



**HOMAT  
AL HIMA**  
**THE WAY  
OF LIFE**  
FOR SUSTAINABLE  
DEVELOPMENT





## ● INTRODUCTION



Common Quail

### HOMAT AL-HIMA FOR PEACE

In 2017 the Lebanese President Michel Aoun launched a campaign to protect migratory birds that pass through Lebanese skies. President Aoun stressed that strict laws should be enforced to the fullest to prohibit the illegal killing of soaring, endangered and all non-game bird species. He stated:

**“There should be a hunting season assigned only from September to January, with the state exercising strictness in its execution” and “There should be a peace treaty between Man and tree as well as Man and birds, because we continue to transgress upon them.”**

SPNL-Birdlife Lebanon are delighted with these recent major developments. Patricia Zuriyta the CEO of Birdlife International wrote to Mrs. Claudine Aoun Roukoz (Special Advisor to the Lebanese President) praising and thanking the President and others, writing: **“We recognise the immense importance that has been placed on this commitment as words do not get stronger than ‘Peace treaty’ in a country like Lebanon”**. Birdlife International & SPNL have been working very closely for three decades to mitigate and prevent the decimation of bird populations and habitats in Lebanon and the Middle East region. More recently, SPNL has been promoting the concept of responsible hunting areas (RHAs) with the support of Birdfair.

The President's initiative was quickly carried forward by Mrs. Claudine Aoun Roukoz when various concerned parties from hunting and conservation (including SPNL) were invited to a meeting at the Presidential Palace in Baabda. This meeting led to SPNL coordinating a National Conference “Homat al-hima –The Way of Life, for Sustainable Development” and a celebration for World Migratory Bird Day (WMBD) that were held at the West Beqaa

Country Club on the 12& 13 May 2017. The principal aims consists in agreeing on ways forward to implement using the Responsible Hunting Area and Hima models as tools to help regulate hunting. The conference provided a valuable opportunity to develop and review a Road Map and 5 Year Action Plan to end illegal hunting, and we are deeply grateful to all participants for their significant commitment, contributions and engagement. Furthermore, we defined how the “Homat al-hima” (Youth of the Hima) can be supported in taking on conservation leadership roles in the future.

During my speech, I outlined the aims of this National Conference and introduced WMBD and this year’s theme, “Their future, is our future” and the topic of “Sustainable development for wildlife and people”. This year’s WMBD theme highlighted the interdependency of people and nature and more specifically people and migrating birds. Birds share the same planet, habitats, limited natural resources and though often persecuted, we as people benefit greatly from the services they provide. This theme links to the goals of the Hima concept of responsible community led resource management. It is essential that we adopt more responsible and sustainable practices such as renewable energy and Himas for decentralization, social cohesion and peace. I also gave special focus to the role of youth and leaders of today, and those of tomorrow. The “**Homat al-hima**” can be a force for change to stop the illegal killing of birds in Lebanon and to promote and advocate for “**Himas for Peace**”, thus helping achieve the Sustainable Development Goals and acting for the same reasons Himas were created over 1500 years ago. This Homat al-hima manual is one of the outputs from the conference, it recognises that the Youth are the conservation leaders of tomorrow and that the new generation need support to build their confidence and capacity to help end illegal hunting practices. Through this

document we hope to provide tools, lay the foundations and provide support so that the Homat al-hima can reduce end illegal hunting and help manage their communities’ lands and resources for the benefit of not only people but also nature.

Looking at the present situation in the region ravaged with wars, witnessing millions of refugees being displaced across most of the Middle East & North Africa region, and the resultant pressures this has caused. SPNL and I personally are deeply honoured to have been instrumental in taking the Lebanese President’s call for a “Peace Treaty” from vision to action. I hope that this Homat al-hima manual guides us all into a real partnership between people and nature, for a peaceful world for All.



**Assad Adel Serhal**  
Director General, SPNL





SPNL director proudly presents Lebanon's Bird pins to Ms. Roukoz and Swiss Ambassador Barras





Owls, farmers best friend © Fouad Itani

## DEAR FRIENDS

**We meet today in this fabulous location to watch together flocks of flying birds, our precious migratory birds, the most beautiful creations of Almighty God, as they transcend our land. They pass overhead safely as we continue to accompany them with our hearts and our good wishes to reach their destinations (new habitats) safely! What renders their journey distinctive this year is that Lebanon will not be the graveyard of these birds, as has been the case in years past. This is a result of the directives of His Excellency the President. These directives were developed into the arrangements by the Ministry of Environment for organizing all hunting activities, specifying their seasons and setting down their terms and conditions. What remains for us, we the citizens, is to do our duty and abide by the law.**

The Almighty God has blessed Lebanon with its wonderful nature, abundant water, dense greenery, mild climate, regular seasons and a highly diversified topography despite its small size. However, our people do not fully appreciate the value of these heavenly gifts since some of us treat them negligently and sometimes harshly.

Since childhood our civil education books have taught us about the rights and responsibilities of every citizen, but in Lebanon we have become used to demanding our rights while often forgetting our duties. One of our most basic responsibilities is to protect the environment and teach our children to respect it.

To teach them how to savour and enjoy the beauty of nature; how a flower on its mother plant is much more beautiful than one thrown on the ground or placed in a flower vase.

To teach them that the singing (tweeting) of a bird will make them much happier than shooting it.

And that a green shady tree is much more bene-

ficial than a burnt one due to the negligence of picnickers.

To teach them the culture of savouring and enjoying beauty; the culture of the right to life of all God's creatures (creations); the culture of respecting nature.

When we are able to teach all this to our children we shall then be able to preserve both their physical and psychological health. Nature is not a mere luxury, rather it is one of the necessities of our life: Without clean air and clean water we cannot survive.

Claudine Aoun Roukoz



Lebanese poppy *Papaver libanoticum* © Asaad Saleh



## أيها الأصدقاء

صنعتها يدُ الله، فلماذا ندمّرها ولأَي هدف؟ لم يَمُنحنا إياها الله عبثاً، بل له في خَلْقها لنا حكمةٌ وسبب، فما هي حكمَتنا نحنُ عندما نقضي عليها مجاناً، وبدون أي سبب منطقي؟

تُخبرنا قصة التكوين، أن الله خلق الطبيعة أولاً، خلق المياه والغابات والحيوانات والطيور، وفي اليوم السابع جاء دور الإنسان، ربما ليفهمه أن وجوده مرتبط بكل ما سبقه وليحملهُ مسؤولية المحافظة عليه.

فهل نصغي لرسالة الخالق، ونحفظ الطبيعة فنحفظ أنفسنا معها؟

## كلودين عون روكز



نلتقي اليوم في هذا المكان الرائع لشاهد معاً أسراب الطيور المهاجرة، وهي من أجمل إبداعات الخالق، تعبرُ فوق أرضنا بأمان، ونرافقها بقلوبنا ودعائنا أن تصل موطنها بسلام.

ما يميّز رحلتها هذا العام أن لبنان لن يكون مقبرة لها كما جرّت العادة، وذلك بفضل توجيهات فخامة الرئيس، والتي تُرجمت بإجراءات وزارة البيئة في تنظيم عملية الصيد البري، وتحديد موسمه وإعلان شروطه، ويبقى علينا نحن المواطنون أن نقوم بواجباتنا ونلتزم بالقانون.

لقد خصّ الله لبنان بطبيعة رائعة، بغزارة مياه، بكثافة اخضرار، باعتدال مناخ، بانتظام فصول، بتنوّع تضاريس على الرغم من صغر المساحة. ولكن في المقابل، فإن إنسانه لا يُقدّر قيمة هذه الهبة الإلهية، فيتعاطي البعض معها بإهمال وأحياناً بقساوة. منذ صغرنا تعلّمنا كتب التربية المدنية عن حقوق المواطن وواجباته، ولكننا غالباً ما ننسى واجباتنا. وأبسط واجباتنا المحافظة على البيئة، وتعليم أولادنا احترامها.

لنعلمهم كيف يتذوّقون جمال الطبيعة، وكيف أن الزهرة على أمّها هي أجمل بكثير من تلك المرمية على الأرض، أو الموضوعية في مزهرية.

لنعلمهم أن صوت العصفور المغرّد يسعدّهم أكثر بكثير من صوت إطلاق النار عليه. وأن الشجرة الخضراء الباسقة تفيدهم أكثر بكثير من تلك المحترقة بسبب إهمال متزّهين.

لنعلمهم ثقافة تذوّق الجمال، ثقافة حقّ الحياة لجميع مخلوقات الله، ثقافة احترام الطبيعة..

فإذا تمكّننا من تعليم ذلك لأولادنا فإننا سنحفظ لا شك صحتهم الجسدية وكذلك النفسية؛ فالبينة ليست ترفاً ولا هي كماليات، هي من ضرورات حياتنا، فبدون الهواء النظيف والمياه النظيفة لا يمكن العيش. الشجرة، الزهرة، العصفور... لوحات رائعة الجمال

## YOUR COUNTRY IS A REAL JEWEL

Along the years, we had a very important development aid to Lebanon including environmental concerns. Now, we concentrate with all the projects in Lebanon mainly on humanitarian Aid. Environment is not really anymore in the picture as it was 10 years ago when we helped Ammiq, Hima Kfar Zabad and Chouf reserve etc.

So how did it come back? Just to show you how environment touches everything.

We met the SPNL people when we made the memorial ceremony to Mr. Luc Hoffmann last fall, a Swiss gentleman who supported the Mediterranean for Bird conservation and environmental protection.

And I myself is a hiker, where I hiked to all Lebanon, and I always saw forests full with lethal cartridges, thus always said that we need to do something about that, but I didn't find the link between the work of our humanitarian aid and these cartridges. How to find the link? We are now very active in the humanitarian aid concentrating on water. Later, I discovered that these cartilages have heavy metals such as lead, and when it rains, this lead goes into the soil and pollutes the water sources. So we made a link between hunting cartridges, the pollution of water, and humanitarian aid within the Mediterranean program.

Thanks to that link that we are here today, and we are able to support your event. So Just to show you that environmental protection is a holistic and encompassing concept, and basically the idea we have is that man is just part of nature. Man is not the master of nature but just part of nature, and in order to ensure the future of man, you have to ensure the future of nature. It is a very simple concept!

We do work with environment and we are very close to LMT for example, and other NGOs, and as I say every weekend when I hike through Lebanon “**I discovered that your country is a real Jewel**”, but my only message is which SPNL does it very well, “**protect your country because it is an endangered**

**Jewel**”. When I hike, I don't only see cartridges but I see all these quarries also. There are people who have to understand that we are a part of nature, not the masters of nature; and they should not exploit it. It is not a matter of economy, it's a matter of education and survival!

I think education is really one of the keys to sustainable development and to the protection of environment. I know that the SPNL does a lot in this field and anything we can do to help you, we are ready. So thank you so much and hope for great success for this day.

**Francois Barras**  
Swiss Ambassador to Lebanon









The Hoopoe, forest and farmers best friend © Fouad Itani

**“The Hima is the Homat al-hima first love from which they grasp the first breath of fresh air. Their ears get tuned to the soft whispers of the nearby forest tree leaves, to the songs and sounds of the birds and wildlife, to the water rushing down from the Hima hills, and to the waves crashing endlessly on the Hima beaches inviting local farmers, shepherds and fishermen to harvest and gather the Hima resources while the first rays of sunshine paints the Hima landscapes, a picture we, Homat al-hima, will cherish to the last days of our lives.”** From introduction of Mr. Assad Serhal – SPNL Director General for Homat al-hima Guideline Manual.

**Mr. Henri Chedid** – the owner of the West Beqaa Country Club resort (WBCC), is a true believer and supporter for the Hima approach and Homat al-hima. He is using the above statements in his speech at every occasion and event. He recently supported the development of Homat al-hima Anthem, and the Homat al-hima video. He thankfully leased 2000 m<sup>2</sup> of land at WBCC for SPNL use in order to establish Homat al-hima International Park and Butterfly Garden. We gratefully thank Mr. Chedid for all his support to SPNL, Homat al-hima International and the Middle-East Center for Sustainable Hunting.



## OPENING NOTE

In the seventieth session of its General Assembly, the United Nations declared 2017 as the “**International Year of Sustainable Tourism for Development**”.

Thus, to endorse this declaration, the General Assembly showed its support to the efforts of the least developed countries to develop a sustainable tourism sector, in particular through infrastructure and human capital development, increased access to finance and enhanced access to global tourism networks and distribution channels.

Furthermore, the General Assembly recognizes that well designed and well managed tourism can make a significant contribution to the three dimensions of sustainable development, has close linkages to other sectors and can create decent jobs and generate trade opportunities, and that sustainable tourism represents an important driver of sustainable economic growth and decent job creation. The Assembly recognized also the important role of sustainable tourism as a positive instrument towards the eradication of poverty, the protection of the environment, the improvement of quality of life and the economic empowerment of women and youth and its contribution to the three dimensions of sustainable development, especially in developing countries.

To achieve this goal, the 2017 tourism year has to promote an inclusive and sustainable economic growth, a social inclusiveness, employment and poverty reduction, a resource efficiency, environmental protection and climate change, as well as cultural values, diversity and heritage.

Within this frame work, The Lebanese Ministry of

Tourism appreciate the SPNL efforts to validate the essence of the sustainable tourism, in concordance with its principals to protect the nature in Lebanon throughout activities, newsletters, preservation of the bird life, and advocating the traditional Hima (Community Based Protected Areas), to promote the sustainable use of natural resources.

**Hima project is a real valuable manifestation of serving the local civil society, which is the essence of realizing 2017 to be an “International Year of Sustainable Tourism for Development”.**

**Working for the development of Lebanese local communities, is a message that we prove together, how we care about Lebanon.**

**Nada Sardouk**

Director General  
Ministry of Tourism



Ministry of Tourism with SPNL and BirdLife International are mainstreaming bird watching into the tourism sector in Lebanon  
- migrating Egyptian Vulture © Fouad Itani



## مدخل



Ms. Nada Sardouk and Dr. Taleb Rifai, Secretary General of UNWTO

بعد إقرار الهيئة العامة لمنظمة الأمم المتحدة، في دورتها السبعين (أيلول 2015)، أن تكون 2017 **السنة الدولية للسياحة المستدامة من أجل التنمية**، وترحب منظمة السياحة العالمية بهذا الإقرار المشرف للعمل على تحقيق أهداف التنمية المستدامة، يتضح حقاً أن السياحة من أبرز القطاعات الاقتصادية ديناميّة، وهي تسهم فعلياً في تحقيق التنمية المستدامة، بإيجاد فرص للعمل، وتفعيل الإنتاج وتأمين الاستهلاك، والحفاظ على الموارد الطبيعية. وهو ما أشار إليه الأمين العام لمنظمة السياحة العالمية الدكتور طالب الرفاعي، مركزاً على دور التنمية في استدراك أو معالجة قضايا التغير المناخي، وإدارة الموارد البشرية والطبيعية، والحد من الفقر وتحقيق التنمية. وهنا الدور الرئيس لإيجاد سياسات وخطط تُحد من المفاعيل السلبية للتنمية السياحية، وتعمل على تفعيلها إيجابياً عبر تقاسم منافعها بين المجتمعات المضيفة.

وفي رأس أهداف التنمية المستدامة، العمل في حمى شراكاتٍ تعاونية، وتعزيز النمو الاقتصادي الشامل والمستدام، والعمالة الكاملة والمنتجة، وتوفير العمل اللائق للجميع، بتأمين ما يعزز المنتجات المحلية، والموارد المحلية والحفاظ على كيانات الطبيعة في برها وبحرها.

ومن يتابع مجموعة الأنشطة حول مفهوم الـ "حمى"، يجد أن مبادئها تتفق تماماً وأهداف التنمية المستدامة، في ما تقوم به من أعمال توعية، وتأكيد الثبوت في الأرض، والإفادة من خيراتهم الكثيرة، والحفاظ على ثرواتهم، مما يعطي جمعية "حمية الطبيعة في لبنان" مرتبة طليعية بين الهيئات الرصينة التي تعمل على تنمية المجتمع المحلي.

ذلك أن مبدأها، منذ تأسيسها قبل سنوات، يندرج في العمل على تنمية الموارد الطبيعية التي ترفدها الموارد البشرية بدفع ثابت. لذا ينتج عن نشاطها ما يترجم عملياً كيف تكون خدمة مجتمعنا المحلي. **انطلاقاً من حصيلة أعمالها الرصينة، نجدد ثقتنا بما تعمل له "الجمعية"، ونؤازر فريق عملها لمواصلة الجهد الذي نوّقر له إمكاناتنا في بلورة كل هدف وكل غاية لخدمة مجتمعنا المحلي. إننا جميعنا مسؤولون عن الحفاظ على ميراثنا وإراثنا وتراثنا في خدمة مجتمعنا، عملاً دؤوباً، كي يستمر وينهض في حمى الوطن.**

ندى سردوك

المديرة العامة لوزارة السياحة



Booted Eagle flying freely over Himas/RHAs © Fouad Itani

## نشيد حماة الحمى

حماة الحمى ابناء الديار  
صقور السما رجال البحار  
للارض ينتمون للنور ينتمون  
للعطر والتراب والشمس والامطار

لخير الحمى حماة الحمى

حماة فلاحون بالحب يحرسون  
هواءنا العليل والماء السلسيل  
وغناء الطيور وحفيف الاشجار

رعاة صيادون للوعر يعيشون  
رحالة الجبال والانهر والتلال  
رفاق للصخور رفاق للازهار

حماة الحمى جنود السلام  
خلاصة الفعل وجوهر الكلام



Illegal hunting of a tagged griffon vulture

## Anthem of Homat al-hima

Defenders of our Hima, Sons of our homeland  
Falcons of our skies, masters of our seas  
They belong to our earth, they belong to the light  
To the fragrances, the soil, the sun, the rain.

For the good (welfare) of our Hima,  
the Homat al-hima are always here.

Farmers-defenders lovingly safeguard  
Our fresh breezes, our pure water  
The songs of our birds, the rustlings of our trees.

Shepherds-hunters, lovers of our rugged hills  
Explorers of our mountains, rivers and hilltops  
Comrades of our rocks, friends of our flowers.

Homat al-hima, the soldiers of peace:  
The essence of all action, the crucial  
substance of all words



Homat al-hima on their way to the field © Asaad Saleh



# ● ● ACKNOWLEDGEMENTS

Lebanon is considered a major bottleneck for migratory birds. In spite of all efforts and developments, hunting is still one of the major threats to birds over Lebanon. Lebanon President General Michael Aoun recognized this issue and urged in his speech early March 2017, to protect migratory birds and have peace treaty between man and birds. This was followed by the decision of the Minister of Environment to open the hunting season from mid-September 2017 to end of January 2018, for the first time since 22 years.

One of the main pillars for establishing SPNL was to promote responsible sustainable hunting in Lebanon. As a result of SPNL efforts, this manual is produced which is an achievement for birds and biodiversity in Lebanon. This manual explains the concept of responsible hunting areas-RHAs, their identification and management procedure, the promotion of responsible rural tourism in non-hunting season, and the role of youth. It would be an important resource for RHA identification, establishment and management for the benefit of birds, nature, and local community.

For this achievement, many thanks are extended to Mrs. Claudine Aoun Roukos, Special Advisor to the Lebanese President, who supported the RHA concept and the development of the five year action plan for implementation. Further gratitude for her support to the national conference “Homat al-hima: The way of life, for sustainable development” and her patronage to the World Bird Migratory Day in May 2017. The aim of the conference was to highlight role of Homat al-hima in the proposed Himas for RHAs with the respected municipalities on municipal lands; in order to put an end to the illegal killing of birds-IKBs, and operate the selected RHAs in the Beqaa region and other regions of Lebanon as models for responsible hunting and ecotourism/nature based responsible tourism. Further thanks to the Embassy of Switzerland, MAVA Foundation, BirdFair and Homat al-hima International for funding the national conference, and their support for its realization. Special thanks

to the Swiss Ambassador Mr. Francois Barras for his attendance of the conference, and Ms. Michelle Jalkh for her follow-up, cooperation and support. It is important to acknowledge gratitude for the Ministry of Tourism for their patronage of the national conference, and the active participation of Ministry of Environment.

It is also important to acknowledge the scientific advices and field study contribution provided by Dr. Ghassan Ramadan-Jaradi, Ornithologist; in the responsible hunting section.

Further thanks to the Committee against Bird Slaughter-CABS, the American University of Beirut-AUB and Balamand University, the municipalities and Hima representatives, and our partner Shouf Cedar Society in the ‘Shouf Biosphere Reserve’ project funded by MAVA for their contribution. Special thanks to James Hogg for editing the introduction, SARI-LEB for translation and SPNL team through ‘Stop the Illegal Killing of Birds in the Mediterranean’ project for making this National Conference and Manual a success. Benelli Diab Freres, and Anis Commercial printing press for their sponsorship in the conference.

**This manual is a climax achievement for the support of sustainable development. Thank you all for your cooperation and support that made the production of this important resource a reality for Lebanon!**

**Bassima Khatib**  
Assistant Director General, SPNL

**Assad Adel Serhal**  
Director General, SPNL

# ● ● EXECUTIVE SUMMARY

Youth are the future generation and leaders of change especially if they are well empowered with needed skills and tools. This was stressed in the Millennium Goals, and the Sustainable Development Goals especially no. 4 for Quality Education, and no. 5 for Gender Equality. SPNL recognized the crucial role of underprivileged groups especially youth and women in nature conservation through the Hima community based approach.

This manual “Homat al-hima –the Way of Life, for sustainable development” links the role of youth (Homat al-hima) with the promotion of responsible hunting practices and the concept of RHAs for the proper implementation of the hunting law. The manual is divided into 6 main sections:

**Section One:** provides an overview about timeline for responsible hunting programme at SPNL since its inception in 1986, role of youth in this programme, then concentrates on the latest National conference organized in May 2017.

The SPNL National Conference, “Homat al-hima –the Way of Life, for sustainable development”, helped not only accomplish the set goals; road map & 5 years action plan as requested by Mrs. Claudine Aoun Roukoz. It also gave special focus to the role of youth - “Homat al-hima”, a force for change to stop the illegal killing of birds in Lebanon and to promote and advocate for “Himas for Peace”.

**Section Two:** highlights the hunting situation in Lebanon, then explains the concept of responsible hunting areas-RHAs as a solution for proper implementation of the hunting law. Then, provides the linkage between Himas for sustainable use and RHAs under the control and management of municipalities as a win-win tool for conservation and sustainable development.

**Section Three:** concentrates on the process of RHA identification adopted in Lebanon. It highlighted the habitat per game species, the agreed criteria for selection of potential RHA sites, field research methodology, RHAs selected with the justification

and endorsement from the municipality of each site.

**Section Four:** highlighted detailed methodology used for mapping identified RHAs, that included maps per site, and an overall strategic map of Lebanon for the identified RHAs.

**Section Five:** This section was dedicated for explaining the technical management of RHAs. It stressed on the involvement of local communities in management, main stakeholders, guidelines, needed infrastructure, and staff. It further clarified the benefits of RHAs to society from economic, social, and environmental perspectives.

**Section Six:** This section highlighted latest developments related to RHAs, namely partnership with “Gold trophy” a private company that promotes responsible hunting, an example EIA study for a RHA, monitoring plan, and an example business plan – from ecological and financial points of view.

The manual with its all sections are interlinked together, providing road map from vision to action for RHAs as a solution to support hunting law enforcement and nature conservation. RHAs on municipal land within the Hima approach stresses leadership of youth for a brighter future!



Guide training, Hima Kfar Zabad Visitors' Center © Asaad Saleh



Demoiselle Cranes scarce and uncommon migrants to Lebanon © Fouad Itani





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Mating White Storks © Afonso Rocha

# ● ● ● ● LIST OF ABBREVIATIONS

<b>FFEM</b>	Fonds Français pour l'Environnement Mondial
<b>AEWA</b>	African Eurasian Waterbird Agreement
<b>CBD</b>	Convention on Biological Diversity
<b>EIA</b>	Environmental Impact Assessment
<b>GIS</b>	Geographic Information System
<b>GTS</b>	Globally Threatened Species
<b>HH</b>	Homat al-hima
<b>IBBA</b>	Important Bird and Biodiversity Area
<b>IKBs</b>	Illegal Killing of Birds
<b>IoE</b>	Institute of the Environment
<b>IUCN</b>	International Union for Conservation of Nature
<b>LEF</b>	Lebanese Environment Forum
<b>LEO</b>	Law Enforcement Officer
<b>MoE</b>	Ministry of Environment
<b>MoT</b>	Ministry of Tourism
<b>MRCZM</b>	Marine Resources and Coastal Zone Management Program
<b>MSB</b>	Migratory Soaring Bird
<b>NGO</b>	Non-governmental organization
<b>P.A.</b>	Protected Area
<b>RHA</b>	Responsible Hunting Area
<b>SPNL</b>	Society for the Protection of Nature in Lebanon
<b>UK</b>	United Kingdom
<b>UOB</b>	University of Balamand
<b>UNESCO</b>	United Nations Educational, Scientific and Cultural Organization
<b>UNDP</b>	United Nations Development Program
<b>USFS</b>	United States Forest Service
<b>WBCC</b>	West Beqaa Country Club



Participants at the national conference «HH the way of life» - West Beqaa



# ● ROLE OF HOMAT AL-HIMA IN RESPONSIBLE HUNTING

## A. TIMELINE FOR RESPONSIBLE HUNTING PROGRAMME

Lebanon lies on the west side of the Rift valley African Eurasian flyway, which is considered one of the most important flyways for bird migration in the world. In spite of its small geographical area, at least 403 species of birds have been recorded in Lebanon. The wealth and diversity in bird species increases the assets of the country, but on the other hand amplifies our collective responsibility for their conservation.

SPNL has been working on the hunting issue since its establishment in 1984. One of its fundamental aims is to help in hunting management in Lebanon while the other aim is to promote protected areas. SPNL has been involved with BirdLife International in the regional project **“Building Capacity for Sustainable hunting of Migratory Birds in Mediterranean Third Countries of North Africa and the Middle East-SHP”** from 2004 - 2007 funded by the European Union (EU), where Lebanon was the hub for the West Asia countries. The main achievements in Lebanon were data collection through a national opinion poll, elaboration of the draft legal decrees and decisions for the new hunting law in Lebanon (Law No. 580/2004). In addition, SPNL played an important role in organizing training workshops for law enforcement officers on bird identification, conservation and legal issues, as well as capacity building on conflict resolution skills involving stakeholders of the hunting sector in Lebanon.

Moreover, SPNL produced awareness material targeting mainly hunters on globally threatened and game bird species, a bird field guide in Arabic, and an educational manual for school children. On a regional level, the project produced synthesis reports on status of hunting, guidelines for hunting management for governments, and code of practice manual for hunters, thus providing the basis for a 'model' of sustainable approach to birds hunting. SPNL has also been involved with the UNDP project **“Mainstreaming Conservation of Migratory Soaring Birds into Key Productive Sectors along the Rift Valley/Red Sea Flyway”** from 2010 – 2015 funded by Global Environment Fund (GEF).

### Main achievements of the Project were:

- Representing the conservation NGOs in the Hunting Higher Council for 3 terms.
- Reports on linkage between hunting and livelihood, relation between hunting and soaring birds, sub-threats for hunting including mitigation measures,
- GIS maps for distribution of soaring birds; Map identifying location of bottlenecks, IBBA/PAs, hunting reserves (public and private), and hunting clubs; and Map of “threat hotspots” for hunting.
- Development of several awareness materials, namely: Soaring birds atlas, Field Guide to the Soaring Birds of Lebanon, Manual for Bird Identification Training, Guide for the hunting exam and its relevant questions and answers,
- Training Educational Coordinators from the Ministry of Education on the use of the Educational Manual/CD.
- Trainings for law enforcement officers and hunting clubs, mainly on bird identification and hunting law.
- Production of a business plan for responsible hunting management in Lebanon;
- Report on existing shooting clubs, private hunt-

ing reserves, game bird breeding farm, existing protected classified sites, and potential public & private hunting areas;

- Report about national policies, legislation related to hunting in Lebanon highlighting identified gaps in policies & legislations, and suggesting relevant recommendations;
- Report about local case study for implementation of the hunting application decrees and decisions at one pilot site;
- Technical support for the development of draft application decisions and decrees of the hunting law.

Currently, SPNL is promoting responsible hunting areas-RHAs concept that would support conservation efforts & proper law enforcement. Thus, hunting can be practiced responsibly under the supervision of municipalities, within the law regulations in restricted areas. SPNL has worked to set the criteria for responsible hunting areas (RHAs) in Lebanon. The RHAs should primarily be evenly distributed over the seven Mohafazats (large administrative districts) of Lebanon established over communal land and/or on governmental property. The RHAs should also preferably be able to host/provide habitat for at least 3 - 4 out of the 16 game bird species. Within the MSB project – stage I, and in collaboration with ministry of Environment and UNDP, SPNL was able to identify 9 RHAs on municipal land, and to declare them as Himas for responsible hunting by the relevant municipal councils (Map of identified RHAs in Lebanon).

SPNL was awarded «Birdlife International Partnership Award» in 2013 for its work on promoting responsible hunting.

SPNL continued to reinforce its efforts of spreading awareness on the concept of responsible hunting by believing that awareness needs to be improved, collectively, as hunting is a shared responsibility of the country. In order to increase the spread of awareness among the Lebanese community, SPNL is reaching out to people on social media, on radios, TV programs and of course in all of the Hima sites through the following projects:

### **“Capacity Development for Flyway Conservation in the Mediterranean” (stage I & II) Project:**

1 September 2012 - 31 August 2014 and 1 February 2015 - 31 January 2017

- Development of training program for hunters based on the “Hunter Guide” (in order to enable them to pass the hunting exam for the license).
- Development of an online quiz as a trial for the hunter before the actual exam (based on the Questions & Answers developed).
- Launching of an Arabic Interactive Website addressed mainly to hunters.
- Social media addressing hunters.
- Establishment of «West Beqaa Centre for Responsible hunting».
- Signature of declaration on responsible hunting by a group of professional hunters.
- Development of software for a competition between hunters on the correct bird identification skills, based on color, flight, movement,....

### **“Promoting responsible hunting practices in Lebanon using community based approach” Project**

1 January 2014 - 30 September 2015, funded by CEPF

- Development of awareness material addressed to LEF conservation NGOs
- Website on responsible hunting [www.responsiblehunting.org](http://www.responsiblehunting.org)
- Short film on status of hunting in Lebanon
- Four posters on game species; permits, safety measures; RHA concept
- Awareness leaflet covering the above 4 themes
- Mobile app addressing conservation NGOs for Apple and Android users  
Apple: <https://itunes.apple.com/lb/app/responsible-hunting/id1032369115?mt=8>  
Android: <https://play.google.com/store/apps/details?id=com.omar.lef&hl=en>
- Initiation of studies for 1st model RHA (EIA, management and monitoring plan, business plan....)

## “Hope for migratory birds in Eastern Mediterranean: action against illegal killing of Birds” Project

1 January 2016 – 31 December 2018, funded by BirdFair

- Raising awareness and increasing the understanding of new hunting laws and regulations by relying on social media: websites, leaflets and posters, press/radio/TV coverage
- Building alliances for responsible hunting, including monitoring and reporting on persecution activities within residential areas and blackspots
- Encouraging hunters to take initiatives to adopt responsible hunting strategies
- Increasing local political and religious support to achieve responsible hunting

BirdLife partnership has presented during Birdfair 2015, a report based on the first ever comprehensive scientific study to quantify the scale of illegal killing across 26 countries of the Mediterranean region. The results were gruesome. The report identifies three individual blackspots – the Famagusta area in Cyprus, the El Manzala area in Egypt and the Akkar area in Lebanon – where, staggeringly, more than half a million birds are being illegally slaughtered each year.

The study led by BirdLife International have shown that Lebanon ranks the 4th country in terms of the illegally killed birds per year. The total number of illegally killed birds in the Mediterranean is 25 million birds annually. Of them, Lebanon's share is 10.5%. As a result, the mean estimated number of illegally killed birds in Lebanon is around 2,600,000 annually. On average, more than 248 birds are illegally killed in Lebanon each year for every square kilometer. Presently, 291 species of bird regularly occur in Lebanon, with 100% of species being killed illegally in significant numbers. The estimated mean number of individual birds killed illegally is 44 individuals for every 100 people. Common Quail (*Coturnix coturnix*), Calandra Lark (*Melanocorypha calandra*) and Blackcap (*Sylvia atricapilla*) are killed in large numbers (Link to National Summary Report-Eng. & Ar).

Recently, SPNL initiated a hunting unit as of 1 June 2016; its vision is to support proper law enforcement for the hunting law through working with local municipalities and especially in the Hima areas of Lebanon; with media, and political figures aiming to change attitude and behavior towards hunting.



Opening ceremony «World Migration Bird Day»

Jbeil region is initiated as a model for RHAs in Lebanon, with a special focus on Hima Akoura for responsible hunting, sustainable grazing (Transhumance) & eco-tourism (**Annex I: Draft Action Plan for Hima Akoura RHA**). Depending on the collaboration between Gold Trophy, MECRH, BioLand, Homat Alhima International-HHI, Great Escape, Sayd Magazine, Hima Akhoura guards and forest guards, Internal Lebanese Security forces, Lebanese Army, CABS/UNEP, and SPNL team, will be monitoring the implementation and law enforcement of the opened hunting season September 2017 after 20 Years of total ban; thus documenting any illegal killing or harvest of migrating birds. This will be done from two main sites in Mount-Lebanon and Beqaa region, with a base camp at Jbeil region.

### “Safe Flyways – stop illegal bird killing in the Mediterranean” project

1 July 2017 – 31 January 2020

The project aims to:

- Expand and improve on knowledge on illegal killing of birds in the region to identify and promote targeted strategic actions
- Increase awareness and stimulate public demand to stop illegal killing of birds whilst raising the additional funds needed for the full implementation of the project
- Support increased international and national advocacy efforts to ensure political commitment to enforce actions to end illegal killing of birds
- Design and implement pilot projects with key stakeholders in five blackspots to demonstrate, share and promote effective approaches to stop illegal killing of birds
- Maintain and strengthen the existing network of civil society organisations and Local Conservation Groups working together to address illegal killing of birds

The main funding for Homat al-hima road map & 5 years manual publishing and implementation of pilot projects in Akoura RHA and Qaroun RHAs, are covered by IKBs, MSBs stage II & Birdfair projects from 2017-2022.



Celebrating «World Migration Bird Day» by planting cedar trees, at HHI park - West Beqaa





Hima Akoura RHA © Hassan Hamud



## B. THE YOUTH

**“The Youth of Today are the Leaders of Tomorrow”**

said Nelson Mandella. Nations often build their future and achieve development through giving the youth a proper environment, motivating them, extending their support, focusing on their positive energy and how they perceive the world. It takes these four factors to ensure the sustainability of a world where its environment is put under continuous pressures and threats in the presence of technology and globalization.

The youth have the strength and enthusiasm to create major transformations, they have the power to break and change sequences that created major problems in the past. The youth are the educators of their parents, they see the world from their angle, and often this angle sees beauty in everything. Sustainable rural development and sustainable livelihood strategies and concepts adopted should be flexible enough to fit different contexts and cope with changes (R. Chambers, G.R.Conway, 1992). The youth are the ones aware of the change, challenges, needs, and opportunities and are always keen on keeping up with these. For this, to reach a sustainable environment and enhanced livelihood, it should be done with the youth and by them.

“Homat al-hima is an Arabic slogan widely used to recognize the individuals and groups acting as Hima guardians and Heroes. Homat al-hima are motivated, well trained & equipped young from local Hima communities, aspiring to lead on activities to give exposure to the Himas, and their communities work including environmental, economic and social concerns, and to assure the conservation of the site and its key biodiversity, and the ecological and cultural services it provides.”

The Society for the Protection of Nature in Lebanon (SPNL) with the support of the European Union, granted through the project “Enhancing livelihoods of Local Lebanese communities in Hima territories; from social, economic and natural perspectives”, and the MAVA funded project “Restoring Hima Ecosystem functions through promoting sustainable







Skill development - Canoe training workshop in Hima Anjar © Asaad Saleh





Ancient ruins of Anjar, World Heritage site and Hima, safe haven for migratory Storks © Anjar Photography Group

community-based water management systems – Phase II”; initiated the Homat al-hima programme. This programme enabled SPNL to contribute further with raising awareness, delivering reliable environmental information, and concretely protecting natural areas in Lebanon, through building capacities of local communities and safeguarding their natural resources, as well as promoting sustainable income generating activities for enhanced livelihoods.

A set of trainings took place under Homat al-hima Capacity Building Program within Hima Anjar/Kfar Zabad between April and August 2016 under the following themes:

- **Bird Identification and Monitoring**
- **Canoeing & Safety in Water**
- **Flora and Fauna identification**
- **Guiding in Nature**
- **Landscape & Hima**
- **Social Media, Business Planning, & Event Management**
- **Water & Sustainable agriculture**

The aim of the trainings was the development of management/Business plans for their site, economic empowerment, education & awareness for Homat al-hima members, in addition to the protection of nature and biodiversity and the sustainable use of natural resources for the benefit of the youth and with the youth.

On 24 August 2016, SPNL, in collaboration with the municipality of Anjar, and through the generous support of the European Union and MAVA Foundation, hosted Homat al-hima National Workshop in Hima Anjar. During the workshop, efforts and achievements of Homat al-hima Capacity Building pilot project was presented, and a graduation ceremony for the attendees of the Homat al-hima mentoring program took place. Meanwhile, a participatory national action plan for empowering the role of local conservation groups (LCGs) and Homat al-himas on the national level was finalized.

Homat al-hima in Anjar are now leading on species monitoring and conservation efforts, organizing awareness events, and managing ecotourism activities in their Hima. One of the members even established a private ecotourism company offering organized field visits to Hima sites for children and youth.

A workshop was also held on August.11.2016 in the Cultural Center of Byblos / Jbeil through the generous support of the European Union as a dedication for the International Youth Day stressing on the leading role of the children in evaluating and supporting natural and cultural resources, sustainably using these resources, and spreading the awareness on to their friends and families. The workshop was held in Hima Byblos, a UNESCO World Heritage Site-WHS, combined with children from Hima Anjar, also a UNESCO WHS, as part of linking and connecting the two Himas and stressing on sharing experiences and knowledge between the two youth communities under SPNL's Hima School - SNOW programme (School with No Walls). Hima school programme aims to raise awareness for children about the Hima IBBA and KBA, species and ecosystems, and cultural practices linked to nature, and learning through fun.

SPNL, whose employees and trainees are mainly young professionals who have graduated or still majoring in environmental fields, aims at enabling their role through creating youth cohesions, building their capacities and knowledge, and empowering their leadership role. One of SPNL's young employees was invited by MAVFA Foundation as a young professional to participate in MAVFA's Young Leaders Workshop that was held in Switzerland on 19 January 2017. The aim of the workshop was to engage young leaders in building its strategy for the youth 2016-2022. Nine Young Professionals from different regions participated in the workshop, dropping their institutional hats, and giving their creative thoughts and ideas as Young Professionals with inspiring views for a better future. MAVFA Board approved the strategy to support young talents and leaders in Nature conservation. The two proposed specific strategies relating to young leaders were approved:

- 1. Reinforcing institutional resilience by strengthening young talents (intergenerational fellowship programme)**
- 2. Supporting innovation within the young generation and encouraging links with other sectors.**

Under the patronage of Mrs. Claudine Aoun Roukoz, special advisor of the president of the Republic of

Lebanon General Michel AOUN, SPNL celebrated the "World Migratory Bird Day" on 13 May 2017 with an awareness-raising event for children that highlighted the need for the conservation of migratory birds and their habitats, involving a wide spectrum of stakeholders related to responsible hunting. This event was funded by the Embassy of Switzerland, MAVFA Foundation, BirdFair and Homat al-hima International. Mrs. Aoun Roukoz gave her speech on the importance of protecting the migrating birds over Lebanon, and reaching a peace agreement with the trees and birds.

The WBMD for year 2017 is under the theme "Their Future is our Future - A healthy planet for migratory birds and people", highlighting the topic "*Sustainable Development for Wildlife and People*". The 2017 campaign aimed at raising awareness on the need for a sustainable management of natural resources, cultural assets, demonstrating that birds conservation is also crucial for the future of humankind and the important role of youth as leaders for change. Prior to the WBMD, SPNL organized a national conference on the 12th of May 2017 in West Beqaa Country Club under the patronage of the ministry of Tourism. The conference was funded by the Embassy of Switzerland, MAVFA Foundation, BirdFair and Homat al-hima International. The aim of this national conference titled "Homat al-hima (HH), The Way of Life, for Sustainable Development" is to highlight the role of Homat al-hima in the proposed Himas for RHAs with the respected municipalities on municipal lands; and develop a road map that guide its implementation.



# C. CONFERENCE RESULTS: A ROAD MAP

The major output of the conference titled **Homat al-hima (HH)- The Way of Life for Sustainable Development** was an agreement of some 70 participants from different areas of Lebanon including Ministries, Municipalities, Universities and Homat al-himas on the following:

Participants agreed to use, promote, and support this “roadmap” as an enabling framework for highlighting the role of HH in the proposed Himas for Responsible Hunting Areas (RHAs) with respected municipalities on municipal lands; in order to put an end to the IKBs, and operate the selected RHAs in the Beqaa, Jbeil and other regions of Lebanon as models for Responsible Hunting (RH) and ecotourism/nature based tourism; hence rehabilitating sites for game and non-game wildlife.

This agreed upon enabling framework on understanding and strengthening the role of HHs in responsible hunting, water & forest habitats and sites rehabilitation & management, in order to serve game & non-game wildlife, includes:

1. Awareness on the current status of Hunting Management in Lebanon
2. Understanding the Role of HHs in RHA management

This roadmap is the result of group work discussions by some 70 participants during the two -day conference. Most of the participants were representatives of Lebanese state agencies, the civil society, development agencies, and international NGOs engaged in nature and wildlife conservation. The first day conference sessions helped in building a working knowledge for participants that has eventually materialized into formulation of the current roadmap. Through the conference, the participants were able to express their vision and opinion on the strengths, weaknesses, opportunities, and threats

related to the role of HHs in the implementation of the RHA concept, as well as in rehabilitation of important water and forest sites for game and non-game wildlife. The participants unanimously acknowledged that **the HHs are, an important tool and approach for sustainable management and application of responsible hunting in Lebanon and in the region**. It is important to note that the conference and its results are a step forward to put an end to Illegal Killing of Birds, and to operate the selected RHAs in the Beqaa, Jbeil and other regions of Lebanon as models of RH and ecotourism/nature based tourism; hence rehabilitating sites for game and non-game wildlife.

Some of the main concerns expressed in relation to RH are related to: law enforcement, political support, lack of knowledge and awareness on hunting, strengthening the role and building capacities of HHs/ Youth regarding monitoring and management of RHAs and IKBs blackspots.

All participants agreed that the role of youth is important in the success of RHA and there is a major need for skill development, mentoring, building networks, gaining the support of national and regional organizations to develop young leaders, developing self-sustaining HH program, and engaging with the private sector.

The agreed road map constitutes the following points:

- Promote endorsement of RHA concept on highest national level.
- Promote public awareness campaign on RHA.
- Establish 1 -3 model RHAs on municipal land for possible replication.
- Develop and promote implementation of national monitoring protocol.
- Ensure legal and political support to RHA concept.
- Develop and implement capacity building programme.
- Strengthen role of HH as future leaders in RHA management.
- Replicate and expand RHA sites as needed.





Riparian forest - Hima Anjar © Asaad Saleh

## 1. THEMES

The working sessions of the first day were divided to two themes:

1. Responsible Hunting Areas (RHA)
2. Water and Forest Habitats for RH

Participants were divided into two groups according to their interest and field of work. A SWOT analysis was done in each group highlighting the role of HH in each theme; in addition to addressing the role of youth in the implementation of RHAs.

## 2. LINKING THEME DEVELOPMENT TO THE ROAD MAP

### 1. Responsible Hunting Areas

Implementation of the RH concept with appropriate law enforcement will allow improved management and better organized conservation. It is also assumed that with RH systems information and data on shot game and non-game species will become reliable and up-to-date. In other words a well-organized RH system can significantly improve conservation management and monitoring of wildlife and biodiversity. It is now proposed to start with 8 RHAs on municipal land as a pilot initiative to learn lessons from, and to decide on further expansion. It is worth noting that municipalities in Himas differ from one to another and so do the civil society organizations. RH should be promoted within the hunting season, with alternative outdoor entertainment activities outside the hunting season, in order to diversify income generating activities. Also, municipal police should be lobbied for being entitled to fine illegal hunters.

**The results of the SWOT analysis was as follows:**

RESPONSIBLE HUNTING (RHAs) WORK GROUP SESSION	
STRENGTHS	WEAKNESSES
Allows proper implementation of the hunting law, and allows Local municipal police support to Law Enforcement Officers-LEO in law enforcement (RHA managed by municipality).	More hunters coming to RHAs is a sign of success. Isn't it? It could be a threat if there is no carrying capacity study made.
Ensures safety of hunters from accidental shooting. In RHAs, hunters benefit from safer conditions and absence of irresponsible and harmful shooting.	The current Hunting Law does not have an article that endorses the RHA concept, however it doesn't deny it either. The Municipal law allow municipalities to act within their jurisdiction. Therefore, based on the success of RHA model, a clear decree for supporting RHAs should be proposed.
New opportunities of wildlife recruitment, diversified wildlife professions and jobs.	RHA will not eradicate poaching outside the RHAs. It will require a longer time and, especially for non-game species. Poachers will continue to exist.
Public illegal hunting case reviews will eventually change the behavior and mentality of the communities, and will increase the sense of respect to game species.	Lack of interest by government officials and weak political will.
Increase of belonging, ownership and sense of patriotism (linked to increased economic value and income to community through RHA).	Unknown risks of change in ecosystems and biodiversity as a result of RHA establishment (if it is not supported by monitoring plans and management plans).
Improved monitoring of game species and support to Research & Development (R&D) activities.	Depending on the political will and support of specific political party on local level it may either lead to success or failure.
	The areas beyond the selected pilot 8 RHAs will remain uncontrolled (if support from LEO is not available).
	It takes a long time to accept & perfect the concept of RHA and change the mentality of people about hunting (as a new concept).
OPPORTUNITIES	THREATS
Successful RHA case studies can potentially upscaled on national level (similar to P.A.s).	Number of hunters may concentrate in specific areas (RHAs), leaving a thin line between conservation and exploitation of bird population. It all depend on carrying capacity and good management.
Improved national database of game and non-game species (monitoring) during hunting seasons for adjustment of rules and regulations and hunting species by the HHC.	Concentrated hunting in favorable areas. It requires continuous management and control of hunting trails.
Fostering regional and international treaties and agreements, for example with Syria, Jordan, etc. to systemize hunting laws.	Security and stability issues within the selected RHAs.
Support better credibility/image in the international arena and gaining of additional sponsorship.	Insufficient income generation. It is a risk that RHA may not bring as much profit as expected.
Support from the presidency office to the RHA concept in order to reach proper law enforcement	Exclusive male involvement in environmental police activities can exclude some opportunities. Involving female police members (female police members may potentially be effective in delivering RH concept messages to hunters).
	Large inflow of tourists-hunters in the situation of weak legislation framework, rules and regulations. Until now, foreigners are banned to hunt in Lebanon

Role of HHs in RHA concept implementation

Youth’s role in RHA concept implementation is vital for they will most likely will take the lead in raising awareness among their peers and beyond. Involving youth in RHA will develop a sense of ownership to their RHAs. This also corresponds to the Aichi Target #1 of the CBD on improved public awareness on biodiversity values. It is assumed that well organized RH systems may retain the growing youth in the country by encouraging youth to consider wildlife profession options and wildlife related jobs. It may reduce the outflow of young people outside their villages and outside Lebanon. For this, however, proper education facilities and programs on sustainable hunting should be created. Youth’s capacity and skills should be developed through university programs and corresponding scholarships and fellowships, international exchange visits, in order to promote diversification of wildlife related professions and jobs. Involving youth in events like “Bird Releasing” events and wild species confiscation activities will strengthen their sense of wildlife protection and the biodiversity values. Also, promoting youth participation in social media to spread interesting news on environmental issues to replace every-day political arguments can facilitate in increased public attention to wildlife conservation. This also includes support in production of short documentaries on illegal hunting by youth.

On the other hand, natural parks should have in place some leisure and entertainment activities related to Nature and Culture, during the non-hunting seasons, in order to diversify income generating activities for local people in RHAs. While establishing RHAs it is vital to take into consideration possible nuisance and pollution that could threaten specific ecosystems. Various habitat, biodiversity and ecosystem peculiarities should be studied and activities well planned prior to intervention.

2. Water and Forest Habitat for RH

- Use of the “Landscape Character Assessment” (LCA) methodology for Forest Landscape Restoration Mechanism that was done jointly by AUB and FAO Lebanon in December 2016. The assessment was done through drones. Level 1 was done on a scale of 1/250,000 for all of Lebanon. Now, Level 2 was done at a lower scale of 1/50,000 and now they are working on doing Level 3 at a more detailed scale of 1/10,000. To complement the work, risk assessment maps and decision support system were also done for all of Lebanon. Thus, the SLMQ project can benefit from this study and tailor the methodology to meet its objectives for the target areas in the Beqaa region.
- Utilize the outcomes and methodology of the LCA methodology to come up with a comprehensive strategy at national level.

WATER AND FOREST HABIBTAT FOR RH WORK GROUP SESSION	
STRENGTHS	WEAKNESSES
Lebanon’s natural landscape	Lack of availability of maps of Lebanon
Start using the already developed Landscape Character Assessment Maps, Risk Assessment Maps, and Decision Support Systems	Weak information sharing between Ministries
Engage different working bodies to have a stronger ground for the project. Having the governmental and non-governmental bodies and the private sector such as SPNL, MoE, SBR, educational institutions, etc…)	Lack of coordination between institutions
SPNL contacts at the different levels: local, national and regional	Overlapping roles & responsibilities between govern-ment institutions

SPNL follows up on the four group species, monitoring in the area (plants, amphibians, reptiles, and birds) for creating connectivity routes	Incoherence of mapping scales between the different institutions
Take the stretch between the Lebanon Mountain Range and Anti-Lebanon Mountain range and the Beqaa Valley for the project (having the distinctive landscape areas included such as SBR, Himas Kfar Zabad/Anjar, Kherbet Kanafar, Ain Zebdeh, the wetlands in between, Litani river, and Qaroun Lake)	Overlapping activities and duplication of efforts by different projects in the region
Connect Water Bodies to Forests, thus potential flyways, which could be part of understanding these routes/ corridors that have different actions of birds and wildlife species going on in each territory	Green corridors (connectivity routes) are often threatened by hunters and natural predators
<b>OPPORTUNITIES</b>	<b>THREATS</b>
LCA as a tool for connectivity through identifying ecological corridors to increase species and biodiversity (Develop Level 2 (1:50 000) and Level 3 (1:10 000) LCA maps and produce a mapping strategy and landscape plan for all the area and the country)	Syrian Refugees in the area are adding pressures on natural resources and national assistance
SLMQ project related to reforestation and identification of continuous ecological corridors, ecotones or stepping stones in the Beqaa region.	Green corridors (connectivity routes) are often threatened by hunters and natural predators. This must be taken into consideration when creating ecological corridors
Coordination from Hima to Hima and Homat al-hima as being part of the ecological corridors and forest conservation	Political instability in the Beqaa region
Results of the ecological assessment that is currently being conducted by UNDP- Sustainable Land Management Qaroun Catchment project	
Share mapping exercises between different institutions to come up with a national strategy and action plan	
Engage national committees such as the committee for Combating Pollution of the Qaroun and Committee for Sustainable Land Management	
Understand the landscape character of the area by its ecological, cultural, and social components	
Empowering youth through capacity building	
Understand the needs of the community, and the youth specifically, and engage them in the decision making for they are the ones who understand and well connected to their lands	
Engage the youth with LCA, and use it as an awareness opportunity for understanding the landscape identity (unity of landscape of the area) and plan for the future	
LCA will help the youth to increase awareness for the understanding of landscape identity	



### 3. CONCLUSION

SPNL is a believer of the saying “**The Child is Father of the Man**” – William Wordsworth. A child trained to cherish nature, grows to be a father, the first teacher and instructor of his children. As a result of SPNL’s continuous support to the conservation of nature with people and for people through the Hima community based approach, the youth were always given the motivation to play the biggest role in this conservation strategy.

For the past three years, SPNL was keen on recording and taking into consideration the needs of the youth for building a more sustainably conserved environment. A list of findings and recommendations are listed below:

#### a. Skills Development:

Empowering young leaders to successfully deliver conservation and systemic change for sustainability impact

- Capacity Building/ Trainings
- Leadership Skills Development (Hima Guards)
- Basic skills for sustainability, management, and fundraising
- Creating Opportunities for Young People to Develop their Skills
- Entrepreneurship and Innovation Learning

#### b. Mentoring:

Accelerating the development of talented people through:

- Developing a mentoring Program

#### c. Networks:

Networks that would participate as connections to skills development, mentoring and involvement of young leaders

- Build Young Leaders Networks on national and regional level
- Build networks between national NGOs to support young leaders

- Build networks of youth leaders on regional and international level

#### d. Support from national and regional organizations to develop Young Leaders:

Creating the working conditions for young people to lead through:

- Engagement of the program within projects of national organizations

#### e. Funding Opportunities

- Homat al-hima Fund which is a fund that can support young leaders while leveraging other opportunities for co-finance
- Any other opportunities?
- Small grants within projects
- Link to ecotourism as income generating opportunities

#### f. Private Sector Engagement

Homat al-hima International Park which is a place for empowering the role of the Youth and for Awareness activities and events

- The usage and support of the Homat al-hima International Park for implementation of the activities on national and regional level, building capacities of the youth on conservation, biodiversity management & the preservation of landscapes and cultural practices, building networks between youth on national and regional level, and improving livelihoods and a fundraising for Homat al-hima Program

#### g. Sustainability of the Program

Aiming at ensuring the short, medium, and long-term sustainability of the program

## 4. NEXT STEPS

Homat al-hima program has crossed big achievements and developments since it was first initiated few years ago. Homat al-himas have showed big interest and support to SPNL's programs which was highly recorded by the achievements they have done on the grounds of the Himas. Movements took place by the Youth for the conservation of many endangered species in plants, animals, and birds; one of the most successful was the River Otter in Hima Anjar which was spotted and monitored on Camera and the migrating storks in Anjar ruins; where efforts were made by Homat al-hima to protect it.

In addition, Homat al-himas in Anjar today are well trained to identify birds, Fauna and Flora, monitor them, take protection measures, manage water resources and its sustainable use, ensure sustainable agriculture, appreciate and assess the landscape where they live, and play as eco-tour operators and guides to enhance their livelihood and spread the awareness to other community members and visitors.

First steps towards the development of the Youth program, as per their suggestions and recommendation previously stated, is to start on national level and move towards the international level. Homat al-hima International Park is being implemented and will play as the place for the implementation of most of these recommendations and the home for most of Homat al-himas from all around Lebanon and beyond.



White Stork with offsprings in the nest © Afonso Rocha







Photos of hunters that participated in the contest of "Spring Photo-shoot" © Khaled Taleb



### A. HUNTING SITUATION IN LEBANON

Lebanon is a small country of 10,452 km<sup>2</sup>, characterized with temperate Mediterranean climate; and topography dominated by two mountain ranges and a rift valley in between, running parallel to a 225 km narrow sandy and rocky coastline. Thus, having extreme variability in climatic conditions, soils, vegetation cover and socio-economic status.

Lebanon lies on the second most important flyway for bird migration, lying between Eurasia and Africa. An estimate of over 2 billion passerines and near-passerines, 2.5 million ducks and two million raptors travel 7-8,000 km from northern breeding grounds to African wintering grounds & backwards.

Around 400 species of birds have been recorded in Lebanon; 143 of these species have been recorded to be breeding in Lebanon. Further, the incidence of globally threatened species- GTS such as Dalmatian Pelican, Greater Spotted Eagle, Sakor Falcon, Egyptian Vulture, Pallid Harrier, Imperial Eagle, Syrian Serin, Little Bustard and the Red footed Falcon stresses the importance of this country on an international scale.

Soaring Birds are predominantly large broad-winged birds e.g. raptors, storks, cranes, pelicans, etc... that conserve energy by soaring on local rising air currents, or thermals for their travel. These birds, here termed migratory soaring birds (MSBs), tend to follow regular routes, termed “flyways”, which maximize opportunities for soaring whilst minimizing migration distances. Because thermals do not form over large areas of water or tall mountain

ranges, MSBs are restricted to traditional routes or “flyways” with large concentrations of birds occurring at migration “bottlenecks” during their migration from Europe and West Asia to North Africa (37 species). Around 1.5 million MSBs pass over Lebanon, where their travel approach makes them susceptible to threats; including unsustainable hunting, unsustainable agricultural practices, collision with wind turbines and high power lines, disposal of waste without appropriate treatment, etc... IKBs and poaching is a major threat to birds in Lebanon, regardless of species, place, season, day, etc. It is a socio-economic phenomenon related to manhood and transferred through generations<sup>1</sup>. It is undermining all conservation efforts in the country. The problem increased with the hunting ban issued in 1995 where a new group of young shooters has evolved who has no respect for species, habitats, ..... and has no training, education or sensitization on conservation, safety or ethical issues. They shoot on anything that flies in front of them and boost their victories on social media tools. The result of that is an increasing number of injuries and mortality among both shooters<sup>2</sup> and birds, poor behavior and respect of private property as well as totally indiscriminate shooting of birds.

Every year, many birds are killed on their way south to winter or north to breed by recreational hunters and shooters who are either unaware of or indiffer-

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<sup>1</sup> Hunting is an activity often passed down from generation to generation – with family members teaching not only how to hunt and learn bush craft skills, but also valuable life lessons. Among other things, hunting teaches the interdependence of life, the importance of stewardship of land and wildlife, cooperation with other land users, and observation and survival skills. It is a physical activity that promotes a healthy lifestyle and demands physical fitness and discipline.

<sup>2</sup> More than 400 incidences of injury and death per year from shooting.

ent to the country's poorly enforced hunting ban. Most of the new generation shooters don't know the avian species very well. In addition, there is no monitoring of hunting at national level that can guide the decision makers of the country to issue the appropriate application decrees.

Hunting has been banned in Lebanon since 1995 or so<sup>3</sup>, but one would hardly know this by the amount of recreational hunting that takes place throughout the year, mainly in the Beqaa Valley and in the Akkar region at the north. At any time of the year, shooters drive into the mountains with their 4-wheel drives and ATVs, often shooting whatever they see. Hunting in Lebanon is destructive, especially under a long-term ban that leads to opposite results with no application of the hunting law and its decrees. Many birds are in decline in Lebanon. These are not limited to threatened species but cover also many common bird species<sup>4</sup>. Environmentalists, hunters and even gun and cartridges sellers are all in favor of a law to regulate hunting. The new hunting law was ratified in 2004 and all the application decrees were finalized by 2014. What is left is the willingness to open the hunting season, a matter that is practically impossible because of the insufficient number of policemen to control hunters and shooters all over the country. This excuse is perhaps accepted under the current political instability of Lebanon.

The hunting ban also triggered the development of new hunting practices. Interviews and meetings with individual hunters show that their attitude towards birds changed to become much more vindictive. These shooters use a wide variety of tools for hunting and trapping such as guns, nets, calling machines, projectors,... They have even invented new tools specific for them. Most of these tools are illegal and banned in the new hunting law 580/2004 (**Annex II: various ways of hunting and trapping birds in Lebanon**).

BirdLife partnership has presented during Birdfair 2015, a report based on the first ever comprehensive scientific study to quantify the scale of illegal killing across 26 countries of the Mediterranean region. The results were gruesome. The report identifies three



Himyas for responsible hunting are the solution for stopping the illegal killing of birds in Lebanon.. © BirdLife International

individual blackspots – the Famagusta area in Cyprus, the El Manzala area in Egypt and the Akkar area in Lebanon – where, staggeringly, more than half a million birds are being illegally slaughtered each year. The study led by BirdLife International have shown that Lebanon ranks the 4th country in terms of the illegally killed birds per year. The total number of illegally killed birds in the Mediterranean is 25 million birds annually. Of them, Lebanon's share is 10.5%. As a result, the mean estimated number of illegally killed birds in Lebanon is around 2,600,000 annually. On average, more than 248 birds are illegally killed in Lebanon each year for every square kilometer. Presently, 291 species of bird regularly occur in Lebanon, with 100% of species being killed illegally in significant numbers. The estimated mean number of individual birds killed illegally is 44

individuals for every 100 people. Common Quail (*Coturnix coturnix*), Calandra Lark (*Melanocorypha calandra*) and Blackcap (*Sylvia atricapilla*) are killed in large numbers.

BirdLife International CEO, Patricia Zurita, stated: “This review shows the gruesome extent to which birds are being killed illegally in the Mediterranean. Populations of 40 different migratory passerines that were once abundant in Europe are declining, with a number even in free-fall and disappearing altogether.” “Our birds deserve safer flyways – concluded BirdLife’s CEO – and we want conservation efforts to be increased now, before it’s too late.” Further, she added “To tackle these threats, our conservation efforts need to be stepped up at the blackspots we have identified, coupled with effective and well-coordinated local, regional and national advocacy”.

Assad Serhal, representing SPNL-BirdLife Lebanon, presented the case for Hima/RHAs to help enforcing the new Lebanese hunting law at the local level and put an end to IKBs in Lebanon.



.. and the proper enforcement of the new Lebanese hunting law  
© BirdLife International

<sup>3</sup> In 1995, the government of Lebanon negotiated a GEF/UNDP project on protected areas with the technical backstopping of IUCN. One of the preconditions of this project was to instate a national hunting ban over a five year period to allow for proper bird population counts and monitoring and to develop a more recent law that would take into account Lebanon's obligations under the CBD, which was ratified in 1994. After a long struggle between environmentalists on one side and hunting organizations on the other, a national hunting ban was instated in 1995 for a five-year period. This duration was supposed to serve for the upgrading of hunting legislation and management responsibilities. However, struggles at all levels of the sector – i.e. between hunting and environmental organizations, within hunting and environmental organizations and between different government organizations – completely paralyzed the process leading to 4 renewals of the ban (between 1995 & 2004). It was only in February 2004 that a Law (no. 580/4) for the management and organization of hunting was voted by the Lebanese Parliament. All application decrees for the law has been issued by year 2014, but the minister did not open the hunting season; thus hunting ban was legally still in effect! Based on the HHC decision on 13/3/2017, the minister of Environment has opened the hunting season from 15 September 2017 – 31 January 2018.

<sup>4</sup> A study made by G. Ramadan-Jaradi (unpubl.) indicated that both migrant and resident bird populations have been reduced by c.18%.



Maher Osta, a responsible hunter

# B. PROBLEM OF LAW ENFORCEMENT

It took around 10 years from the hunting ban until the new hunting law 580 was issued in February 2004. Two years were needed for the establishment of the Hunting Higher Council-HHC in 2006, and 10 years for the development of the application decrees. The last 10 years period resulted in a lot of achievements through several regional projects where SPNL was leading, mainly:

## Sustainable Hunting Project<sup>5</sup>

- **Regional basis:**
  - Development of “guidelines for hunting management”, to be adapted on national basis.
  - Development of “Code of Practice for hunters”.
  - Development of “Synthesis reports” on the issue of hunting.
- **National level:**
  - Development of “Country National Report” on hunting.
  - Coordination a “National Hunter Survey” (gathering data on hunting sector).
  - Development of draft application decrees for the hunting law.
  - Development of awareness material (Pamphlets addressing hunters on game birds & on globally threatened birds).
  - Printing of the “Arabic Field Guide for Birds in the Middle East”.
  - Development of “Educational Manual/CD” addressed to school children 8-12 years old, and training around 200 – 250 school teachers on its use.
  - Organizing conflict resolution sessions between different stakeholders involved in hunting.
  - Training courses on bird identification & conservation issues to Law Enforcement Officers-LEOs.

## Migratory Soaring Bird Project<sup>6</sup>

- SPNL representing the conservation NGOs in the Hunting Higher Council for 2 terms.
- SPNL technically supporting in the development of application decrees for the hunting law 580/2004.
- Preparing GIS maps for MSB species flyways, hunting hotspots, and the protected areas in Lebanon.
- Development of “Soaring Bird Atlas”, “Field Guide for MSBs”, and “Manual for Bird Identification”.
- Development of the “Hunter Guide” that covers safety, hunter ethics & responsibility, and conservation.
- Development of Questions & Answers in parallel with the hunter’s guide which is the reference book for the hunter in order to pass the exam needed for the hunting license according to hunting law 580/2004.
- Training Educational Coordinators from the Ministry of Education on the use of the Educational Manual/CD.
- Training Law Enforcement Officers - LEOs on bird identification, conservation, and the hunting law.
- Organizing a National Training on the identification of Migratory Soaring Bird species with Dr. Richard Porter.
- Preparing reports on relation between hunting & soaring birds, analysis of sub-threats of hunting, and report on hunting stakeholders and organizations.
- Preparing a report on national policies and legislations related to hunting management in Lebanon.
- Preparing a business plan for hunting management in Lebanon.
- Conducting a survey assessing the relation of hunting to livelihood of people and the impact of the MSB project.
- Development of “Status of Birds and IBAs in Lebanon”.
- National survey for the identification of «Responsible Hunting Areas» that would support conservation efforts & proper law enforcement.

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<sup>5</sup> BUILDING CAPACITY FOR SUSTAINABLE HUNTING OF MIGRATORY BIRDS IN MEDITERRANEAN THIRD COUNTRIES (NORTH AFRICA AND MIDDLE EAST)

<sup>6</sup> Mainstreaming Conservation of Migratory Soaring Birds into Key Productive Sectors along the Rift valley/Red Sea Flyway



## MAVA BirdLife Capacity Building Project<sup>7</sup>

- Development of training program for hunters based on the “Hunter Guide” (in order to enable them to pass the hunting exam for the license).
- Development of an online quiz as a trial for the hunter before the actual exam (based on the Questions & Answers developed).
- Launching of an Arabic Interactive Website addressed mainly to hunters.
- Social media addressing hunters.
- Establishment of the «West Beqaa Center for Sustainable Hunting ».
- Signature of declaration on sustainable hunting by a group of professional hunters.

Now, all application decrees has been issued, list of game species highlighted, and **the hunting season** has been opened by ministerial decision from 15 September 2017 – 31 January 2018 based on the HHC decision on 13/3/2017 (after 22 years of hunting ban). Three issues are mandated for hunting legally, for the hunter to have, namely:

- **Gun license.**
- **Hunting license based on a mandated exam.**
- **Insurance policy for hunting accidents against others.**

One of the still pending issues for the hunting law enforcement is the issue of hunting places. Article 8 in the law 580 states «It is strictly forbidden to hunt in cities, villages, picnic areas, public gardens, protected areas; and areas that have been categorized as important heritage sites, or less than 500 meters distance from residential areas, religious sites, public or private infrastructure, even if the hunter is using arms that work by air or gas pressure. It is also prohibited to display hunted prey on the car and on main roads», while article 7 states «None of the wild birds or animals in Lebanon is considered the property of anyone regardless of its species or origin. The land owner or the investor of the land has the right to prohibit hunting on it by



placing “No Hunting” signs on the entrance of the land according to agreed practices».

Further, it is very difficult for law enforcement officers to enforce hunting ban all over the country (due to their low number, other security priorities, need for training on bird identification,...).

Thus, SPNL is currently advocating towards the adoption of responsible hunting areas-RHAs in collaboration with municipalities as a solution for this issue, in order to support proper implementation of the law by the law enforcement officers-LEOs. Within this context, SPNL has collaborated with UNDP Migratory Soaring Bird project towards the identification of 8 RHAs on municipal land covering all Mohafazats in Lebanon, to be managed by municipalities-local authorities.

Currently, the identified RHAs are a model for experimentation. Their success will be behind increasing the number of areas in many districts in order to keep the hunting controlled by municipalities in accordance with the Law.

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<sup>7</sup> Capacity Development for Flyway Conservation in the Mediterranean

## C. CONCEPT OF RHAS

The convention of Biological Diversity provided the **Definition of “Sustainable Hunting”** – in its article 2 as follows:

- **Sustainable Hunting:** is the use of wild game species and their habitats in a way and at a rate that does not lead to the long-term decline of biodiversity. Such use maintains its potential to meet the needs and aspirations of present and future generations, as well as maintaining hunting itself as an accepted social, economic and cultural activity.

### Within the current situation of:

- Hunting ban for 22 years since 1995.
- New hunting law 580/2004 is not enforced yet.
- When Lebanon do not satisfy its commitments of sustainable use for the CBD convention that it ratified in 1994.
- When Lebanon can't satisfy its commitments for the AEWA agreement to protect the waterbirds by banning the use of lead cartridges.

### And based on:

- Importance of birds especially for reforestation, cleaning nature from dead bodies and pest control.
- Spread of Illegal unsustainable hunting all over the country regardless of species, habitat, season, day, tools,.....attacking all birds even soaring birds.
- Limited capacity of the law enforcement officers to implement the hunting law.
- Pressure from international community to stop the massacre against birds in Lebanon.

SPNL suggested the implementation of an innovative approach which is the Responsible Hunting Areas-RHAs.

Aldo Leopold, one of the pioneers of wildlife management as a science, defined the RHAs as «the art of making land produce sustained annual crops of wild game for **recreational** use». The suggestion by SPNL is to establish RHAs **“to be for conservation and sustainable use”** in Lebanon

The idea of RHAs is to restrict hunting to specific areas per Mohafazat and ban hunting in the rest of the country. RHAs will have management plans & teams similar to PAs, and will have monitoring plans for habitat & species. Responsible Hunting Areas - RHAs are:

- Areas where hunting law and its application decrees are respected.
- Areas where hunters should have hunting license in order to practice hunting.
- Areas where hunters would abide with the hunting law, its application decrees, hunting season, and list of game species.
- Areas managed and monitored with the aim of conservation and sustainable use.
- Areas that depend on scientific criteria for its selection and identification.



Amazing Common Teal and Wild Fowl migration over the rift valley of Lebanon © Fouad Itani

Establishment of Lebanese RHAs is an attempt to balance the needs of wildlife with the needs of people using the best available science where the area should be of certain size to ensure hunting security and possibility of hunting for almost everyone within the carrying capacity limitation and the presence of the most searched game species on the site. RHAs allow game hunting with bag limit under the control of the local community that is represented by the local authority, the municipality. Management within RHAs draws on disciplines such as mathematics, chemistry, biology, ecology, climatology and geography to gain the best results. RHAs contribute to reduce the loss in the earth's biodiversity by taking into consideration ecological principles such as carrying capacity, disturbance and succession and environmental conditions such as physical geography, pedology and hydrology with the aim of balancing the needs of wildlife with the needs of people. RHAs management may require reforestation, pest control, nitrification, denitrification, irrigation, coppicing and hedge laying.

Unlike the United States where RHAs management practices are often implemented by a governmental agency to uphold a law, such as the Endangered Species Act of 1973, Lebanon tends to manage its RHAs through municipalities and groups formed from the local communities as the latter are the most interested in making revenues from recreational activities within the wise harvest and the sustainable use perspectives<sup>8</sup>.

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<sup>8</sup> As in protected areas and biosphere reserves: the law for protected areas does not state that they can collect entrance fees; but it does not prevent collection of revenue against offered services. Currently, P.A.s do collect donations and contributions at the entrance of each site which help in its sustainability.



Majestic mountains Himas of Lebanon © Asaad Saleh



# D. HIMAS AND RHAS

**For the first time in Lebanon, an initiative combines two main actions: Community based Conservation (CBC) & Scientific based Management (SBM) on one side, and Wise Traditional Harvest and Use (WTHU) through specific criteria and guidance material for management on the other hand.**

Having RHAs designed to be managed by the local communities in response to scientific findings that may positively affect the bag limit and the target game species among others, SPNL attempts to investigate into the matter of establishing RHAs on communal lands within areas declared “Hima”<sup>9</sup>. The latter is a type of local tradition of conservation that prevailed 1500 years ago in the Arabian Peninsula and was necessary for the survival of people in harsh environments. The Hima system has been revived by SPNL since 2004. The aim of incorporating the RHAs in the “Himas” is to enhance the importance of community involvement when preserving and sustainably using natural areas and balancing natural resources through sustainable management. Accordingly, Himas and RHAs are in harmony due to their dependence on sound local governance rooted in a culture of coexistence, integrity, trust, care and respect for both the natural and human environment.

RHAs are based on scientific studies to ensure security of hunters, safety of managers and sustainability of target game species through a set of guiding materials to hunters and involved managing staff. Subsequently, RHAs are away at least 500 meters distance from residential areas, religious sites, public or private premises, protected areas and main migratory bird flyways. On the other side, RHAs will not cause disturbance to residents, there wouldn't be any trespassing to other lands, moreover the hunters will get to enjoy their hobby without having a negative impact on the bird populations, habitats, and without negatively affecting

the local community and business owners of guns and ammunition shops.

For the first time in Lebanon, monitoring and evaluation of the birds in general and the game birds in particular will be possible within the RHAs and at the national level since the RHAs are suggested to be represented in all the Mohafazats of Lebanon (except the capital Beirut).

Finally, it is worth noting that the RHAs concept is nowadays getting more and more popular all over the country. Meanwhile some municipalities are not interested in establishing RHAs or may not able to provide the necessary surface area to be declared RHAs, whereas other municipalities have the right surface areas but they wanted them to be for the local use by the hunters of their villages only<sup>10</sup>. Will this latter category be allowed to hunt on national RHAs besides hunting on their local RHAs?

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<sup>9</sup> Hima is a traditional approach for the conservation of natural resources that has been prevalent in the Arabian Peninsula for more than 1500 years. It started with the tribal system and the need to secure their livelihood in harsh environment. The Hima approach evolved with the Islamic culture that added to it values such as equity, common good, equal opportunity, common decision making,... Since 2004, SPNL is promoting the “Hima” community based approach for the conservation of key biodiversity sites in collaboration with municipalities-local authorities. This approach concentrates on the involvement of local communities in decision making, promotes sustainable use of natural resources, and supports poverty alleviation through providing alternatives for income generation. The Hima system has proved to be the best solution for sustainable use of natural resources and for the conservation of culture and traditions.

<sup>10</sup> RHAs are identified based on objective criteria (ecological & geographic). RHAs would allow hunters from any area; while some RHAs prefer to restrict their RHA to its local people.

Municipality members are elected by locals. If the majority of locals are with hunting, then RHA would be established within their village. If the hunters are a minority, they can go to large RHAs where hunting is not limited to locals.

After the demonstration that will be shown by the 8 identified RHAs, more areas will be designated & established per Mohafazat to accommodate for the large number of hunters. Further, the hunting is not supposed to be outside RHAs and will be enforced by time.



Birds are targets of environmentalist's lenses



The Technical Advisory Committee of the Equator Initiative was impressed by SPNL/Hima nomination for year 2017. It was selected to be included in the Solutions Database on the Equator Initiative's website. This new database hopes to connect practitioners that have developed nature-based solutions to sustainable development at the local level by showcasing solutions that work.





## E. RHA AS A WIN-WIN TOOL FOR CONSERVATION AND SUSTAINABLE DEVELOPMENT

The concept of RHAs is new innovative idea introduced to our region; thus it is expected to face some challenges such as:

- Lebanon is a small country with large population & development. Thus, finding communal land compatible with the criteria might be difficult.
- New concept introduced to stakeholders (as in P.As concept 30 years ago).
- Needs funding for the establishment and management of the pilot RHAs.
- Needs experienced human resources (SPNL/site field staff).

On the other hand, issues of success has already been encountered such as:

- Adoption of sustainable responsible hunting concept by municipalities.
- Potential RHA sites are identified & maps secured.
- Estimates: 4-5 % of Lebanon (declared Himas), 1 % (Potential identified RHAs) <sup>11</sup>.

- RHAs are promoted on communal land under the authority of municipalities-community based management who are more proactive for implementation.

It is important to note that UNESCO & Biosphere reserves consider RHAs as conservation areas for non-game species & habitats. Further, The Convention on Biological Diversity defines protected area as: **“A geographically defined area which is designated or regulated and managed to achieve specific conservation objectives”** where RHAs are included<sup>12</sup>.

Thus, RHA concept is considered as a win-win tool for conservation and sustainable development as it:

- Facilitate hunting law enforcement.
- Decrease hunting threat on birds especially in PAs, IBBA, Himas, Ramsar sites,....
- Allow habitat restoration of marginalized areas; improve habitats for birds & other biodiversity.
- Allow monitoring; thus annual scientific decision on game species.
- Protect local people from hunting accidents.
- Raise funds for conservation.
- Help in alleviating poverty at local level.
- Increase the percentage of protected areas in the country.

<sup>11</sup> RHAs are additional % of land which is designated or regulated and managed to achieve specific conservation objectives.

<sup>12</sup> The current identified 8 RHAs are already designated by municipal councils as Himas for sustainable use including responsible hunting. Once initiated, they will be regulated according to management plans to achieve specified conservation objectives.



Workshop on hunting laws with the internal forces and the forest

## F. LINKAGE BETWEEN HIMAS / RHAS AND RURAL RESPONSIBLE TOURISM

Hima is a traditional approach for the conservation of natural resources that has been prevalent in the Arabian Peninsula for more than 1500 years. It started with the tribal system and the need to secure their livelihood in harsh environment. The Hima approach evolved with the Islamic culture that added to it values such as equity, common good, equal opportunity, common decision making,... Since 2004, SPNL is promoting the “Hima” community based approach for conservation in collaboration with municipalities-local authorities. This approach concentrates on the involvement of local communities in decision making, promotes sustainable use of natural resources, and supports poverty alleviation through providing alternatives for income generation.

Hima projects concentrates on scientific research (social & ecological), situation analysis, and developing management plan for the Hima sites that takes into consideration poverty alleviation & providing alternative ecologically friendly job opportunities for the local communities that raises their livelihood and quality of life (such as ecotourism, Bed & breakfast facilities, visitor centers, guiding in nature, cultural artisana and food,...).

**The suggested RHAs are Himas declared for sustainable use of resources including sustainable responsible hunting, grazing, fishing,...in addition to promoting sustainable rural tourism in the non-hunting season; that is creating year round options for local economy. All interlinked to support local economies and livelihood within carrying capacity and nature conservation; thus achieving sustainable development goals.**

SPNL is the World Leader in Hima revival & has been advocating for the promotion of the Hima concept on national, regional, and international basis. It is adopted by the Ministry of Environment within the national draft decree for protected area management in Lebanon, and adopted by BirdLife International, IUCN, MedWet, WANA Forum,...Also SPNL was the leader for the establishment of the “Hima Fund” in Qatar for the conservation of Hima and Globally Threatened Species. Another achievement was the adoption of Motion 122, for promoting and supporting community based resource management and conservation (including Al Hima), by the IUCN during its 5th World Conservation Congress in Jeju- South Korea during September 2012, which was co-presented by SPNL and the Ministry of Agriculture, Forestry, Environment and Water in Austria. SPNL was awarded in June 2013 the BirdLife Partnership Award for the revival of the Hima approach, in addition to the Best Practices Award from the UN-Habitat and Dubai Municipality for preserving the Qolieleh Marine Hima. The Hima system has proved to be the best solution for sustainable use of natural resources and for the conservation of culture and traditions.

### Vision and Strategy of Ministry of Tourism

The Ministry of Tourism in its national strategy “Rural Tourism Strategy for Lebanon” has defined rural tourism as “*experiencing the country* through a variety of tourism activities that have positive impact on the local environment, local community and local culture. Through rural tourism visitors experience the authentic rural way of life where landscapes, nature, agriculture, food, and heritage are at the heart of activities. The vast majority of rural tourism businesses are usually small scale, family-run enterprises offering a personalized experience for guests”. Himas as community based protected areas were mentioned in the strategy within the rural assets of the country.

The United Nation World Tourism Organization (UNWTO) definition of sustainable tourism is:

**“Tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities”.** Following the UNWTO sustainable tourism understanding *“Sustainable tourism development Rural Tourism Strategy for Lebanon requires the informed participation of all relevant stakeholders, as well as strong political leadership to ensure wide participation and consensus building.”*

As quoted from the rural tourism strategy, the **guiding principles** revolve around:

- Cooperation among all actors in rural tourism: local communities, civil society, donors, decision makers, service providers, and other stakeholders in the tourism sector and in other sectors that can support the development of rural tourism such as environment, investments and finance, transportation, and others.
- Coherence and complementarity of projects and initiatives and building on already existing projects and programs and established structures.
- Promoting protection and conservation and building on protected areas and zones (himas), and parks initiatives.
- Strengthening the participatory approach and involvement of local communities at destinations and work towards inclusive growth of all businesses involved in the sector, making sure that investments end up benefiting entire communities.
- Strengthening mutual benefits and sound and fair funding opportunities among stakeholders.
- Adapting and developing context-oriented actions specific to Lebanon that respect the uniqueness of communities, regions or clusters.

The strategy sets its vision, goal, and strategic directions as follows:

**Vision:** “Rural areas and regions beyond the capital city Beirut and major urban areas are more successful sustainable destinations for travel including cultural, historical, religious, culinary, nature, sports, agricultural and adventure tourism”.

**Goal:** “Rural communities expand their income by receiving more visitors and by offering more competitive tourism products, services and experiences to tourists while preserving their natural environment and cultural heritage”.

**The long term expected general outcomes are:**

- Increased awareness on rural tourism destinations, products and services in Lebanon with consistent and professional presentation of the sector among Lebanese and diaspora markets
- Improved conservation of natural, historical and cultural heritage at the level of local communities and enhanced policies and procedures that promote sustainable tourism practices
- Improved regulations, legislation and procedures that enhance the work of rural tourism providers and encourage rural tourism ventures and investments
- Improved quality of visitor experience in rural areas of Lebanon
- Increased tourism expenditures in rural areas through longer stays and higher spending per capita
- Improved economic development and job creation across local communities
- Improved quality and professionalism of service providers
- Improved common action and cooperation among rural tourism stakeholders

Lebanese regions and rural areas are destinations that can offer a variety of attractions to diverse markets, and Lebanon can offer differentiated travel experiences. Lebanon has to conserve and differentiate its assets in order to stand out in the competitive market for rural tourism. Within the current security situation, the strategy concentrates on the domestic and diaspora market. The strategy suggests 8 strategic directions:

**Strategic Direction 1. Develop and improve marketing and promotion to increase consumer awareness and the visibility of rural tourism destinations, products and services domestically and internationally**



- 1.1.** Package, market, and promote existing rural tourism destinations, products and services
- 1.2.** Develop a comprehensive rural tourism marketing strategy including an inclusive communication and promotional plan focused on the domestic market and the Lebanese diaspora
- 1.3.** Work on countering the negative image of Lebanon on the international market

**Strategic Direction 2. Institutionalize rural tourism at the level of the local communities**

- 2.1.** Work with local communities and local governments (municipalities, mohafazats) to improve their understanding, valorization and ownership of the environmental, economic and social value of their local assets
- 2.2.** Encourage and support local communities and municipalities in developing tourism strategies including investment and infrastructure strategies following zonal and clustering approach
- 2.3.** Engage religious orders to participate in the social and economic development of rural areas

**Strategic Direction 3. Improve and enforce conservation and protection of the environmental, cultural, historical, agricultural heritage of rural areas**

- 3.1.** Enhance protection of local assets and enforce applicable laws
- 3.2.** Consolidate and expand on existing community based conservation models
- 3.3.** Officially recognize and protect national trails and identify zones to be protected

**Strategic Direction 4. Diversify, modernize and improve quality of rural destinations, products and services**

- 4.1.** Develop existing and *new* competitive rural tourism destinations - according to new trends - and appropriate to the local communities specificities and identities
- 4.2.** Improve quality of tourism offers and products and develop standards and the culture of certification and labeling across the value chain
- 4.3.** Improve funding and investment mechanisms to support rural tourism products and services development

**Strategic Direction 5. Improve policies, legislation, and regulation of the rural tourism sector and enforcement of laws across the value chain**

- 5.1.** Improve the regulatory framework of rural accommodations and guesthouses
- 5.2.** Enforce customer protection and complaint mechanisms across the value chain
- 5.3.** Regulate the work of local tour guides
- 5.4.** Regulate the work of unlicensed outdoor activities clubs and specialty tour operators

**Strategic Direction 6. Improve information and data collection and management to support sound planning**

- 6.1.** Form a rural tourism research network (and later an observatory) to collect and manage tourism information, knowledge and data for planning and strategizing

**Strategic Direction 7. Develop the culture of rural tourism among the young generation and in the education system**

- 7.1.** Promote the culture of rural tourism and raise awareness within schools and universities

**Strategic Direction 8. Improve domestic and international business linkages and networking (cross cutting objective)**

- 8.1.** Improve private-public coordination and linkages on the local level
- 8.2.** Network with international stakeholders
- 8.3.** Network with diaspora and Lebanese expats<sup>13</sup>

Implementation of this national strategy by the Ministry of Tourism has already been initiated, exemplified by: the development and issuance of several decisions and decrees such as:

- Decree no. 6298 that organizes Bed and Breakfast facilities (dated 9 September 2011).
- Ministerial decision no. 205 that specifies the terms of license for the manufacture or sale of antiques and souvenirs (dated 2 August 2017) (**Annex III**).

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<sup>13</sup> Rural Tourism Strategy for Lebanon, Lebanon Industry Value Chain Development (LIVCD), USAID Lebanon, 15 September 2014.




Great White Pelican resting at Himas of West Beqaa © Fouad Itani

## SPNL Vision and Strategy

This section highlights the structure of the HIMA approach and the functioning of the “HIMA standard” certification, an innovative biodiversity conservation labeling that satisfies sustainability criteria by simultaneously promoting the following in target areas:

Sustainability criteria	HIMA criteria	Implementation
Environmental conservation	Environmental sustainability	<ul style="list-style-type: none"> <li>• Biodiversity conservation (Birds conservation through promoting responsible hunting or no-hunting zone as appropriate, wildlife conservation through banning animal testing, animal cruelty, destruction of habitat, or any other negative practice; and promoting open spaces (no Fences).</li> <li>• Use of sustainable renewable energy (Solar System Energy, wind power, recycling etc...).</li> <li>• Promote Responsible Tourism</li> <li>• Introduce new water saving technologies, ex: sensors on trees to use water efficiently.</li> <li>• Promote sustainable grazing since it is essential for flowers diversity, fire prevention, organic high quality milk production, etc...</li> <li>• promoting sustainable use of resources with people through revival of Hima approach.</li> </ul>
Social wellbeing	<ul style="list-style-type: none"> <li>• Institutional principles</li> <li>• Governance best practices</li> <li>• Inclusion of marginalized groups</li> </ul>	<ul style="list-style-type: none"> <li>• Fair treatment of local communities;</li> <li>• Social inclusion</li> <li>• Engagement &amp; empowerment of women &amp; youth</li> <li>• Advocating a better quality of life for people and nature, through conserving sites, protecting species, and assuring sustainability</li> </ul>
Economical prosperity	Economic empowerment/ independence	<ul style="list-style-type: none"> <li>• Economic empowerment</li> <li>• Income generation</li> <li>• spreading tailored best practices.</li> <li>• Fair trade: promoting direct access for farmers to market.</li> <li>• Responsible Tourism</li> </ul>





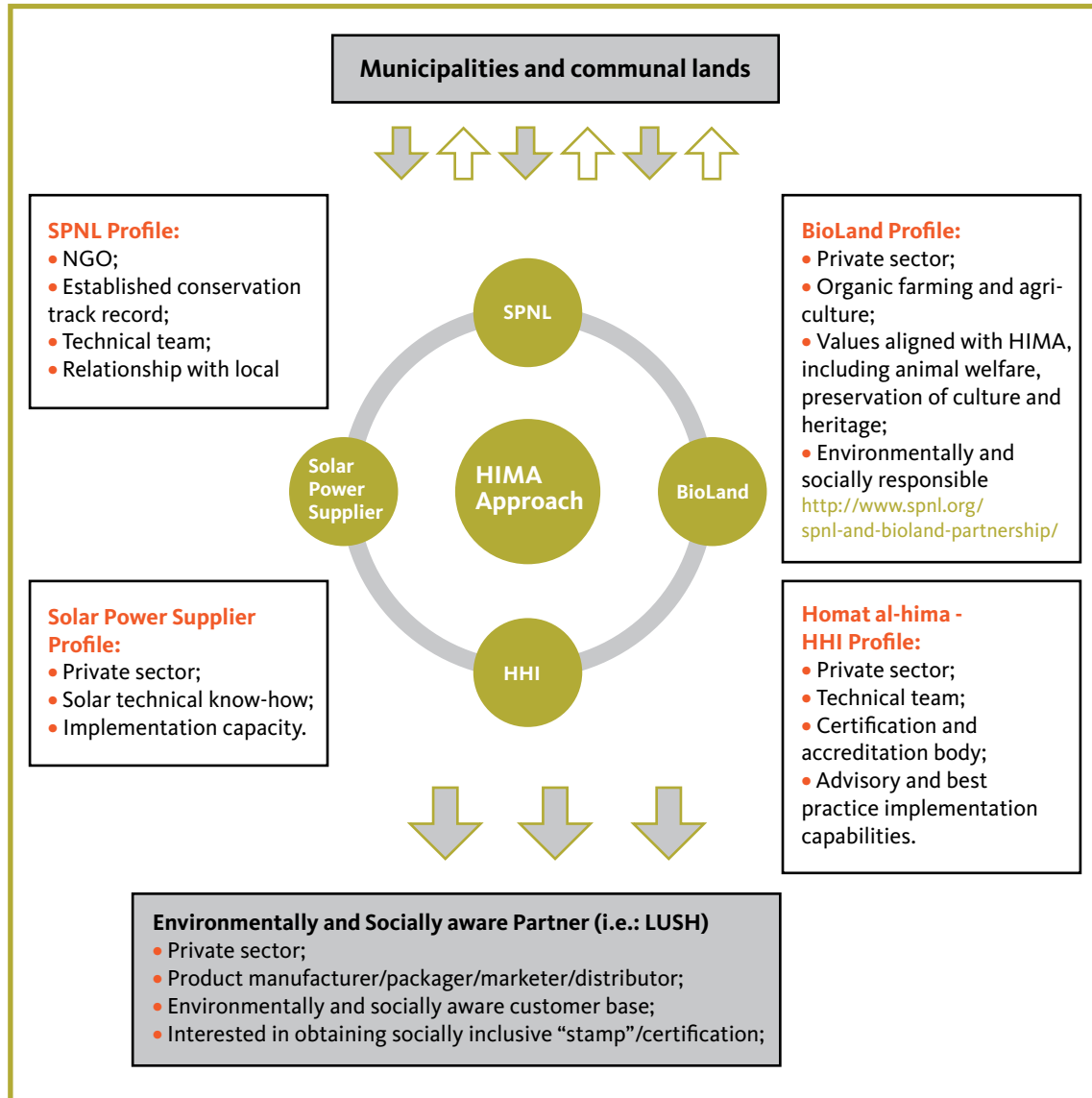
Organic Agriculture	Certified organic agriculture	<ul style="list-style-type: none"> <li>• Preventing the use of chemicals.</li> <li>• Respecting the trees by trimming and harvesting at the right moment in the right way.</li> <li>• Adding a traceability system to detect and cure any disease or problem</li> </ul>
Cultural Heritage Sustainability	<ul style="list-style-type: none"> <li>• Cultural practices preservation &amp; revival</li> </ul>	<ul style="list-style-type: none"> <li>• Preserving our ancestors' legacies by producing Terroir products while staying up-to-date and opened to new products, ex: producing gin from the lezzeib (juniperus, genevrier)</li> <li>• Conserving and reviving cultural and traditional skills and practices at local communities, ex: handcrafts, traditional food, etc...</li> </ul>
<ul style="list-style-type: none"> <li>- Peace Making</li> <li>- Hima for Peace</li> </ul>	<ul style="list-style-type: none"> <li>• Peace building</li> <li>• Peace maintenance</li> <li>• peace strengthening</li> </ul>	<ul style="list-style-type: none"> <li>• Conflict Resolution</li> <li>• Social Cohesion</li> <li>• Greater public good for all; equity and equality.</li> <li>• Building and sustaining relationships between different communities</li> <li>• Engagement of refugees</li> </ul>
Building up Synergies For Greater Public Good	<ul style="list-style-type: none"> <li>• Capturing synergies</li> </ul>	<ul style="list-style-type: none"> <li>• Partnership with international organizations, government institutions, municipalities, local communities, other NGOs, associates and the private sector</li> <li>• Combined efforts</li> <li>• Combined skills &amp; experience</li> </ul>

Under the HIMA umbrella, SPNL contemplates capitalizing on its extensive track record and constant innovation to introduce yet another aspect to empower local communities in areas of strategic environmental importance (KBAs, IBBAs, RAMSAR

sites, UNESCO heritage sites, etc...), the aspect of sustainable energy & Responsible Tourism

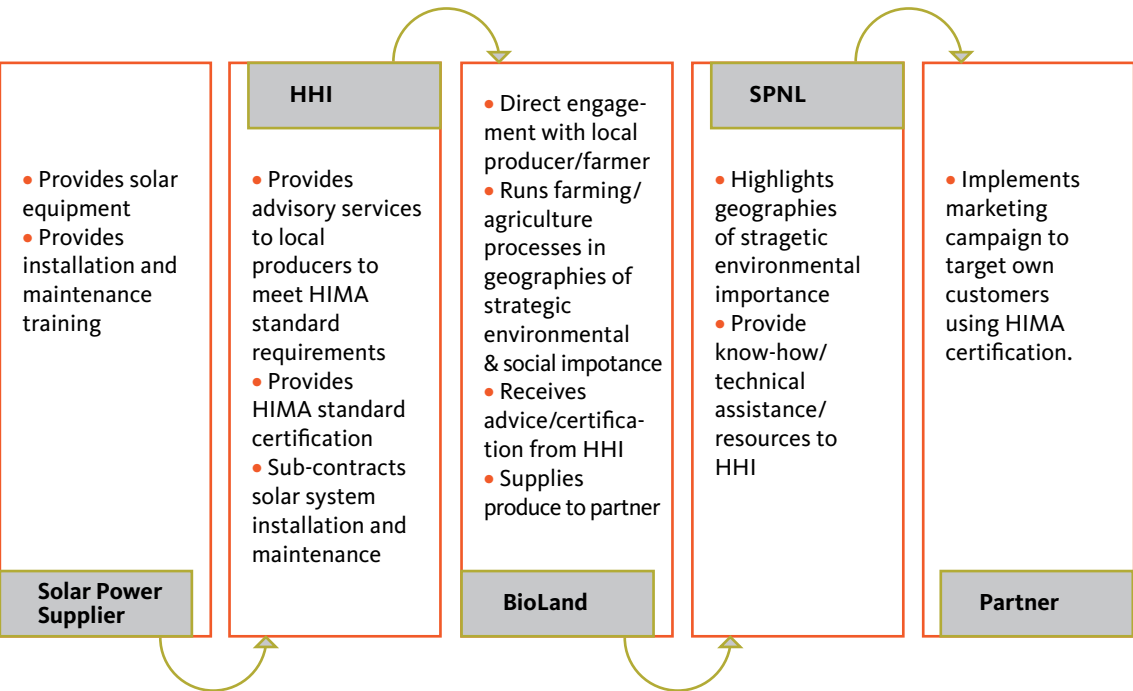
## Organizational implementation:

### • Key players



The schematic presented above presents the various stakeholders needed to implement the innovative HIMA approach, and gaining the seal of approval of the “HIMA standard” certification.

**Roles and interactions:**



**Fig.2:** HIMA standard certification: stakeholder interaction

**Homat al-hima International** is implementing the “HIMA standard” certification. HHI assesses the production processes of a potential partner (e.g.: partner sourcing from local vanilla producer, local orange blossom producer, etc...) and determines whether their practices are aligned with the values of the HIMA conservation approach:

- Should the **standards of the process meet the core requirements of the HIMA** conservation approach, HHI would issue a “HIMA standard” certification. The process/product would then be recognized as a HIMA approved product. This will allow the partner company to place the certification stamp on the product in question, and market it as such.

- In the case of **non-compliance of the processes of a given partner company**, HHI will propose a **solution** if it sees a potential alignment of values. Should the HHI team conclude that advising local communities and implementing best practices is possible, then HHI would propose, along with the assistance from SPNL, a ‘steering programme’ to guide a given community into meeting the HIMA standards for a subsequent certification.

SPNL and HHI believe that the above methodology is relevant, and meets the core values and drives of LUSH, a company aiming to promote and ensure the sustainable management of resources, both human and environmental, to produce high quality products. The below table highlights this by drawing a comparison between the HIMA requirements and the LUSH mission:



LUSH values		Equivalent HIMA standard requirement
Naked	No plastic packaging	<b>Environmental bottom line</b> -HIMA conservation requires all processes, practices, and materials used to be green and eco-friendly. -HIMA conservation works towards the conservation of wildlife and the promotion of nature away from any harmful practices, be it animal cruelty, destruction of habitat, or any other negative practice
100% Vegetarian	Animal cruelty-free practices	
Fighting Animal Testing	Awareness against animal cruelty Proposal of alternative methods	
Freshest Cosmetics	Local suppliers Whole, fresh products	<b>Socio-economic bottom lines</b> -HIMA conservation aims to promote equity and equality with and within local communities. The approach ensures economic development of communities by spreading tailored best practices and ensuring social inclusion. -HIMA conservation aims at providing the means and tools for local communities to be economically sustainable, allowing people to grow and prosper.
Handmade	Real smiling people behind every aspect of the business	
Ethical Buying	Positive impact on local communities	

### Concluding note:

The above highlights the tailored approach to be followed by SPNL to promote HIMA principles at the heart of the private sector. The framework showcases how sustainable development criteria and the values and principles of HIMA are synonymous. In fact, the HIMA approach goes beyond and tackles current issues facing today's societies globally. HIMA caters for peace, conflict resolution, social cohesion, empowerment of women and youth, all of which are at the very heart of the mission that LUSH, West Beqaa Country Club (WBCC), BioLand & other SPNL Private Sector Partners,

trying to achieve. HIMA translates the concept of greater public good in the West, translates and tailors it to the cultures, values, and norms of the East Way of God in the East.

Last but not least, SPNL deeply believes that in order to ensure equity in society, resources need to be readily available for all members to use fairly and sustainably for the benefit of all. Today's technological advances and innovative approaches can accelerate the achievement of this. With the proper use of sustainable energies, even the most remote communities have been able to unlock the basic needs for survival: water and energy. SPNL strongly urges the implementation of the aforementioned best practices, by introducing such concepts and applications as part of the pillars of the HIMA approach, thereby also tackling energy poverty and water scarcity with sustainable means.

**SPNL relation with private sector was initiated since its inception, and evolved along the years as follows:**

- 1-** SARI Translation Company: SARI owners are the one of the founding members of SPNL since 1983. They have kindly offered SPNL with office space and facilities. As they believe in SPNL conservation effort, SARI provide technical translation of our scientific and awareness publications.
- 2-** West Beqaa Country Club: a great resort located at the heart of the Hima Kherbet Kanafar hosting several recreation activities such as horseback riding, tiro, swimming, hiking, organic farming and responsible hunting. Based on partnership agreement in 2013, WBCC has provided an office for Mediterranean Center for Responsible Hunting-MECRH established by SPNL, and leased 2,000 m<sup>2</sup> land for 50 years ahead to SPNL in order to establish Homat al-hima International Park-HHIP that serves for training, capacity building, networking, and marketing Hima local products.
- 3-** Bioland: Bioland, is a leading organic farmer in Lebanon, with a full-fledge organic shop in Beirut, and a first-of-its-kind farm-to-table organic restaurant in Batroun, North Lebanon. Bioland proudly believes in "organic for all" and provides a wide



Bird Watching at Hima Anjar

array of fresh and processed organic products, all at the most competitive prices. Bioland & SPNL joined forces in 2015, given the many values we share. These include but are not limited to reviving the Lebanese terroir, promoting eco-friendly practices, introducing the HIMA concept, applying the fair trade approach, and supporting the local communities.

**4-** Gold Trophy: Lebanese company providing small and big game hunting trips to worldwide destinations, abiding by high international hunting standards that it wishes to apply in Lebanon. SPNL and Gold Trophy signed a partnership agreement in 2015, in order to collaborate on awareness on responsible hunting.

**5-** Homat al-hima International-HHIP: Private sector with Technical team; acts as Certification and accreditation body; with Advisory and best practice implementation capabilities. It works on linking Hima to Hima through ecotourism. Based on the shared common values and interests, SPNL and HHI signed an agreement in 2017.

The Hima approach with its objectives to promote sustainable use of resources, conservation of nature and culture, and support community livelihood; satisfies with the national strategy for rural tourism. The Ministry of Tourism supports SPNL initiative in Hima revival for conservation and support of rural development. The Ministry believes in the role of youth guardians (Homat al-hima) and the link with responsible tourism; thus the need for official certification and recognition of Homat al-hima trained by SPNL.

SPNL with its partnerships with the Hima RHA municipalities, and private sector such as Homat Hima International, Bioland organic company, West Beqaa Country Club-WBCC, as a consortium aims to support in sustainable development goals and rural responsible tourism strategic directions.







Qaraoun Lake, Hima Qaraoun - West Beqaa © Asaad Saleh



Photos of hunters that participated in the contest of "Spring Photo-shoot" © Antoine Faissal

# ● IDENTIFICATION OF RHAs IN LEBANON

The methodology for the identification of potential RHAs involved several steps as follows:

## A. Highlighting list of game bird and mammal species as specified in the hunting law 580 (Table 1).

Under the phenological column, the following abbreviations denote:

- R** Resident with definite breeding records
- SB** Breeding summer visitor
- SV** Non-breeding summer visitor
- WV** Winter visitor
- PM** Passage migrant

Lower case abbreviations (eg r, sb, sv, wv and pm) indicate that the species is uncommon or rare at the relevant season.

Order	Family	Scientific Name	English name	Arabic name	Phenological status
<b>BIRDS</b>					
Anseriformes	Anatidae	<i>Anas platyrhynchos</i>	Mallard	بط شريف	PM, WV, sv, sb
	Anatidae	<i>Anas crecca</i>	Eurasian Teal	حذف شتوي	PM, WV
	Anatidae	<i>Anas querquedula</i>	Garganey	حذف صيفي	PM, sb
Galliformes	RHAsianidae	<i>Alectoris chukar</i>	Chukar Partridge	حجل شوكار	R
	RHAsianidae	<i>Coturnix coturnix</i>	Common Quail	فري – سمان	sb, PM, wv
Charadriiformes	Scolopacidae	<i>Scolopax rusticola</i>	Eurasian Woodcock	دجاجة أرض	WV
Columbiformes	Columbidae	<i>Columba oenas</i>	Stock Dove	حمام بري	pm, wv
	Columbidae	<i>Columba palumbus</i>	Woodpigeon	دلم	PM, WV
	Columbidae	<i>Streptopelia turtur</i>	Turtle Dove	ترغل	sb, PM
Passeriformes	Alaudidae	<i>Turdus philomelos</i>	Song Thrush	سمنة مغردة	PM, wv
	Turdidae	<i>Turdus viscivorus</i>	Mistle Thrush	سمنة الدبق	sb, pm, WV
	Turdidae	<i>Turdus pilaris</i>	Fieldfare	كيخن	pm, wv
	Turdidae	<i>Melanocorypha calandra</i>	Calandra Lark	مطوق	R, PM, wv
	Fringillidae	<i>Fringilla coelebs</i>	Chaffinch	صلنج	R, PM, wv
<b>MAMMALS</b>					
Lagomorpha	Leporidae	<i>Lepus capensis</i>	Cape Hare	أرنب	R
Artiodactyla	Suidae	<i>Sus-scrufa</i>	Wildboar	خنزير	R





**Aammiq Swamps**



**Qaraoun Lake**



**Bkassine Pine Forest**



**Rocky habitat**



**Olive grove**



**Cereal cultivated land**



**Cultivated land**





Isolated tree stand



Forest edges



Juniper trees



Rocky cliffs



Orchard & scattered trees in semi-desert



Scatered shrubs in semi-arid area

## B. Elaborating a study that relates each game species to its most relevant appropriate habitat in Lebanon (including species type, preferred hunting time,...).

### 1. Birds:

#### 1.1. Mallard Duck

Found in inland freshwater swamps, ponds, marshes, rivers, lakes, ditches and on islands. Sometimes seen resting in sea. **Example:** Qaraoun lake, Bishmezzine ponds, Aammiq swamps, Cheikh Zennad ditches, Litani River, etc. **Type:** Waterbird **Preferred hunting time:** September – Late January **Preferred hunting area:** Qaraoun Lake (artificial lake that needs rehabilitation) / West Beqaa



#### 1.2. Eurasian Teal

Found in inland freshwater swamps, ponds, marshes, rivers, lakes, ditches and on islands. **Example:** Qaraoun lake, Bishmezzine ponds, Aammiq swamps, Cheikh Zennad ditches, Litani River, etc. **Type:** Waterbird **Preferred hunting time:** Mid September – Late November **Preferred hunting area:** Qaraoun Lake (artificial lake that needs rehabilitation) / West Beqaa



#### 1.3. Garganey

Found in inland freshwater swamps, ponds, marshes, rivers, lakes, ditches and on islands.

**Example:** Qaraoun lake, Bishmezzine ponds, Aammiq swamps, Cheikh Zennad ditches, Litani River, etc. **Type:** Waterbird **Preferred hunting time:** Mid September – Late November **Preferred hunting area:** Qaraoun Lake (artificial lake that needs rehabilitation) / West Beqaa



#### 1.4. Chukar

Rocky terrains, open deciduous or evergreen woodlands, and grasslands of terraces.

**Example:** Most of the mountainous slopes (Jezzine, Bcharri, Barouk, Machghara, Rihane, Fakiha, Aana, Bkessine, Yammouneh) where the presence of rocky slopes helps the birds to escape by flying downslope or running upslope. **Type:** Semi-desert rock bird **Preferred hunting time:** Mid September – Early December **Preferred hunting area:** Fakiha, Eastern Region/ Baalback





### 1.5. Eurasian Woodcock

Feed and rest in the dense growth of brush, shrubs, and young forest. Woodcocks favor alder stands and abandoned farmland, including old apple orchards where the trees have become crowded by hawthorn and other light-loving trees and shrubs. At dusk, it roosts in early autumn in partially open areas such as berry barrens, fallow fields, pastures, newly logged woods, and brushy pine plantations. The birds roost -- not in trees, but sitting on the ground among the scattered growth of shrubs, weeds, and briars. **Example:** Sides of Litani River, Bkassine pine groves, Horsh Ehden mixed forest. **Type:** Forest ground bird **Preferred hunting time:** Mid October – February **Preferred hunting area:** Bkassine and Jezzine Stone pine forest/ Nabatieh



### 1.6. Song Thrush

Parks, gardens, small stands of trees, woodlands and hedgerows provide good habitat for song thrushes. Olive groves and areas of open grassland with slightly damp soil provide a good foraging environment. Orchards with berries are also important in autumn. **Type:** Wood bird **Preferred hunting time:** Early October – Late November **Preferred hunting area:** Olive groves & isolated tree stands on upper parts of slopes at Chehim/ Mount Lebanon



### 1.7. Mistle Thrush

Open woodland with tall trees that is located close to short grass for feeding is ideal for Mistle Thrush. Olive groves and areas of open grassland with slightly damp soil provide a good foraging environment. Orchards with berries are also important in autumn. **Type:** Wood bird **Preferred hunting time:** Late October – February **Preferred hunting area:** Olive groves & isolated tree stands on upper parts of slopes at Chehim/ Mount Lebanon

### 1.8. Fieldfare

Often seen in small forest areas fringing villages, parks or in isolated stands of trees at high altitude. **Type:** Wood bird **Preferred hunting time:** November – February **Preferred hunting area:** Olive groves, forest edges and Juniper stands in Jrood Akkar/ Akkar.



### 1.9. Common Quail

Grasslands are the general habitat of this terrestrial bird. Dense, tall vegetation is preferred, while forest edges and hedgerows are avoided. Cultivated fields are also used. **Example:** Cultivated grasslands of the abandoned terraces of both Lebanon and Anti-Lebanon lowland slopes. Fodder crops and cereal plains of the Beqaa Valley. **Type:** Farmland bird **Preferred hunting time:** September – Late November **Preferred hunting area:** Cheikh Zennad agricultural area/ Akkar and Fakiha & Ras Baalback/ Baalback, Dalhamieh, Anjar.



### 1.10. Calandra Lark

The Calandra lark is highly sensitive to habitat fragmentation, requiring fallow fields or dry open grasslands or large plains with no shrubs or trees, embedded in large expanses of open farmland or cereal cultivated areas, generally away from drainage and roads. **Example:** Beqaa Valley cultivated lands away from trees or shrubs.

NB. It also nests on the sides of the drains at Aammiq. **Type:** Farmland bird

**Preferred hunting time:** Late September – Late November **Preferred hunting area:** Cultivated lands of Baalback, Doris, Hermel, Qaa, Marjhein/ Baalback



### 1.11. Stock Dove

Open and semi-open areas from the coast to high mountain, mainly at Beqaa Valley where it frequents woodland edges, quarries and cliffs as well as farmlands. **Type:** Terrestrial bird

**Preferred hunting time:** October-November

**Preferred hunting area:** Rocky cliffs of Dounnieh, Yammouneh, Aammiq El Shouf/ Akkar, Middle Beqaa and Mount Lebanon; farmlands of the Beqaa where it feeds on stubbles.

### 1.12. Common Woodpigeon

Found in woodlands, hedgerows, parks, and gardens. In Europe it is also found in city centers.

**Example:** Pine grove of western slopes of Mount Lebanon, well wooded agricultural lands of Beqaa Valley, deciduous woodland edges, wooded ravines of most western middle altitude slopes of Mount Lebanon. Avoid rocky habitats and coastal area of Lebanon. **Type:** Tree dwelling bird

**Preferred hunting time:** Late November - late January.

**Preferred hunting area:** Hedgerows and pine groves at Diddeh-Kesrouane/ North Lebanon

### 1.13. Turtle Dove

Mainly found in agricultural land with scattered trees or shrubs, or in heathlands, parks, orchards near cultivated fields with hedgerows, mainly in dry sunny habitats. **Example:** Northern Beqaa semi-arid areas of Hermel, Fakiha and Qa'a.

Eastern slopes of southern half of Mount Lebanon.

Western slopes of Anti-Lebanon **Type:** Tree dwelling bird

**Preferred hunting time:** Mid September – mid November.

**Good potential hunting area:** Qaa, Hermel, Fakiha/ Baalback



### 1.14. Chaffinch

Chaffinches are found in a range of habitats including forests, woods, parks, gardens and hedgerows. They are likely to be found in more open areas in autumn and winter, when large groups of visiting birds search for seeds to sustain them through the winter or passage. **Example:** Cedar forests, pine and oak groves, orchards and parks in mountains and Beqaa Valley, all over Lebanon. **Type:** Tree dwelling bird **Preferred hunting time:** Mid October – mid January. **Preferred hunting area:** Forest of Dalboun/ Mount Lebanon; Fakiha/ Baalback; Bkassine/ Nabatiyeh.







## 2. Mammals:

### 2.1. Wildboar

Found in various mountainous areas, mainly in valleys and ravines. **Preferred hunting time:** Early December to early January. **Preferred hunting area:** Bisri, Mohtaqara, Dalboune, Deir El Mkhalles

### 2.2. Cape Hare

Found in various mountainous areas, mainly in open herbaceous land with heath, small shrubs, scrubs or patchy bushes. **Preferred hunting time:** During the hunting season, mainly in January. **Preferred hunting area:** Bisri, yahshoush, Fakiha, Aarsal, Ras Baalback

This study was the basis for the development of species vs habitat GIS maps for the 16 game bird and mammal species (as explained in section “Three”).



## C. IDENTIFIED CRITERIA FOR SELECTION OF RESPONSIBLE HUNTING AREAS

Having a set of criteria will save a lot of time to get there and identify the Responsible hunting areas (RHAs). Setting criteria ahead of time, however, it will be much easier to stay focused and make the best decision for the selection of the best site. In order to make the optimal decision regardless of how long it takes, every option was examined to ensure outlining the criteria in advance and only gathering information that's relevant.

The process of responsible hunting areas selection using criteria depends on conservation, sustainability, species and means of hunting. It is true that hunting in Lebanon is allowed with licensed hunting weapons, archery, dogs, falcons, hawks and eagles (Article 9 of Law 580/04), but the Lebanese landscape makes hunting with raptors very difficult due to rarity of open areas which allow the raptor to see the prey from long distance and the hunter to follow the raptor by vehicle to find him with its hunted prey or alone, especially that the Saker Falcon for example may need up to 10 km of pursuit before catching the prey and the Peregrine Falcon may need 5 km to do so. Such distance can't be covered by vehicles on the rough lands of Lebanon. The same applies on hawks that usually hunt in forested areas. Falconry is allowed but practically very limited by absence of appropriate terrains and appropriate preys. The size of Lebanon and the types of land properties impose the establishment of relatively small responsible hunting areas where the falconry cannot be contained due to the large hunting space that is required by raptors.

Following hard time of research, the following criteria for the identification of responsible hunting areas were set:

**1. Criterion 1:** The RHAs should primarily be evenly distributed over Lebanon.

It is preferred to have RHAs evenly distributed over the 7 Mohafazats (large administrative districts) of Lebanon. In other words, 1-2 RHA per Mohafazat. This will at least ensure equality between districts, an easier control of hunting, unnecessary movement of local communities between the districts, and coverage of various types of habitats to include all the game species allowed.

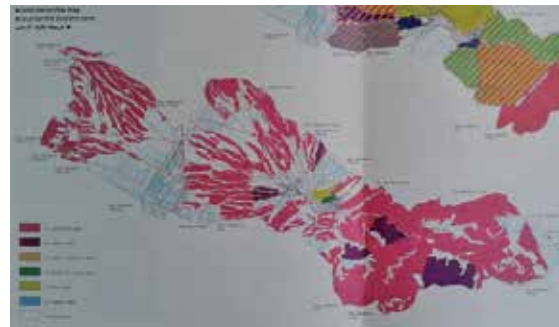
**2. Criterion 2:** The RHA has representatives of game bird species according to the hunting law. The RHA should preferably be able to host at least 4 out of 16 huntable species or it must provide the habitats of these 4 huntable species. The various habitats attract different bird populations, strongly so during the breeding season and loosely and lightly during the migration season, especially the fall season that corresponds to the hunting season. The Woodcock will always search for moist soil for feeding even outside the nesting period; the Calandra Lark frequents large plains, grassy steppes and cereal cultivated areas but will invade cereals fields during migratory passage. Thus, the various habitats still attract specific birds during non-breeding seasons. With four different types of habitats in a site, the needed population size of game species will be ensured, and with more sites, all the game species are covered. For example, there are more Larks and hares at Fakiha, Charbine, Khirbet Qanafar and Qaraoun; more Doves (pigeons) and Thrushes at Akkar; and more Ducks and Wild boars at Qaraoun and Kaytouli, etc.

**3. Criterion 3:** Communal landownership. The RHA should be communal (municipality owned) land and to a lesser extent (when in severe cases is necessary) governmental and private lands. Article 7 of the Law of hunting allows hunting on private lands if the owners and tenants have no objection. The criterion deliberately mentioned communal land and when necessary governmental and private lands because when two municipal lands are separated by a small private or governmental land, negotiation may take place to add the private land to the RHA. In certain areas of Lebanon, municipalities have no municipal lands but they are authorized

to use governmental lands with permits for each use. In this case the governmental land can be RHA.

**4. Criterion 4:** The responsible Hunting Area should not be less than 500,000 m<sup>2</sup>.

Lebanon is small and its surface area is 1/9th of Jordan, 1/18th of Syria and 1/384th of Turkey. Also Lebanon is highly populated (density is 430 persons/km<sup>2</sup> before the arrival of Syrian refugees). Subsequently, it is difficult to find larger areas than 500,000 m<sup>2</sup> in the country. Many municipalities have regretted the fact that they don't have such area size despite their desire to have RHAs.



Hima Fakiha where most of the area is governmental (violet), and the municipality is authorized to manage it

**5. Criterion 5:** The peripheral limits of the RHA should respect the Article "8" of the Hunting Law. The borders of the RHA must be 500 meters away from public and private premises and from protected areas (according to the Law 580/2004). The commitment to 500 meters is supported by two facts: 1) Rarity of sites in Lebanon that are 500 meters away from public and private premises and from protected areas due to the small size of the country combined with the high population density per unit of area; and 2) the hunter's rifle range is about 60 meters. Thus the 500 meters distance is reasonable.

**6. Criterion 6:** The RHA shall never be in a position to threaten the life of people. The RHA should not include leisure areas (picnic areas), public parks, towns, villages, human agglomeration, etc.

**7. Criterion 7:** The RHA shall never include ecologically sensitive areas.

The RHA will not include Nature Reserves, Core and/or Buffer zones of Biosphere Reserves, Natural Important Bird Areas (IBBAs), Bird bottlenecks, World Heritage sites, Ramsar sites, Biodiversity designated areas, Specially Protected Areas of Mediterranean Importance (SPAMI). The Hima is excepted as it is a community based protected area focusing on traditional sustainable use, including sustainable hunting, exactly as is the case in transition zones of biosphere reserves.

**8. Criterion 8:** The RHA should be easily accessible. Candidates RHAs are subject to exclusion due to rough terrains and presence of dangerous cliffs; thus it is important to have appropriate terrains with easy access to ensure better management.

**9.** The RHA shall not include a riparian area. The RHA should not include a riparian area that is usually playing the role of bird corridor for altitudinal migration or is under restoration to play the role of corridor or breeding areas for specific species. Riparian areas are considered as the richest sites in biodiversity and considered very important habitats (or biomes) because of their role in soil conservation, their habitat biodiversity, and the influence they have on fauna and aquatic ecosystems, including grassland, woodland, wetland or even non-vegetative. This criterion is strengthened by the Lebanese regulation (Ministry of Environment Decision) that considers the rivers and their sides (500 meters to each side) protected.

**10.** The RHA should have supportive maps. The designation of an area as RHA is conditioned by the submission of maps showing the borders and the size of the proposed RHA as well as other information assisting in studying and analyzing the area.



Landuse map for Hima Fakiha as an example



Example of municipal decision declaring a Hima for sustainable use

**11.** Municipality willingness to initiate RHA on its Land. A written willingness/decision from the municipality should be submitted as a commitment towards accepting the management of the RHA. In case the land belongs to two municipalities or more, the willingness/decision should be provided by all involved municipalities.

**12.** Better to have a RHA near a Protected Area (optional).

If it happens that the RHA is 500 meters away from a protected area (nature reserve, IBA or a Ramsar Site, etc.), this protected area can be used as a good refuge for the escaped birds and animals from the RHA. In all cases the Law of hunting allows hunting at more than 500 meters from protected areas. If respected, this distance is very safe for the biodiversity of the protected area. The hunting within the RHA guarantees the respect of this distance. Example: the monitoring of birds at IBA/Hima Anjar during 2013 and 2014 demonstrates that the number of species and their populations increases with the increased intensity of hunting in the surrounding of the IBA (Jaradi, unpl.).



## D. METHODOLOGY USED TO CONDUCT THE FIELD RESEARCH

It is important to note that a list of about 75 hunting hotspots was gathered through earlier research with hunters. Based on the set objective scientific criteria, possible sites (most appropriate and most feasible) to claim as RHAs were highlighted.

The aim of the field research is to check if the site responds to the established criteria, including the number of game bird species occurring in it.

To study birds, the Point Count method (Blondel 1975; Blondel et al., 1981) is used. In this method, the points are, for the purpose of establishing RHAs, not randomly chosen but previously selected on a map outside or away from nature reserves, biosphere reserves, Ramsar sites, Natural IBBAs, Bird Bottleneck areas, natural buffer zones, urban areas, biodiversity designated sites, etc. Bird species are recorded using the Point Count method and when needed, photography is used for documentation. In some cases, point counts are located along transects that are imposed by the terrain nature and structure. In the appropriate sites, the birds were studied during the fall passage period of migration season with concentration on game bird species and during the winter, breeding season and spring passage through quick surveys of the avifauna (sighted mammals are also recorded). This contributes to placing the potential RHA site in a wider ornithological context. For example, a site may appear suitable as RHA in fall passage period but if it hosts a globally threatened species during the breeding season, the hunting activities in autumn may alter the function of the available ecosystems and negatively affect this globally threatened species in spring/ summer times.

In spring, the time given (20 minutes) to the breeding birds is based on the fact that parents carrying food to offspring should necessarily reappear or return to the nest before the end of the 20 min-

utes, as this period is apparently the maximum time during which a bird can be absent from nest. Outside the breeding season, this time can be 5 to 15 minutes as it seems to be enough to record all species available in a portion of a homogeneous habitat.

During the field study, the vegetal cover and structure are recorded. Foreign or artificial bodies such as electric lines, dams, bridges, wind breaking tree lines or hedgerow trees are also documented.

Parts of the study methodology are the interviews conducted with people from local communities, hunters and conservationists.

Following the establishment of the list of huntable species by the Higher Hunting Council (14 bird and 2 mammal species) and after assigning to each of these species a national status, distribution, and preferred habitat; field research were undertaken and meetings with mayors and members of municipalities were convened, in order to apply the approved set of criteria over different communal lands and to know the real species of game birds practically present.



Eurasian Coot with young at Hima Anjar/Kfar Zabad © Fouad Itani

# E. RHAS SELECTION METHODOLOGY

Several methods completing each other were used to select the most appropriate RHAs (out of the shortlist potential sites) all over Lebanon.

The essential method consisted of introducing the concept of Hima and RHAs to municipalities, and of discussing with them a scenario to manage, through the local communities, the RHA on behalf of the government which is not in a position to control the hunting in the country.

This method of communicating knowledge to municipalities is followed by the exposure of economic aspects as an incentive to local authorities such as proposing that the RHA is to be managed by members from local communities (including municipalities) so that the latter can retrieve financial benefits from the RHAs against the services provided to hunters.

The third step is crucial as it demonstrates to the municipalities that the management of the RHAs is done in accordance with the Law of hunting 580/2004, its articles and application decrees. Similarly, the concerned municipalities were notified that the RHA is a protected area controlling and managing hunting and hunters.

The fourth step is an invitation by the municipality or union of municipalities to the SPNL staff to discuss additional commitments and to examine the site's landscape and land use.

The interested municipalities became eager to submit their maps and real estate certificates as an expression of acceptance and commitment, provided the surface area of the proposed RHA is above 500,000m<sup>2</sup>.

The benefits from the ecologically friendly RHA functioning attracted the attention of an additional number of municipalities that expressed their willingness to have RHAs on their communal lands.

In meantime, the bird expert conducted field visits to

the proposed RHAs in order to verify if the latter are visited by at least 4 game species and that they don't host threatened bird or mammal species (**Annex IV: Questionnaire to assist selection of RHAs in Lebanon**). To do this, the bird expert studied all the species (game and non-game species) that occur during the hunting season (September-January). If the threatened species are not impacted by the hunting activities, the RHA is then well established.



Hima Kfar Zabad Wetland © Asaad Saleh

# F. SITES SELECTED AND JUSTIFICATION

At the end of the field research and the use of the assessment questionnaire, the following sites were selected as shown in Table 2 below:

Table 2: The selected 10 RHA			
Mohafazat		RHA site	Summary Report
Akkar	1	Andket	X
Akkar	2	Mounjez	X
Akkar	3	Al-Maabour El-Abyad	X
West Beqaa	4	Qaraoun	X
Central Beqaa	5	Anjar	X
North Beqaa	6	Fakiha	X
North Beqaa	7	Charbine	X
Nabatieh	8	Qaytouli	X
Nabatieh	8	Roum	X
South Lebanon		Selection postponed due to a ban on hunting in South Lebanon that is enforced by the army.	



RHA serves to protect endangered species - juvenile Syrian Serin feeding on mulberry at Hima Anjar © Fouad Itani



**MOHAFAZAT:** Akkar

**1. ASPIRING RHA NAME:** Aandket

**COORDINATES:** 34°33'31.15»N and 36°16'29.12»E



**DATES OF VISITS:** 7 and 8 December 2013, 22 January and 29 March 2014

**SIZE:** > 500.000m<sup>2</sup>.

**PROPERTY:** Communal land of Aandkit Municipality

**PERIPHERY:** Five hundred meters away from human agglomeration

**PRESENCE OF ECOLOGICALLY SENSITIVE AREAS:** No

**SAFETY FOR PEOPLE:** Ensured by the size of the RHA and its distance from agglomeration

**PRESENCE OF RIPARIAN AREAS:** No

**SUPPORTIVE MAPS:** Submitted

**WILLINGNESS OF MUNICIPALITY TO ESTABLISH A RHA:** The members of municipal council issued a decision to initiate and manage a RHA.

**GAME SPECIES OBSERVED:** >4: Song Thrush, Mistle Thrush, Woodcock, Woodpigeon, Fieldfare.

**GAME SPECIES CITED BY LOCALS:** Wild Boar, Turtle Dove, Quails, Stock Dove, Chaffinch, Chukar.

**OTHER SPECIES RECORDED:** 1 Lesser Spotted Eagle, + Robin, 2 Stonechat, + Sandgrouse spp., Black-shouldered Kite, European Bee-eater, Short-toed Eagle

**MOHAFAZAT:** Akkar

**2. ASPIRING RHA NAME:** Mounjez

**COORDINATES:** 34°36'56.68»N and 36°14'59.19»E



**DATES OF VISITS:** 29/3/2014

**SIZE:** > 500.000m<sup>2</sup>.

**PROPERTY:** Communal land of Mounjez Municipality

**PERIPHERY:** Five hundred meters away from human agglomeration

**PRESENCE OF ECOLOGICALLY SENSITIVE AREAS:** No

**SAFETY FOR PEOPLE:** Ensured by the size of the RHA and its distance from agglomeration

**PRESENCE OF RIPARIAN AREAS:** No

**SUPPORTIVE MAPS:** Submitted

**WILLINGNESS OF MUNICIPALITY TO ESTABLISH A RHA:** The members of municipal council issued a decision to initiate and manage a RHA.

**GAME SPECIES OBSERVED:** >4: Chaffinch, Quail, Chukar, Woodpigeon, Stone Pigeon, Woodcock.

**GAME SPECIES CITED BY LOCALS:** Turtle Dove, Stock Dove, Woodpigeon, Chukar, Black-bellied Sandgrouse, Thrush spp., Lapwing, European Roller, Bee-eater, Willow Warbler, Corncrake, Crested Lark, 1 Honey Buzzard.

**OTHER SPECIES RECORDED:** + Blackcap, + Graceful Warbler, +Great Tit, 3 Coal Tit, 5 Greenfinch, 1 White throat Warbler, 2 Cuckoo, 3 Yellow Wagtail, 7 Common Crane, 1 Oriole, 1 Hoopoe, 21 Hooded Crow, 1 Common Buzzard, 3 Calandra Lark, 2 Corn Bunting, 8 Bulbul, 1 Dipper, 17 Cetti's Warbler.

**MOHAFAZAT:** Akkar

**3. ASPIRING RHA NAME:** AL-Maabour El Abyad

**COORDINATES:** 34°28'49.57»N and 36°17'16.03»E



**DATES OF VISITS:**

**SIZE:** > 500.000m2.

**PROPERTY:** Communal land of Maabour El Abyad Municipality

**PERIPHERY:** Five hundred meters away from human agglomeration

**PRESENCE OF ECOLOGICALLY SENSITIVE AREAS:** No

**SAFETY FOR PEOPLE:** Ensured by the size of the RHA and its distance from agglomeration

**PRESENCE OF RIPARIAN AREAS:** No

**SUPPORTIVE MAPS:** Submitted

**WILLINGNESS OF MUNICIPALITY TO ESTABLISH A RHA:** The members of municipal council issued a decision to initiate and manage a RHA (still in progress).

**GAME SPECIES OBSERVED:** >4: Quail, Chukar, Woodpigeon, Stone Pigeon, Chaffinch.

**GAME SPECIES CITED BY LOCALS:** Turtle Dove, Stock Dove, Woodpigeon, Chukar, Black-bellied Sandgrouse, Thrush spp., Lapwing, European Roller, Bee-eater, Willow Warbler, Corncrake, Crested Lark, 1 Honey Buzzard.

**OTHER SPECIES RECORDED:** + Robin, + Blackcap, + Graceful Warbler, +Great Tit, 3 Coal Tit, 5 Greenfinch, 1 White throat Warbler, 2 Cuckoo, 3 Yellow Wagtail, 7 Common Crane, 1 Oriole, 1 Hoopoe, 21 Hooded Crow, 1 Common Buzzard, 3 Calandra Lark, 2 Corn Bunting, 8 Bulbul, 1 Dipper, 17 Cetti's Warbler.

**MOHAFAZAT:** West Beqaa

**4. ASPIRING RHA NAME:** Qaraoun Village

**COORDINATES:** 33°33'39.71»N, 35°43'32.40»E



**DATES OF VISITS:** 30/1/2014, 7/2/2014,

**SIZE:** > 500.000m2.

**PROPERTY:** Communal land of Qaraoun Municipality

**PERIPHERY:** Five hundred meters away from human agglomeration

**PRESENCE OF ECOLOGICALLY SENSITIVE AREAS:** No

**SAFETY FOR PEOPLE:** Ensured by the size of the RHA and its distance from agglomeration

**PRESENCE OF RIPARIAN AREAS:** No

**SUPPORTIVE MAPS:** Submitted

**WILLINGNESS OF MUNICIPALITY TO ESTABLISH A RHA:** The members of municipal council issued a decision to initiate and manage a RHA.

**GAME SPECIES OBSERVED:** >4: Chaffinch, Chukar, Mistle Thrush, Calandra Lark.

**GAME SPECIES CITED BY LOCALS:** Turtle Dove, Stock Dove, Fieldfare, Quail, Song Thrush, Woodpigeon.

**OTHER SPECIES RECORDED:** 3 Greenfinch, 2 Siskin, 1 Robin, 14 Hooded Crow, 1 Long-legged Buzzard, Crested Lark, 1 Kestrel, +Linnets, 1 Little Egret, 1 Little black-headed Gull.

**MOHAFAZAT:** Central Beqaa

**5. ASPIRING RHA NAME:** Anjar

**COORDINATES:** 33°47'4.19»N, 35°55'2.60»E



**DATES OF VISITS:** 11/5/2013, 23/5/2013, 13/7/2013, 2/2/2014, 18/4/2014, 1/5/2014, 17/5/2017, 24/5/2014.

**SIZE:** > 500.000m<sup>2</sup>.

**PROPERTY:** Communal land of Anjar Municipality + Private lands for Farmers that usually receive hunters.

**PERIPHERY:** Five hundred meters away from human agglomeration

**PRESENCE OF ECOLOGICALLY SENSITIVE AREAS:** No

**SAFETY FOR PEOPLE:** Ensured by the size of the RHA and its distance from agglomeration

**PRESENCE OF RIPARIAN AREAS:** No

**SUPPORTIVE MAPS:** Submitted

**WILLINGNESS OF MUNICIPALITY TO ESTABLISH A RHA:** The members of municipal council issued a decision to initiate and manage a RHA.

**GAME SPECIES OBSERVED:** >4: Chaffinch, Chukar, Mistle Thrush, Calandra Lark, Hare, Turtle Dove, Mallards, Garganey, Song Thrush, Woodpigeon, Quail.

**GAME SPECIES CITED BY LOCALS:** Stock Dove, Fieldfare.

**OTHER SPECIES RECORDED:** + Starlings, 3 Syrian Serin, 23 Lapwings, + Robin, 3 Black-eared Weatear, 1 Hoopoe, 6 Palm Dove, 2 Chiffchaff, 3 Masked Shrike, 4 Bulbul, Olivaceous Warbler, Linnet, Goldfinch, Collard Dove, Lesser White Throat, White Stork.

**MOHAFAZAT:** North Beqaa

**6. ASPIRING RHA NAME:** Fakiha

**COORDINATES:** 34°14'33.48»N, 36°24'20.09»E



**DATES OF VISITS:** 6/5/2013, 13/10/2013, 3/12/2013, 1/5/2013.

**SIZE:** > 500.000m<sup>2</sup>.

**PROPERTY:** Communal land of Fakiha Municipality

**PERIPHERY:** Five hundred meters away from human agglomeration

**PRESENCE OF ECOLOGICALLY SENSITIVE AREAS:** No

**SAFETY FOR PEOPLE:** Ensured by the size of the RHA and its distance from agglomeration

**PRESENCE OF RIPARIAN AREAS:** No

**SUPPORTIVE MAPS:** Submitted

**WILLINGNESS OF MUNICIPALITY TO ESTABLISH A RHA:** The members of municipal council issued a decision to initiate and manage a RHA.

**GAME SPECIES OBSERVED:** >4: Chaffinch, Chukar, Mistle Thrush, Calandra Lark, Hare, Song Thrush, Woodpigeon, Turtle Dove, Quail.



**GAME SPECIES CITED BY LOCALS:** Stock Dove, Fieldfare.

**OTHER SPECIES RECORDED:** +Starlings, 3 Black-eared Weatear, 2 Hoopoe, 6 Mourning Wheatear, + Chiffchaff, 6 Masked Shrike, 2 Bulbul, Olivaceous Warbler, Linnet, Goldfinch, White Pelican, White Stork, Common Crane, Pale Rock Sparrow, Cream Colored Cursor, Lapwing, Sparrow, Crested Lark, Pallid Swift, Barn Swallow.

**MOHAFAZAT:** NORTH BEQAA

**7. ASPIRING RHA NAME:** CHARBINE

**COORDINATES:** 34°26'50.00»N, 36°18'43.93»E



**DATES OF VISITS:** 28/10/2011, 29/3/2013 and 6/10/2013

**SIZE:** > 500.000m<sup>2</sup> (70630000m<sup>2</sup>) at an altitude of 950m.

**PROPERTY:** Communal land of Charbine Municipality  
**PERIPHERY:** Minimum five hundred meters away from human agglomeration

**PRESENCE OF ECOLOGICALLY SENSITIVE AREAS:** No (About 2 kilometers away from upper Akkar-Dounnieh IBA)

**SAFETY FOR PEOPLE:** Ensured by the size of the RHA and its distance from agglomeration

**PRESENCE OF RIPARIAN AREAS:** No

**SUPPORTIVE MAPS:** Submitted

**WILLINGNESS OF MUNICIPALITY TO ESTABLISH A RHA:** The members of municipal council issued a decision to initiate and manage a RHA.

**GAME SPECIES OBSERVED:** >4: Chaffinch, Chukar, Woodpigeon, Woodcock, Mistle Thrush, Fieldfare, and Hare.

**GAME SPECIES CITED BY LOCALS:** Turtle Dove, Song Thrush.

**OTHER SPECIES RECORDED:** 3 Great Tit, 1 Kestrel, 3 Greenfinch, 1 Siskin, 7 Robin, 2 European Serin, 5 Hooded Crow, 1 Common Buzzard, 1 Long-legged Buzzard, 2 Black Redstart, and 1 Syrian Woodpecker.

**MOHAFAZAT:** Nabatyeh

**8. ASPIRING RHA NAME:** Qaytouli

**COORDINATES:** 33°32'10.03»N, 35°33'11.93»E



**DATES OF VISITS:** 1/10/2013, 8/10/2013, 21/11/2013.

**SIZE:** > 500.000m<sup>2</sup>.

**PROPERTY:** Communal land of Qaytouli Municipality

**PERIPHERY:** Five hundred meters away from human agglomeration

**PRESENCE OF ECOLOGICALLY SENSITIVE AREAS:** No

**SAFETY FOR PEOPLE:** Ensured by the limited access to locals only and by its distance from agglomeration

**PRESENCE OF RIPARIAN AREAS:** No

**SUPPORTIVE MAPS:** Submitted

**WILLINGNESS OF MUNICIPALITY TO ESTABLISH**

**A RHA:** The members of municipal council issued a decision to initiate and manage a RHA.

**GAME SPECIES OBSERVED:** >4: Song Thrush, Woodcock, Turtle Dove, Chaffinch, Chukar, Wood-pigeon.

**GAME SPECIES CITED BY LOCALS:** Fieldfare, Stock Dove, Mistle Thrush.

**OTHER SPECIES RECORDED:** 1 Olivaceous Warbler, + Sparrow, + Barn Swallow, 5 Lesser White Throat, 4 Sardinian Warbler, 1 Black Redstart, 1 Robin, 4 Blackcap, 7 Great Tit, 2 Kestrel, + Greenfinch, 4 Goldcrest, Spotted Flycatcher, Wren, Cetti's Warbler, Chiffchaff, Barn Owl, 1 Long-legged Buzzard, 2 Common Buzzard, 16 Pelican.

**MOHAFAZAT:** Nabatyeh

**8. ASPIRING RHA NAME:** Roum

**COORDINATES:** 33°33'18.00»N, 35°31'5.23»E

**DATES OF VISITS:** 11/10/2013, 2/11/2013, 21/11/2014.

**SIZE:** > 500.000m<sup>2</sup>.

**PROPERTY:** Communal land of Roum Municipality

**PERIPHERY:** Five hundred meters away from human agglomeration

**PRESENCE OF ECOLOGICALLY SENSITIVE AREAS:** No

**SAFETY FOR PEOPLE:** Ensured by the limited access to locals only and by its distance from agglomeration

**PRESENCE OF RIPARIAN AREAS:** No

**SUPPORTIVE MAPS:** Submitted

**WILLINGNESS OF MUNICIPALITY TO ESTABLISH**

**A RHA:** The members of municipal council will issue a decision to initiate and manage a RHA.

**GAME SPECIES OBSERVED:** >4: Song Thrush, Mistle Thrush, Woodcock, Turtle Dove, Chaffinch, Chukar, Woodpigeon, Wild boar.

**GAME SPECIES CITED BY LOCALS:** Fieldfare, Stock Dove, Quail.

**OTHER SPECIES RECORDED:** 15 Bee-eater, 2 Short-toed Eagle, 21 Hooded Crow, + Sparrow, + Barn Swallow, 7 Sardinian Warbler, 3 Black Redstart, 5 Robin, 4 Blackcap, 7 Great Tit, 1 Kestrel, + Greenfinch, 11 Goldcrest, 1 Spotted Flycatcher, 1 Semi-colored Flycatcher, Wren, Chiffchaff, Tawny Owl, 1 Hoopoe, 1 Red-back Shrike.

## G. ENDORSEMENT FROM EACH MUNICIPALITY

All the selected RHAs files were endorsed by the concerned through a municipal decision (**Annex V: Sample of RHA Hima Municipal Decisions**).

## H. REQUEST FORM FOR ADOPTION OF A RHA BY THE MINISTRY OF ENVIRONMENT

Based on the standard forms adopted by the Ministry of Environment, SPNL developed a request form for the establishment of a Responsible Hunting Area (**Annex VI: Request Form for Establishment of Responsible Hunting Area on municipal land**).











Photos of hunters that participated in the contest of "Spring Photo-shoot" © Johannes Bamouk

# IV ● METHODOLOGY OF GIS MAPPING FOR THE IDENTIFIED RHAs ON MUNICIPAL LAND

Following the scientific and technical studies of the sites and the meeting of these sites with the criteria set for RHAs, the concerned municipalities submitted to SPNL official maps, representing the area on which the RHA will take place, based on official municipal decision from the concerned municipalities declaring their acceptance to consider their land as RHA. All these maps and decisions constituted the material needed for the coordination of GIS maps production in cooperation with the Environment Department of the Balamand University.

Better understanding of the environment and physical and ecological characteristics of Lebanon requires the use of Geographic Information System (GIS) tools and analysis. Concerning the RHAs, the produced maps are expected to help decision makers and stakeholders understand their importance, locations and spatial characteristics.

Therefore, the Marine Resources and Coastal Zone Management Program (MRCZM) at the Institute of the Environment (IOE), University of Balamand (UOB) was subcontracted to produce three types of maps:

- 1-** Potential habitat maps: Where 16 maps were produced for the identification of the potential habitats of the 16 game species.
- 2-** Strategic maps: Where two maps were produced, the first for the identification of potential

RHA sites based on the results obtained from the 16 potential habitat maps and the second for locating the 10 selected RHAs on national level (according to land ownership, interest of owners, and field surveys).

- 3-** Detailed maps: Where 10 maps were produced for each of the identified RHAs including its boundaries on cadastral level.

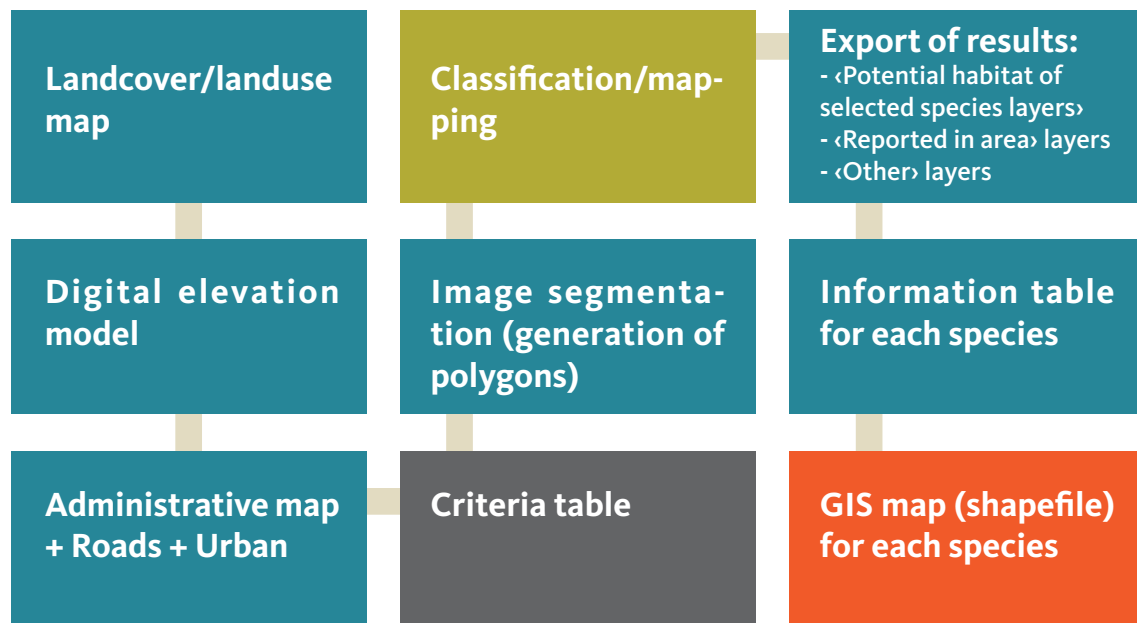


New Lebanese hunting laws prevents the use of decoys to kill birds



# A. MAPPING POTENTIAL HABITATS IN LEBANON

The mapping process involved the use of the software Ecognition and Arc GIS and comprised of the following consecutive steps: data collection and use, segmentation, classification, and export of results (Figure 1).



**Figure 1:** Flowchart of the methodology for the production of the 16 potential habitat maps

## • Data collection and use

Data coming from various sources was collected and employed. These included the following:

- o The 2005 landcover/landuse map of Lebanon
- o The map of cadastral units of Lebanon
- o The Digital Elevation Model of Lebanon (25 m resolution)
- o Urban and road network maps

## • Segmentation

The segmentation process comprised the generation of 780,000 homogenous objects/polygons (in terms of landcover/landuse) covering the entire Lebanese territory and employing the previously described data. As a result, each of the produced polygon included information about landcover/landuse, administrative organization, elevation, and urban extension.

## B. HABITAT VS GAME SPECIES MAPS

### • Classification

All previously generated objects/polygons were classified into the following classes: “potential habitat of selected species”, “reported in area”, and “other” (Figure 1). The classification process comprised the use of previously identified criteria for classification related to species habitat, areas where each species was reported, and topography. Such criteria were provided by SPNL and validated by the MRCZM-IOE-UOB team and the SPNL birds Expert, Dr. Ghassan Ramadan-Jaradi (Table 1). In addition, meetings were constantly held with the Expert and the SPNL team in order to discuss the mapping process and to agree on the final output and its layout.



Colony of Little Egret at Hima wetlands © Fouad Itani

Order	Family	Scientific name	English name	Species habitat	Reported in	Topography
Birds						
Anseriformes	Anatidae	<i>Anas platyrhynchos</i>	Mallard Duck	Marshlands, ponds, lakes and rivers	Aammiq, Anjar, Bishmezzine, Tanayel, Qaraoun and the Litani River; with smaller numbers on coast, islands and other inland waters	Waterbird
	Anatidae	<i>Anas crecca</i>	Teal Duck	Marshlands, ponds, lakes and rivers	Beqaa wetlands; less common further west, along coast and on Palm Islands	Waterbird
	Anatidae	<i>Anas querquedula</i>	Garganey Duck	Marshlands, ponds, lakes and rivers	Widespread and common passage migrant through most wetlands and on Palm Island	Waterbird
Galliformes	Phasianidae	<i>Alectoris chukar</i>	Chukar Partridge	Rocky areas with sparse and low vegetation	Common and widespread resident breeder principally at 1200–2000m. Scattered at lower altitudes (700–1100m) and considerably decreased in some sites	Semi-desert rock bird
	Phasianidae	<i>Coturnix coturnix</i>	Common Quail	Mainly Grasslands with dense, tall vegetation is preferred, while forest edges and hedgerows are avoided. Cultivated fields are also used. Example: Cultivated grasslands of the abandoned terraces of both Lebanon and Anti-Lebanon lowland slopes. Fodder crops and cereal plains of the Beqaa Valley	Very common passage migrant over most of the country from mid-February–late May and early August–late November	Farmland bird



Order	Family	Scientific name	English name	Species habitat	Reported in	Topography
Charadri-formes	Scolopacidae	<i>Scolopax rusticola</i>	Eurasian Woodcock	Feed and rest in the dense growth of brush, shrubs, and young forest. Also abandoned farmland, including old apple orchards where the trees have become crowded by hawthorn and other light-loving trees and shrubs. At dusk, it roosts in early autumn in partially open areas such as berry barrens, fallow fields, pastures, newly logged woods, and brushy pine plantations	Aammiaq, AinZhalta, Beirut, Beirut River Valley, Beqaa Valley, Bzebdine, Byblos, CheikhZennad, Damour Valley, Ehden, JabalBarouk, JabalRihane, Jezzine and Tyre Coast	Forest ground bird
	Columbidae	<i>Columba palumbus</i>	Eurasian Woodpigeon	Found in woodlands, hedgerows, parks, and gardens	Bentael, Aramta, Arzel Shouf, Bentael, Beqaa Valley, Damour, Ehden, Kfarhouneh and Nahr Ibrahim	Tree dwelling bird
	Columbidae	<i>Streptopelia turtur</i>	Turtle Dove	Mainly found in agricultural land with scattered trees or shrubs, or in heathlands, parks, orchards near cultivated fields with hedgerows, mainly in dry sunny habitats	Common passage migrant across most of the country. Northern Beqaa semi-arid areas of Hermel, Fakiha and Qa'a. Eastern slopes of southern half of Mount Lebanon. Western slopes of Anti-Lebanon	Tree dwelling bird
Passeri-formes	Alaudidae	<i>Melancorypha calandra</i>	Calandra Lark	Fallow fields or dry open grasslands or large plains with no shrubs or trees, embedded in large expanses of open farmland or cereal cultivated areas, generally away from drainage and roads	Principally in cultivated fields, but also on low hillsides of the Lebanon and Anti-Lebanon ranges bordering the valley. Beqaa and Marjaayoun valleys, low hills of south Lebanon, and on Palm Islands	Farmland bird

Order	Family	Scientific name	English name	Species habitat	Reported in	Topography
	Turdidae	<i>Turdus philomelos</i>	Song Thrush	Parks, gardens, small stands of trees, woodlands and hedgerows provide good habitat for song thrushes. Olive groves and areas of open grassland with slightly damp soil provide a good foraging environment. Orchards with berries are also important in autumn	Aammiq, Assi, Ain-Zhalta, Anjar, Arz el Shouf, Beirut, Byblos, Chwayya, Damour, Deir el Ahmar, Deir el Qamar, Doueir, Fneideq, JabalBarouk, JabalRihane, Nahr Ibrahim, Palm Islands, Qammouha, Ryaq, Sannine, Tyre, Yarzeh and Zahleh	Wood bird
	Turdidae	<i>Turdus viscivorus</i>	Mistle Thrush	Open woodland with tall trees that is located close to short grass for feeding is ideal for Mistle Thrush. Olive groves and areas of open grassland with slightly damp soil provide a good foraging environment. Orchards with berries are also important in autumn	Qammouha, Cilician oak Quercuscilicica at Fneideq and cedar at Karm el Mohr, near Ehden	Wood bird
	Turdidae	<i>Turdus pilaris</i>	Fieldfare	Small forest areas fringing villages, parks or in isolated stands of trees at high altitude.	Aammiq, AinZhalta, Amchite, Barouk, Bcharre, Beirut, Bzebdine, Damour, Deir el Qamar, Ehden, Hammana, JabalRihane, Jiyeh, JoubJannine, Nahr Ibrahim, Niha, Qammouha, Tanayel and Yammouneh	Wood bird

Order	Family	Scientific name	English name	Species habitat	Reported in	Topography
	Fringillidae	<i>Fringilla coelebs</i>	Chaffinch	Found in a range of habitats including forests, woods, parks, gardens and hedgerows. They are likely to be found in more open areas in autumn and winter, when large groups of visiting birds search for seeds to sustain them through the winter or passage	In most habitats at mid to high altitude, with highest densities in cedar groves, fir and pine forests, river valleys and orchards	Tree dwelling bird
Columbiformes	Columbidae	<i>Columba oenas</i>	Stock Dove	Olive groves & tree stands, old parks, gardens, oak and pine woodlands and environment. Orchards with berries are also important in autumn	Aamm i q, Aana, Damour, near Baalbek	Climax forests, areas of open grassland with slightly damp soil
Mammals						
Lagomorpha	Leporidae	<i>Lepus capensis</i>	Cape Hare	Found in various mountainous areas, mainly in open herbaceous land with heath, small shrubs, scrubs or patchy bushes	Mount Lebanon and Anti-Lebanon	Non forested mountainous areas
Artiodactyla	Suidae	<i>Sus-scrufa</i>	Wild boar	Found in various mountainous areas, mainly in valleys and ravines.	Reported in most Lebanese villages, excluding Beqaa region, starting from the coastal areas like Jbeil going up to the highest mountains in Ehden and Al Shouf area	Forested areas



## • Export

One map was produced for each of the 16 game species at the 25 m spatial resolution showing its potential habitat on national level in addition to “reported in areas”. Maps were exported in the form of GIS shapefiles associated with attribute tables for each species. Each attribute table included the location of the object/segment, its corresponding cadastral unit, and its area of distribution.

## • Information table for each species

The background search resulted in a table containing information about each species. These tables included common names, description, sightings and potential habitats with their coverage over the national territory; it also included images of the species provided by SPNL team. Figure 2 presents an example of the table added to the map of each species. Information available in the table was thoroughly discussed by the MRCZM-IOE-UOB team, the SPNL team and the Expert in order to adopt the most relevant description for each species and agree on what to include in the legend of each map.

## • GIS map for each species

The map produced for each species was comprised of the layers of the “potential habitat of selected species”, “reported in areas” and the layer of Cazas of Lebanon. Then the table of information

	
Common names	Eurasian Woodcock دجاجة أرض
Description	Forest ground bird
Sightings	Aammik, Ain Zhalta, Beirut, Beirut River Valley, Beqaa Valley, Bzebdline, Byblos, Cheikh Zennad, Damour Valley, Ehdn, Jabal Barouk, Jabal Rihane, Jezzine and Tyre Coast. Andqit, Qaraoun, Saghbine, Qaytoule, Bkassine and Tannourine
Potential Habitat	
Habitat	Dense growth of brush, shrubs, and young forest and abandoned farmland
Coverage	7.82% of national territory

**Figure 2:** Information table and image of the Eurasian woodcock

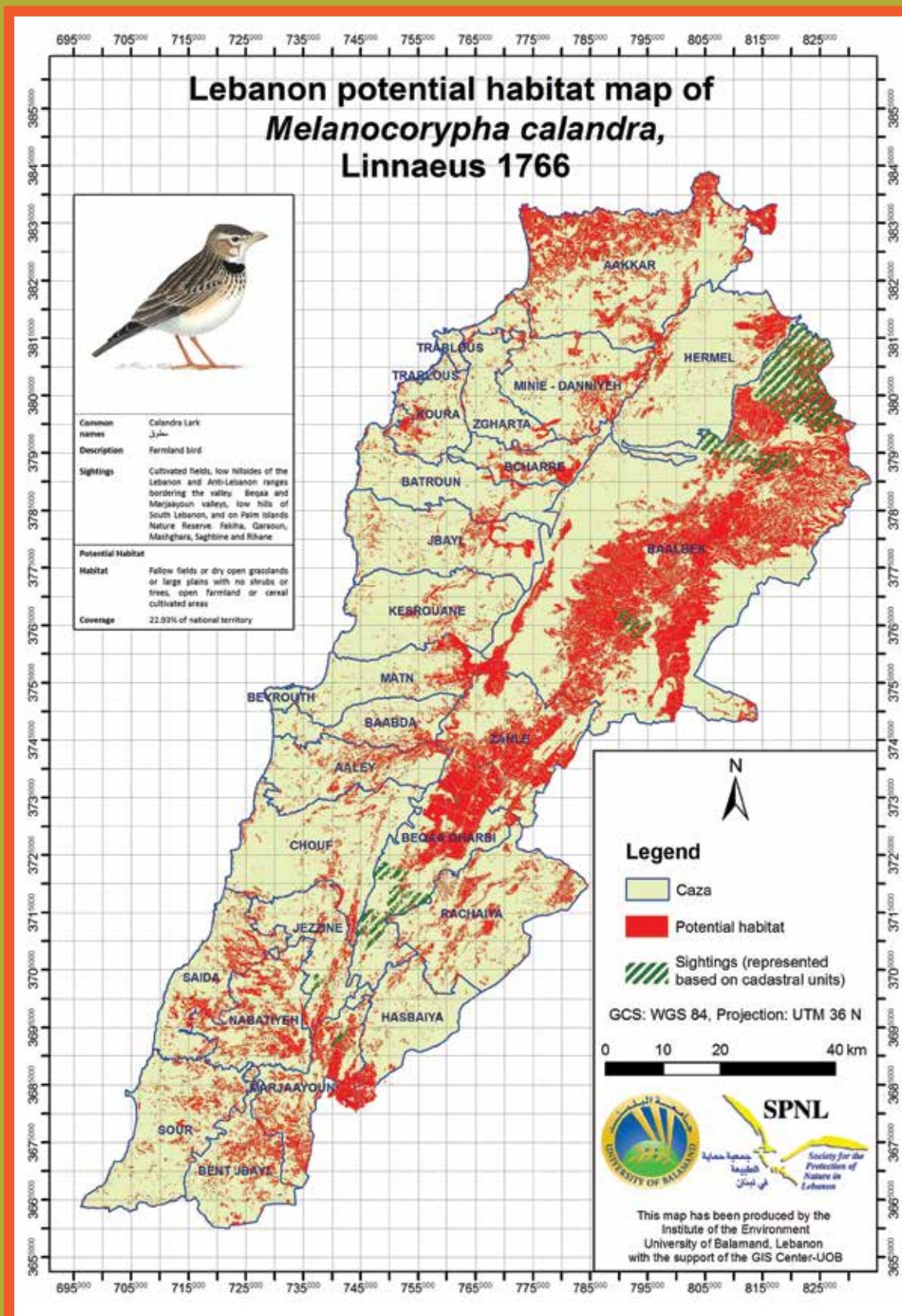


Figure 3: Lebanon potential habitat map of *Melanocorypha calandra*

## C. STRATEGIC MAPS

Two maps were produced based on GIS analysis using the ArcGIS software. This step comprised two phases: Phase 1 identified all potential areas suitable for RHAs, and Phase 2 showed the distribution of the 10 selected RHAs on national level as provided by SPNL.

### Phase 1: Identifying potential areas suitable for RHAs

This phase required the use of several layers:

- The 16 potential habitat layers related to each game species were combined into one in order to define the occurrence of species in each defined object (identified in the segmentation/classification of the Lebanese landcover/landuse map). The analysis done on the object level showed the number of game species occurring in each object.
- Layers provided by the SPNL team: “Hunting Hot Spots” and “Important Bird Areas”.
- Layers provided by the Ministry of Environment for the following: protected areas, nature reserves, biosphere reserves, agricultural and urban areas, protected valleys, the Cedar Forest of Bcharre, and the administrative Caza limits of Lebanon (Figure 4).



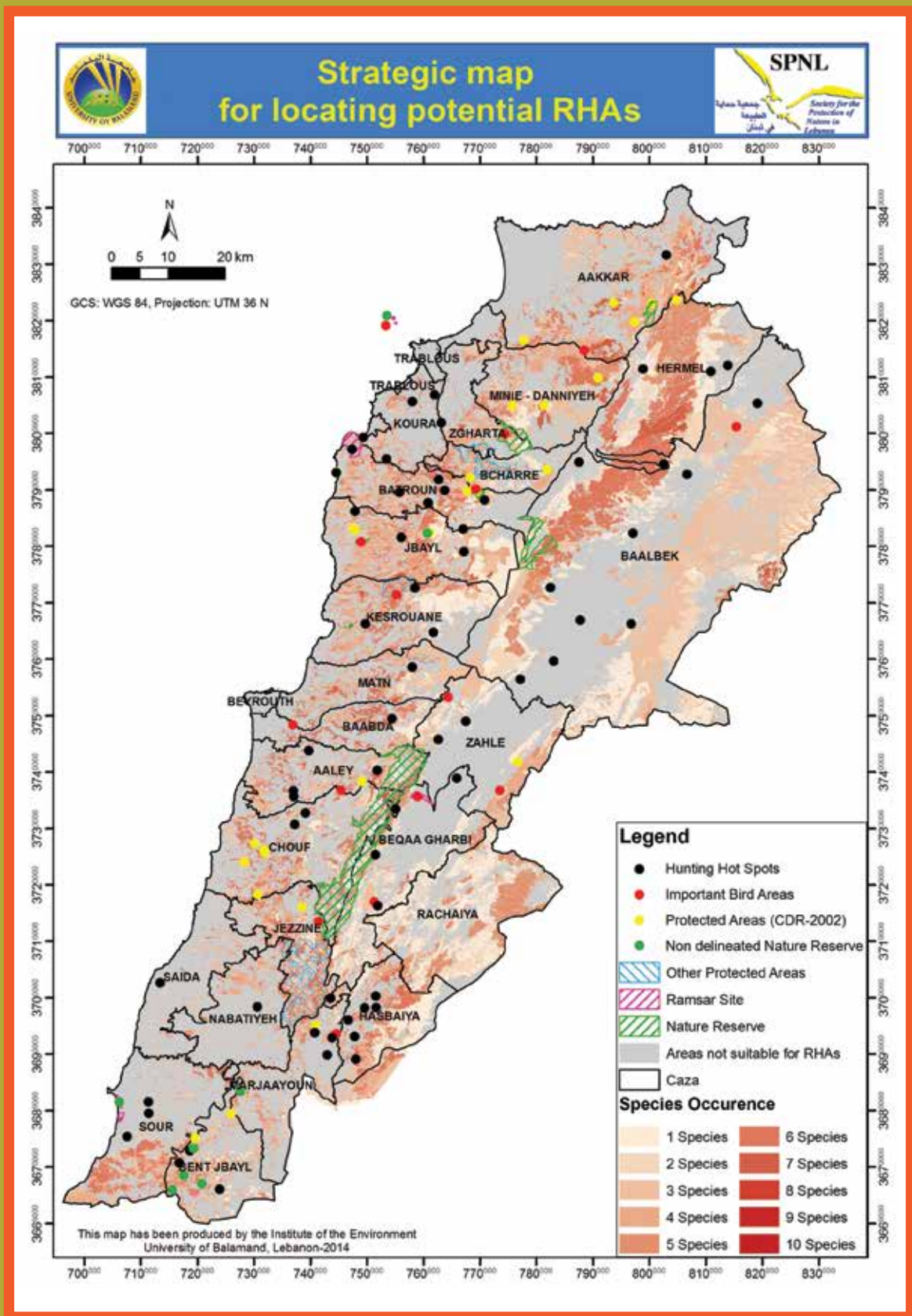


Figure 4: Strategic map for locating potential RHAs



This strategic map helped in identifying potential locations for RHAs. According to this map, areas suitable for a RHA could include habitats for one or more game species and allow decision makers to appropriately locate a potential RHA away from nature reserves, protected areas and other regions labeled for conservation. An explanatory table (Table 2) was annexed to the map explaining the legend.

## Phase 2: Distribution of the 10 RHAs

Field investigations carried-out by the SPNL team and the Expert during the period of the project, along with gathering information regarding land ownerships and interest of owners, facilitated the selection of the 10 RHAs that were later represented on the “Distribution of Responsible Hunting Areas in Lebanon” map (Figure 5). The map was produced by adding the location of the selected 10 RHAs to the “Strategic map locating potential RHAs”.

**Table 2:** Legend description of the “Strategic map for locating potential RHAs”

Legend	Source	Description
● Hunting Hot Spots	SPNL	Layer provided by SPNL- Areas non-delineated
● Important Bird Areas	SPNL	Layer provided by SPNL- Areas non-delineated
● Protected Areas (CDR-2002)	CDR	Centroids of the decreeted protected areas and forests - Areas non-delineated. ( <a href="http://www.moe.gov.lb/Sectors/Biodiversity-Forests/Sub-Sector/Sub-Sector/Protected-Areas-in-Lebanon/Protected-Area.aspx">http://www.moe.gov.lb/Sectors/Biodiversity-Forests/Sub-Sector/Sub-Sector/Protected-Areas-in-Lebanon/Protected-Area.aspx</a> )
● Non delineated Nature Reserve	MOE	Nature Reserves that do not yet have well defined borders by law
□ Other Protected Areas	MOE	Cedar Forest of Bcharre, Qadisha Valley World Heritage Site, Biosphere Reserves
□ Ramsar Site	MOE	Tyre Coast Nature Reserve, Ammiq Wetland, Raas El Chaqaa and Palm Islands Nature Reserve
□ Nature Reserve	MOE	Nature Reserves with defined borders by law. Does not include the 500 m buffer zones
■ Areas not suitable for PHAs	IOE	Agricultural and Urban areas (MOE, 1998), Nature Reserves, Ramsar Sites, Protected Valleys, Kadisha Valley and Cedar Forest-Bcharre
■ Caza	CDR	Administrative Caza limits of Lebanon (2002)
<b>Species Occurrence</b>		This layer represents the occurrence of game species after merging the layers of the 16 Species Potential Habitat Maps. For species identification, please refer to species maps.
■ 1 Species	IOE	Areas with habitat for 1 of the 16 game species
■ 2 Species		Areas with habitats for 2 of the 16 game species
■ 3 Species		Areas with habitats for 3 of the 16 game species
■ 4 Species		Areas with habitats for 4 of the 16 game species
■ 5 Species		Areas with habitats for 5 of the 16 game species
■ 6 Species		Areas with habitats for 6 of the 16 game species
■ 7 Species		Areas with habitats for 7 of the 16 game species
■ 8 Species		Areas with habitats for 8 of the 16 game species
■ 9 Species		Areas with habitats for 9 of the 16 game species
■ 10 Species		Areas with habitats for 10 of the 16 game species

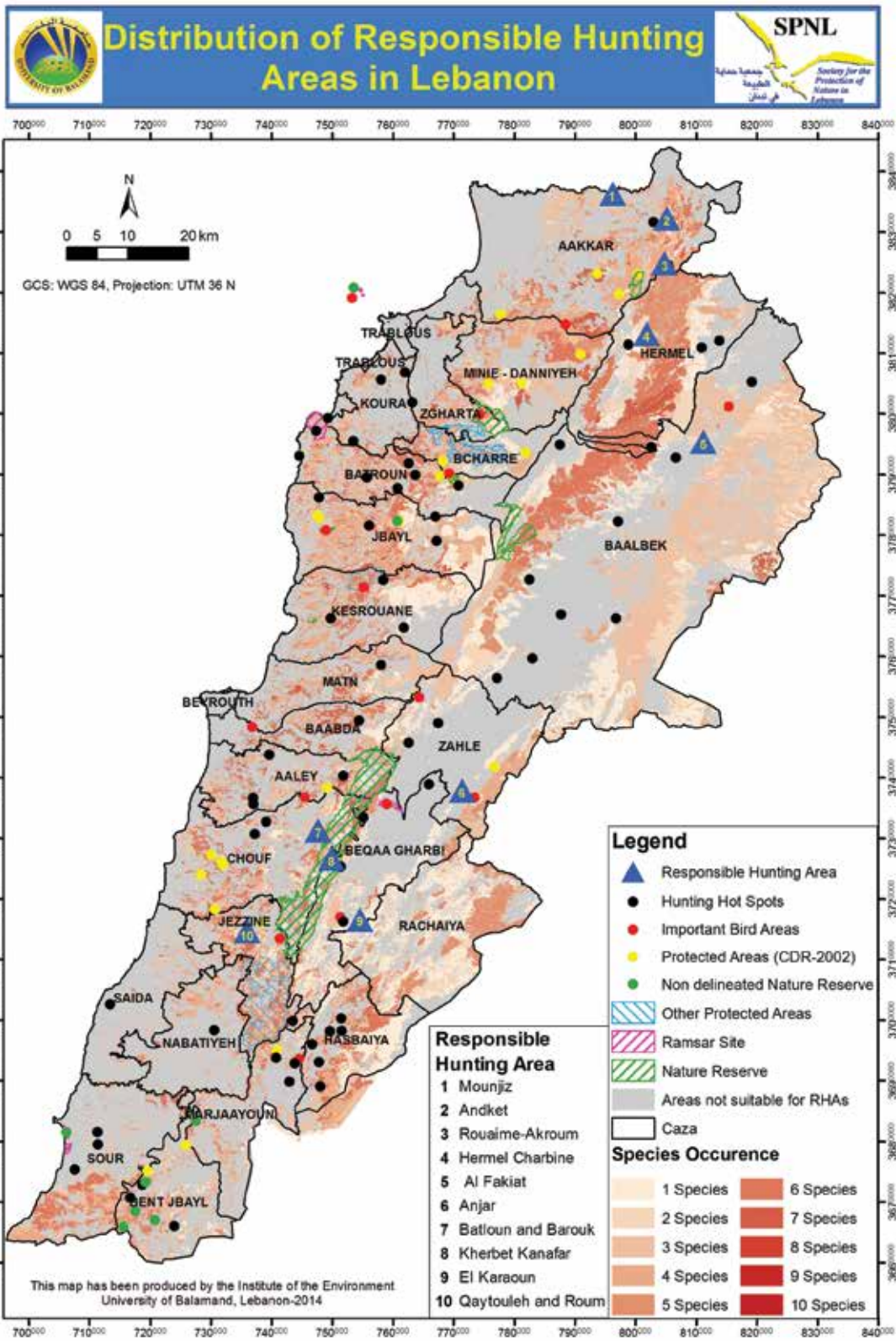


Figure 5: Distribution of Responsible Hunting Areas in Lebanon

## D. MAPPING THE IDENTIFIED RHAs

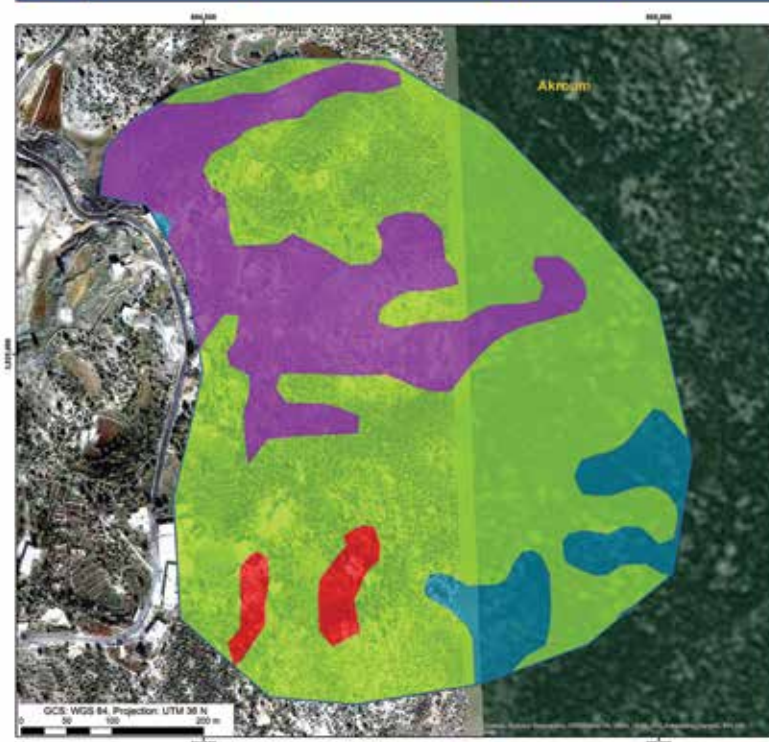
A map was prepared for each identified RHA. Information and base maps (topographic maps, blue prints, CAD layers and Google Earth images) were gathered by the SPNL team from relevant municipalities. This task was very challenging especially that most municipalities did not provide the requested base maps due to lack of expertise, resources, or just lack of availability of the needed information. Some have sent files/maps lacking coordinates which made them impossible to use, while others sent municipal decisions including parcel numbers to be included in the RHA site without any indication of the location of these parcels. These challenges were overcome after long consultations between SPNL and the municipalities. The needed data was then secured allowing the completion of the whole set of the selected RHAs.

Each map comprised a satellite image as background and showed the landcover/landuse layer within the RHA borders. The map also included a lower scale map showing the RHA within its neighboring cadastral limits and a table showing the game species that could be found in the area according to SPNL field investigations and the findings of the strategic map. However, the final selection of the candidate RHAs has led to the selection of the following sites presented in **Figure 6:**









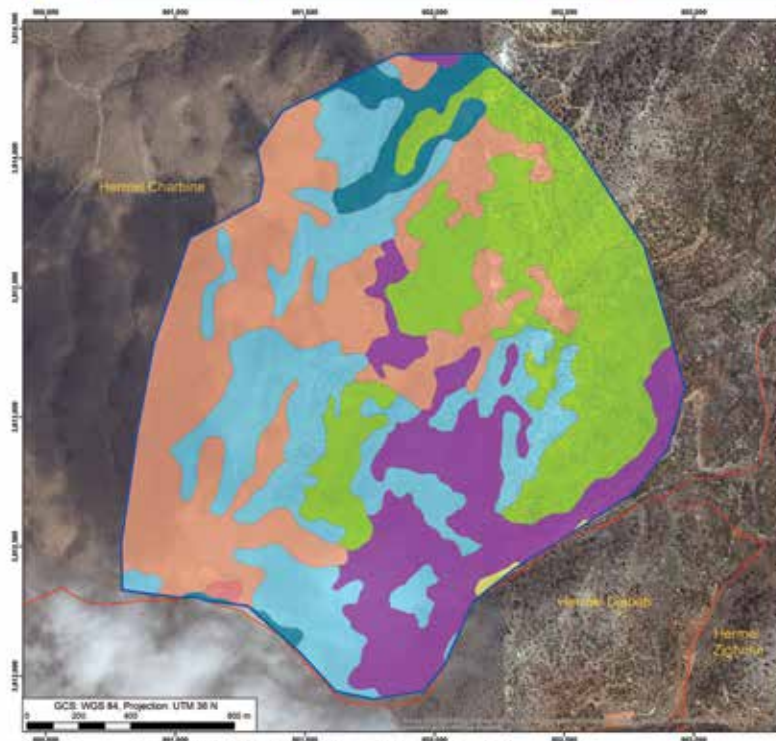
**Legend**



Land Use/Land Cover (MOE 1998)

[illegible]<sup>a</sup> According to the 10 species listed above produced by the INTYMAC-08 unit.<sup>14</sup> According to the 1995, 1996 surveys.

This map has been produced by the Institute of the Environment, University of Balamand, Lebanon-2014



### Legend



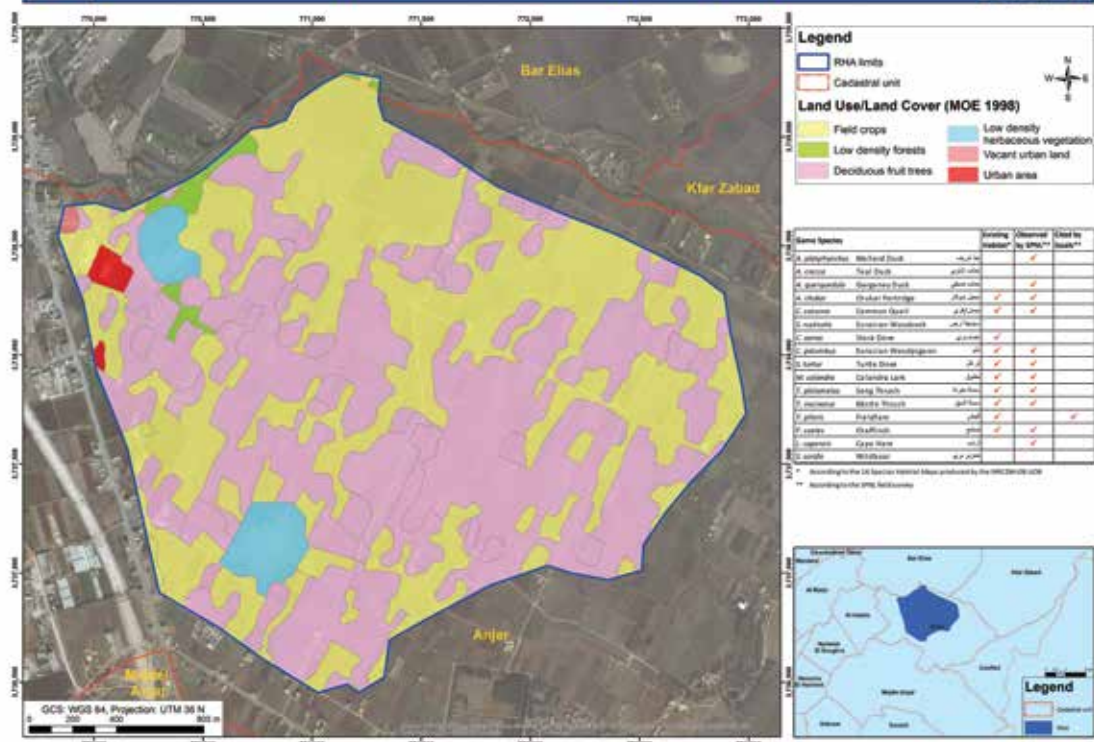
Land Use/Land Cover (MOE 1998)

[illegible]<sup>†</sup> According to the 120 species Index of Biotic Integrity produced by the IBI-2000 v2.00.<sup>19</sup> according to the 1976 field version.

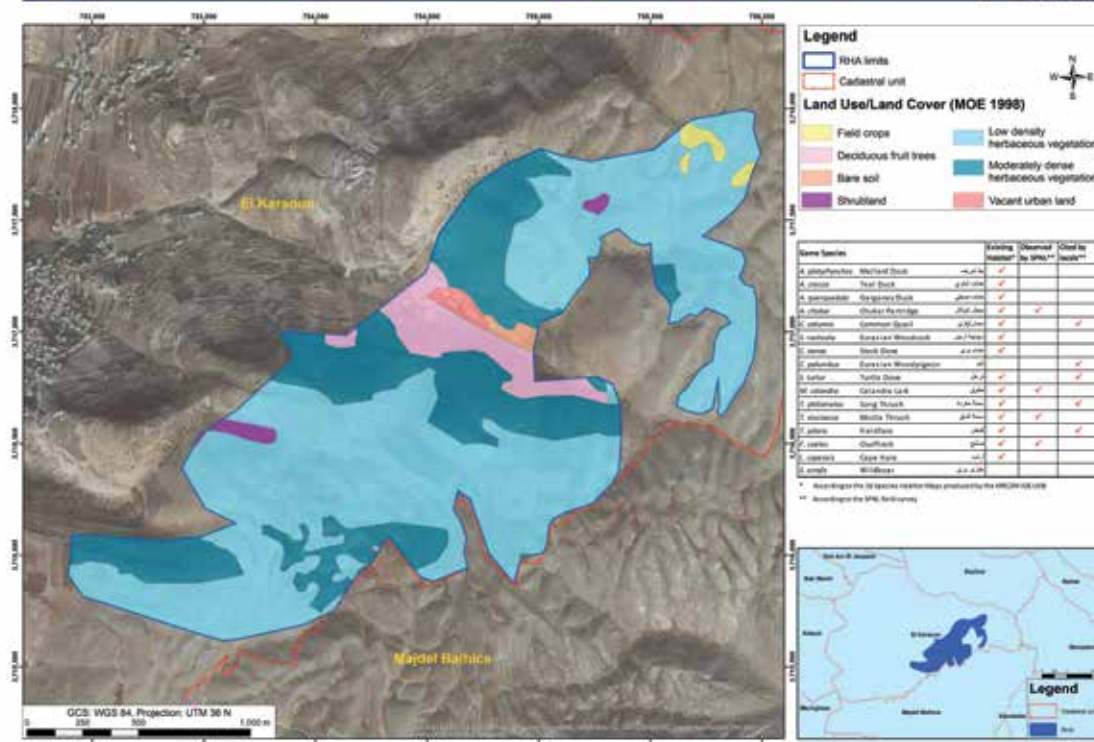
This map has been produced by the Institute of the Environment, University of Baalmand, Lebanon-2014



## Responsible Hunting Area, Anjar



## Responsible Hunting Area, El Karaoun









The 28 maps produced will help ensure the adoption of the identified RHAs of Lebanon based on internationally validated and adopted scientific methodology. In addition, these RHAs are expected to promote the conservation and sustainable management of game species as well as other species and their ecosystems while at the same time ensuring economic and recreational benefits to both local communities and hunters.

In addition, these maps are considered as a national scientific database linking game species to existing habitats in Lebanon. Therefore any future amendments or updating of the hunting law and its application decrees at national level should be based on these generated maps. It is therefore imperative that these RHAs be declared by law leading the way to the full implementation of the hunting law of Lebanon.



Wetland - Hima Kfar Zabad © Asaad Saleh



Hima Kfar Zabad Wetland - Central Beqaa © Asaad Saleh

## A. INTRODUCTION

The hunting Law 580/2004 in Lebanon supports sustainable and responsible hunting and game management in the country. Our aim seeks better game management outcomes that provide healthy habitats, improve access to sustainably managed game resources, contribute to a thriving hunting industry and enable control over hunting activities. The RHA Management Plan will provide the Municipality strategic policy direction for the future. It seeks to maximize the benefits of hunting and game management and to actively manage challenges across the landscape. The identified RHAs will be the first demonstration sites in Lebanon for hunting in accordance with the hunting Law and its application decrees and for combining two main actions: Community based Conservation (CBC) & Scientific based Management (SBM) on one side, and Wise Traditional harvest and Use (WTHU) through specific criteria and guidance material for management on the other hand.

Hunting and game management has a rich cultural heritage. Local communities across Lebanon, have hunted wildlife for many years. In Lebanon, game hunting has occurred for over 150 years, mainly in the form of trapping and liming; but it was only regulated since the early 1950s. Research has shown that regulated hunting (Lebanese hunting Law) is sustainable and will not put at risk the conservation status of any species, game or non-game. Only the poor enforcement of the hunting Law had led to damage wildlife.

In recent years, several hunters referred to hunting as being a traditional practice in Lebanon and has become an increasingly trendy hobby. The low cost of hunting gear and ammunition has supported this trend, as have the illusion of huge number of

migrating birds on one hand and the lack of other activities in rural areas on the other. The last census of registered hunters in Lebanon indicated their number was of 14,000 before the hunting ban, while in the past few years, informal estimations of the number of hunters has been much higher – ranging from 60,000 on behalf of the hunting organizations to 600,000 on behalf of environmental organizations.

By applying the Law within the RHAs, shooters will become hunters. These are from a diverse range of social, economic and geographic backgrounds – from farmers and primary producers for whom hunting is an important component of farm management, to game hunters who laud the country's natural environment. While hunting is no longer required for survival, a strong traditional tie will remain binding many Lebanese to hunting as a form of sustainable wildlife use – including as a cherished food source.

For the purpose of ensuring an appropriate management and control over the hunting process, RHAs are proposed on communal land; thus, the RHA will be managed by the municipality owning it. Accordingly, the present work provides guidance material that emphasizes the municipality's role and responsibility in managing the responsible hunting areas.

### Importance of responsible hunting areas

Recognizing the difficulties to control the hunting activities all over the country's surface area, SPNL believes that the limitation of these activities to a certain number of communal lands of limited surface area could ensure proper control of the



hunting operation in a sustainable way. Accordingly, RHAs can organize directly or indirectly the land boundary in which the hunting is acceptable, what to hunt, when and how much is the bag limit from each allowed game species (according to the hunting law). Because RHAs require registering at access points, hunters will experiment the responsible hunting principles. Since RHAs would be selected far from known flyways, fragile and endangered birds are more likely to be away from shooting areas. In all cases, the Ministry of Environment and the Municipalities will certainly make sure that non-game species are not targeted by the hunters. Responsible Hunting Areas are considered Wild-Life Management Areas that attempt to balance the needs of wildlife with the needs of people, using the best available integrated science. Clearly, RHAs management aims to halt the loss in the biodiversity by taking into consideration ecological principles such as carrying capacity as explained in section one.

## Importance of involving communities in the management of responsible hunting areas

Managing responsible hunting areas is important since it will help in conserving bird species, and in providing the local people a chance to assist in encouraging responsible sustainable hunting practices. Involving the community will help make the people more co-operative and concerned about their community and their lands. This will also set an example for other communities to take initiative in conserving nature, which will provide the birds an opportunity to pro-create. Such mitigation measures will lead to better wildlife equilibrium.

## Overview of responsible hunting area concept abroad

The concept of responsible hunting areas abroad differs in many countries; this is due to the variance in the governance styles of game birds. To be more specific, this is noted in Europe and North America.

They depend on three governance styles which are the following:

**Landowner regulated:** the hunting rights belong to the landowner. In this style, monitoring of game population is only done by the landowner/manager, and there is no set bag limit. This is the style seen in UK and on privately owned land in many countries in Europe.

**State regulated:** the hunting rights usually belong to the landowner, but presence of land area restrictions may be possible. A state agency sets bag limits, at least for some species which may or may not be based on monitoring of game populations. Some form of license or permit is used to regulate hunting, this is applicable to most of the public lands in Europe.

**State owned:** Game and hunting rights belong to the state (or they are otherwise controlled by them) and not to the landowner. Hunting is regulated by license, and there are usually bag limits imposed, which may or may not be based on monitoring of game populations. This is the governance style in North America, Hungary, Poland and Estonia. This is the most relevant style to Lebanon where the State is replaced by the Municipality who owns the land and the overall supervision is to the Ministry of Environment.

Hunting styles can be generally summarized into two categories:

**Driven shooting:** This is common in some areas especially in UK, France and some areas of Southern Europe, and in specific parts of North America (e.g. Bobwhite quail in Texas).

**Walked up shooting or 'rough shooting':** (rough shooting is the common term used in UK). "The majority of game bird hunting in Europe and North America is walked up shooting over dogs, or a similar practice."

In many countries, the hunting age is 18 years and above. There are many differences concerning this matter of age and governance styles of public hunting areas. To have a further overview of things abroad two case studies were chosen, the public hunting area concept in South Australia and in Brunswick Canada. These two studies were chosen

in order to see more variations in game bird hunting styles other than the ones mentioned generally about North America and Europe.

## South Australia

In South Australia, hunting is regulated by the national parks and wildlife act 1972 (NPW Act) and the National Parks and Wildlife (Hunting) Regulations 2011. One should have a basic hunting permit if he wishes to hunt unless he is:

- Destroying animals which are endangering human life
- Destroying animals (other than protected species) that are causing damage to crops, stock or other possessions on your land (your own or employer's property)
- Taking an animal under any other permit regulations.

The native mammals, reptiles, and birds are completely protected in South Australia, this is done in order to avoid extinction of many species. Also the NPW Act allows for open seasons to be officially announced for hunting specific species such as ducks and quails.

In South Australia, there are no bag restrictions when it comes to hunting native animals and species of animals that have been introduced, hunters can hunt these animals only if they have a hunting license, and if they obtained written permission when they hunt on private lands.

In South Australia, there are different types of permits such as:

- Basic permit
- Open Season permit
- Open season quail

The basic permit allows hunters to hunt all species of animals that are introduced, whereas the open season permit is for hunting ducks and quails. Last but not least there is the open season quail permit for hunters who do not want to hunt ducks. It is a condition that the hunter passes the waterfowl identification test before they apply for the open season permit.

In **Brunswick**, the hunting license is given to a resident. The resident is eligible based on the following criteria:

- Any person who has lived in the province for 6 months before he applies for a license.
- A person who has lived 2 weeks in the province and can show proof that he has been required to move there based on the request of an employer.
- A person who is living there for educational training purposes for a 3 month minimum period and has been there for two weeks before applying for a license.
- A person who has lived in the province for a period of 6 months directly prior to taking educational training outside the province and who is continuing such education.
- A person who proves to the satisfaction of the Minister that he has resided in the province for employment purposes for a period of 6 months within the 12 (this should be done before applying).
- A person who was born in the province and who possesses land there.

## Generally both countries have common Prohibiting regulations such as:

- hunting is restricted to specific species of wildlife
- Hunting at night
- Hunting during closed season
- Handling or discharging firearm in a reckless and unsafe manner
- Killing wildlife with poison
- Buying, selling, and attempting to buy or sell the carcass of any wildlife or wildlife parts

To conclude, RHAs abroad are for managing game species or for controlling the wildlife for the well-being of game and may include controlling other animals which share the same niche or predators to maintain a high population of the more profitable species, such as pheasants introduced into woodland.



Homat Alhima leader teaching HH about wildlife monitoring

## B. STRATEGIC OBJECTIVES FOR SUSTAINABLE MANAGEMENT OF RHAS

The primary management objective for Responsible Hunting Areas is to provide the public with hunting and outdoor recreational opportunities within the carrying capacity. This is said, sustainable management objectives focus on:

- Protecting the watershed of the water bodies and managing the vegetation types. This includes maintaining landscapes and seeking opportunities to increase or diversify the vegetation cover types.
- Providing responsible hunting by managing the game species best suited to the land capabilities of the area.
- Involving the communities to manage the responsible hunting areas
- Empowering the municipality to be able to monitor illegal hunting.
- Reducing the burden of hunting (poaching, illegal hunting) on protected areas.
- Reducing the number of shooters, and training the hunters on responsible sustainable hunting.
- Reducing the number of possible hunting accidents.
- Allowing the escaped birds and mammals in RHAs to find refuge in other habitats mainly in protected areas.
- Allowing various bird species to procreate through proper conservation measures.
- Keeping all game and non-game species at or above management objectives that consist, among others, of maintaining a natural balance between the components, chiefly populations, of an ecosystem, and of ensuring hunting sustainability.
- Having responsible hunters share their experience and knowledge with young hunters.



- Limiting hunting to a timeframe, game species, and bag limit or Game Take Objective (GTO) which is the desired number of individuals allowed to be harvested in RHAs.

These objectives when carried out properly, will lead to a better hunting sector where its own people have come to learn the negative insinuations of the wrong methods and attitude towards hunting. This will lead to more alliances from communities especially when it comes to sharing experiences and learnt lessons. This helps in forming a strong base for future co-operation in managing and dealing with any obstacles they might face.

## Strategic Objectives

### Objective1: Promoting Responsible Hunting

**Action1.1:** To improve hunting information and education through awareness raising.

**Action1.2:** To promote responsible hunting through partnering with hunting community.

Ensuring the hunting community participates in safe and responsible hunting is central to the long-term sustainability of hunting and the welfare of game animals. Engaging and partnering with the hunting community to promote responsible hunting through the development of a responsible hunting campaign will reinforce a self-regulation approach and promote a 'zero tolerance' culture to irresponsible behavior.

Many hunting community organizations provide responsible hunting information and deliver training programs to their members. There is significant existing knowledge and capacity within these organizations that can be leveraged to promote responsible hunting in a sustainable and cost-effective manner.

#### The RHA management will:

- Engage with hunting organizations to develop responsible hunting campaigns
- Support and promote expanded distribution of existing hunting information guides and training

programs developed cooperatively between government, NGOs, and relevant hunting and shooting community organizations.

**Action1.3:** To introduce the Code of Practice for the Welfare of game species in Hunting, and other relevant codes, and promote these Codes more broadly. The Code of Practice for the Welfare of game species in Hunting is to be based on the Prevention of Cruelty to game species. The Code of Practice should set out minimum standards, obligations and recommendations with respect to the care and use of game species. The purpose of the code is to prevent cruelty and encourage the considerate treatment of game species that are hunted or used for hunting.

#### The RHA management will:

- Review the Code of Practice for the Welfare of game species in Hunting, seeking stakeholder and broader community feedback during the review process.
- Explore options to better promote the Code of Practice for the Welfare of game species in hunting and other animal welfare codes more broadly among hunters and the community.

**Action1.4:** To improve guidance for hunters on the safe transport and storage of firearms.

There is uncertainty across the hunting community around the rules and regulations for the transport and storage of firearms. This uncertainty is particularly high when hunters are transporting firearms to and from hunting activities outside their usual place of residence.

To resolve current levels of uncertainty, RHA management will develop a practical guide to the current firearms regulations applied in a hunting environment. This guide will provide clear information and specific examples about how firearms (and associated products including ammunition) should be transported and secured within the RHA.

This guidance will be provided on the Hunter's website and distributed with new firearm licenses and with the RHA Hunting Guide and Code of practice. This will provide valuable guidance for both current RHA hunters and for national firearms license

holders who bring firearms into the RHA for hunting purposes. The practical guide will also assist enforcement officers to interpret and apply existing firearms regulations.

**Action1.5:** To empower training and education of new hunters

At present, in order for prospective hunters to obtain a hunting license in Lebanon, they are required to file an application and pay the required fee. Specific study and testing are required. In order to promote safety and responsible hunting practices, exams have been introduced in hunting clubs that prospective hunters must complete and pass before obtaining a game hunting license.

The government will:

- Explore opportunities to improve the technical capacity of the current game licensing system, e.g. web-based licensing in order to improve the quality of services such as online education, and probably payment and printing of licenses.
- Approve the results of the exams made in the clubs for the prospective hunters and deliver the licenses to those who passed the exams.

**Action1.6:** To train new hunters on identification of game bird species

**Action1.7:** To develop partnership with hunting retail businesses

Hunters in the RHA should contribute to local economies and jobs through spending on safety equipment, fuel, accommodation, camping and hunting gear, and food.

Well-informed retail businesses can encourage greater sharing of hunting information, including current rules and regulations and permitted places for hunting, acting as a valuable source of information to promote responsible hunting.

Hunting retail businesses also provide an information gathering channel for government to assist in identifying risks and collecting data, such as the number of hunters each season.

**The RHA management will:**

- develop partnerships with hunting retail businesses, in particular firearms and ammunition

retailers, to ensure that staff are able to provide accurate information to hunters

- Expand the distribution of hunting information and educational material through hunting retail businesses.
- Establish an annual forum with hunting retail businesses.

**Action1.8:** To promote responsible hunting by attending relevant events and exhibitions.

RHA management officers should attend key hunting organization events and relevant exhibitions to provide compliance information and education. Officers will keep attending at least 10 relevant outdoor and recreational activity events and exhibitions each year to provide information and education about responsible hunting.

Other agencies that play an important role in the regulation or provision of hunting services, such as Municipality police will also attend major events. Attending these events will encourage and promote safe and humane hunting practices while broadening the community's understanding of hunting.

**Action1.9:** To encourage captive breeding of game species and their release in the RHAs

## **Objective2: Realizing the economic and social benefits of hunting management in the RHA**

**Action 2.1:** To provide timely announcements to industry and the public of seasonal hunting conditions.

The length, open and close seasons, opening times and bag limits for hunting conditions are set out in the Law 580 and its application decrees and decisions. The Government (MoE) makes annual announcements about any variations in these seasonal conditions as appropriate. In providing timely announcements:

- The Minister for Environment will publish and announce detailed seasonal conditions for game birds and mammals hunting as soon as practical
- The Government will investigate options to bring

forward announcements of seasonal conditions, while still maintaining the integrity of the evidence-based decision

- The RHA Municipality will adopt new technology and use new communication channels, such as Twitter, to provide information on bag limits, opening and closure of seasons, opening times for games and other seasonal conditions.

**Action 2.2:** To support the growth of hunting tourism in the RHA.

Many countries such as New Zealand, Scotland, the United States, South Africa, and various Canadian provinces (British Columbia, Ontario and others) have all worked to create vibrant hunting tourism industries. These international examples highlight opportunities to promote hunting tourism in Lebanon, especially at the RHA, to deliver growth and economic benefits.

In Lebanon, tour operators are the efficient tourism organization for the country. They are responsible for the holistic development of tourism and advocacy. Functions include setting the strategic direction of the region, acting as a conduit between industry in the region and government bodies, regional marketing, industry development, identifying investment priorities and managing sustainability.

The government will work to enhance game hunting as a tourism-generating activity by:

- Providing detailed information about game hunting in Lebanon on a named “Visit Lebanon” website, either through a stand alone webpage or as a part of an existing webpage.
- Facilitating meetings with Regional Tourism organizations regarding hunting and game management opportunities and consulting and working with these organizations in the promotion of hunting opportunities at RHA level
- Developing an international supply chain analysis for the hunting industry and formulating appropriate strategies.

**Action 2.3:** To enhance release of captive bred game birds in the RHA.

**Action 2.4:** To support sustainable development of the hunting tour operator industry in the RHA. Hunting tour operators can provide new and particularly regional and international hunters. The RHA can provide a specialist local knowledge about available hunting opportunities. Hunting tour operators can also promote compliance with the RHA hunting regulations, offering guided access to available hunting areas.

Development of a hunting tour operator industry offers the potential to increase hunting related tourism and deliver economic benefits for the RHA. The RHA management will work with current and prospective hunting tour operators, along with hunting organizations, to promote the industry and simplify the regulatory processes by:

- Providing information on the MoE/Municipality websites for regional and international visitors regarding licensed hunting tour operators so that prospective hunters can readily access this information
- Providing information on mobile app so that prospective hunters can easily access the needed information.

**Action 2.5:** To commission a study to determine the contribution of hunting to the RHA economy. There is a need for estimates of expenditure on game hunting in the RHA. Game hunting supports businesses and industries, including gun shops, accommodation, camping, rural petrol stations and general stores, as well as dog breeders and the pet industry.

Data collection in the past on hunter expenditure in Lebanon (outside that undertaken by game hunters) has been infrequent, incomplete and inconsistent. The Municipality will commission a study every five years to determine the contribution of hunting to the RHA economy. The research will provide comprehensive data and a robust assessment of the net economic benefits of all forms of hunting.

Data will be used to inform investment decisions, target growth opportunities, and improve service provision and regulatory outcomes.



### **Objective3: Improving opportunities for hunting in the RHA**

**Action 3.1:** To provide current and easily accessible information about permitted locations for hunting, including appropriate signage.

Providing accurate and easily accessible information about permitted hunting locations and game availability is important to promote hunting activity and enhance hunter compliance with current regulations.

Comprehensive information about hunting locations and allowable game hunting activity can be disjointed and not easy to access. This makes it difficult for hunters and the general public to stay informed of hunting locations and game hunting opportunities.

Improving both physical signage on public land and online delivery of dynamic hunting information will lead to a better informed hunting community and general public.

To achieve these outcomes the RHA management will:

- Initiate a rolling program of assessment and appropriate replacement/renewal of signage for the RHA.
- Signs will ensure people and the hunters readily understand where and when hunting can legitimately take place.
- Identify appropriate platforms for disseminating information about available hunting locations and game hunting opportunities, and access information required for such platforms. Tools will include the websites, phone applications, an updated RHA Game Reserve guide, dynamic online maps and other information resources
- Information within the tools will include where and when hunting is permitted and the type of game species that can legally be hunted within each location.

**Action 3.2:** To improve access to the RHA and other public land where hunting is permitted.

The Municipality is committed to improving opportunities for hunting in the RHA and will ensure there is no negative impact on emergency services (and

will consider the impact on other public land users) from any proposed changed access arrangements.

**Action 3.3:** To engage with local communities to build capability and participation.

Since long time, farmers and locals have had decreased levels of access to land and ability to undertake traditional practices, such as the hunting of native wildlife. The Municipality of the RHA has already made progress in this area which seeks to achieve outcomes relating to recognition of local people customary hunting rights while maintaining sustainable hunting management.

- The Municipality of the RHA will engage with Traditional Owner organizations (including through capacity building and direct contracting) to build participation in land management and conservation.
- The Municipality will employ a local Game Manager to engage with local community and Traditional Owner organizations with an interest in hunting in the RHA.

### **Objective4: Improving Wildlife conservation and land management outcomes**

**Action 4.1:** Improving habitat management of the RHA.

RHA management will preserve the habitat of game species from agricultural development and offer some of the best hunting opportunities in the RHA. It will:

- Focus on maintaining quality habitats and watering regimes, pest control, installation and maintenance of appropriate visitor facilities and correct signage and information (including information on hunting and the purpose of the RHA). The management principles suggest partnership models with community groups to improve habitat management of the reserve.
- Complete RHA Audit Report and make this widely available. The report will review and assess the current status, quality and availability of land resources for hunting, and will inform the rolling program of signage renewal and access improvement.

- Make the RHA a 'demonstration site' engaging hunting organizations to assist in improving the management plan. The RHA will be managed for improved outcomes for game (including predator control, nest boxes, pest control, water regimes, revegetation, managed grazing).

**Action 4.2:** Initiating a national-wide game management strategy benefiting from the demonstration RHA.

**Action 4.3:** Monitoring, conducting research and analyzing the environmental, social and economic impacts of game hunting and game management.

The Municipality is committed to using a strong scientific evidence base to drive the policy agenda in wildlife conservation and environmental management.

An ongoing research program will be used to allow a deep understanding of current impacts and issues relating to game hunting and habitat management activities. In this research program, options for collaboration with private and tertiary education sectors, and Traditional Owners, when commissioning new research are considered.

The government and/ or municipality will need to:

- Develop a research strategy for hunting and game management in Lebanon in cooperation with the RHA.
- Ensure ongoing monitoring, maintenance and analysis of long term data sets, including population monitoring for game and non-game species to assess the impact of hunting and ensure sustainability.
- Undertake research to identify hunting strategies (e.g. strategic harvest, ballots) to maximize control outcomes on public land for implementation by land managers.
- Conduct research on hunting and pest control management, including to define boar population ranges to inform containment programs
- Undertake programs of tagging, banding and monitoring of game species
- conduct research into land and habitat manage-

ment techniques to benefit native game species

- Undertake assessments of relationship between hunting seasons on local ecosystems around hunting reserve areas, including consideration of soil, air and water quality.

**Action 4.4:** Improving the quality of data that is collected and monitored about hunting activities. Gathering data about hunting activities is critical to inform the development of policy and regulation of game hunting.

A project for "Improved Monitoring of Game Harvest" may be developed to issue mail and telephone based surveys to a sample of the RHA's licensed hunters and ask them questions about harvesting numbers and effort.

In order to gather similar information, the RHA management will:

- Continue to conduct regular telephone interviews with licensed hunters, to gain a current understanding of the levels of hunting activity and how it changes throughout the year
- Explore new technologies to collect this information.



Bird hides for duck hunting: a Lebanese hunting tradition

# C. MAIN STAKEHOLDERS IN MANAGING RHAS AND THEIR ROLES

The main stakeholders in managing responsible hunting areas and their roles are:

- Society for the Protection of Nature in Lebanon
- SPNL (providing trainings, monitoring, evaluation, technical support, scientific solutions). SPNL's role is clearly to train municipalities on the guidelines that they should adopt, as well as the techniques and skills necessary to manage the responsible hunting areas, and empower the municipality to do training sessions about responsible hunting practices within their communities. SPNL provides them with technical support and guidelines for monitoring.
- Ministry of Environment (providing overall supervision of the hunting operation, including coordination with the Ministry of Interior for Law enforcement, and verifying if the provisions of the municipalities, hunting clubs, etc. are acceptable). In addition, the Ministry of Environment will have a role in declaring that no hunting should take place outside the recognized RHAs, and the necessary rules and regulations that the municipalities should abide by. The most substantial role the ministry of environment will have is to help facilitate the necessary hunting procedures and regulations that the municipalities need to abide with.
- Municipalities (providing infrastructure for RHAs, including parking, trails, signs, resting areas, controlling the hunters behavior and impact, assisting law enforcement officers in enforcing the Law and its application decrees through reporting violations to the authorities, and supplying ecologically friendly services to generate income). The municipalities' role is also to manage and monitor

the responsible hunting areas, and have their staff undergo the necessary training. They will have to report any illegal hunting violations that take place in the responsible hunting areas or near it, which will help limit and decrease illegal hunting. Another thing which will help municipalities is doing training sessions about responsible hunting to interested community members.

- Conservation NGOs who would be responsible for raising awareness on responsible hunting practices.
- Hunting clubs (training candidates on the terms and rules of responsible hunting, legal game species, holding arms, administering the exam for acquiring the hunter license, etc.)
- Competent hunters (supplying information on the hunting activities, hunted species, etc. and providing information on landscapes connectivity).
- The Ministry of Interior (assisting municipalities in enforcing the Law of hunting and its application decrees). Officers from the RHAs management and municipality officers need to ensure monitoring of illegal hunting activities and report violated regulations to representatives from the Ministry of Interior.
- Captive breeding centers for game birds and mammals, practiced in the past by NGOs and private sector.
- Middle East Center for Sustainable Hunting (MECSH) which would be responsible for awareness campaigns and training hunters on responsible hunting practices.
- Private sector companies involved in promoting responsible hunting, would support municipalities and RHA management in proper sustainable management of the RHA in a cost effective manner.



# D. GENERAL GUIDELINES FOR MANAGEMENT OF RHAS

There are many guidelines necessary for managing responsible hunting areas, the most crucial ones that need to be adopted are:

## Vehicles & Roads

- Vehicles, including ATVs, must remain on established roads open to public vehicles. All RHAs are closed to the use of all motorized vehicles since their circulation may create room for possible accidents between hunters. In addition, the Law prohibits hunting from vehicles.
- Vehicles should be parked outside the RHAs in a manner that will not interfere with normal flow of traffic or block the gates.

## Parking Infrastructure

- There should be a proper design as to where the entrance of the responsible hunting area is, including the designated parking space. Moreover, appropriate signs should be placed so that the hunters can recognize the responsible hunting area, the rest rooms, and the reception area.

## Season and time of hunting

- The season where hunting is permitted should be in Mid-September till end of January according to the decision of the Minister of Environment upon consultation with the Hunting Higher Council. No hunting should be allowed during the summer or spring season. The time of hunting should take place between mornings till ½ hour before sunset. Any hunting activity outside the permitted season and time will be considered as a violation of regulations.

## Camping

- Camping and fires are prohibited within RHAs.

- Camping may be allowed during the hunting season outside the RHAs, but in designated areas.
- Camping could be allowed within the RHAs in designated areas outside the hunting season; that is in spring and summer only.

## Number of hunters/area size

- The number of hunters should not exceed the carrying capacity/ area size. This aspect is critical because it is essential for the safety of hunters, thus will help avoid any hunting accidents that might occur. It will also be an opportunity for the hunters to hunt equally without having to fight or argue.
- The number of hunters per area size should preferably be calculated depending on various factors including the density of game species, the species of the game bird or mammal, the range of the guns allowed and the density of the vegetation within the hunting area.

## The use of Bait

- The use or possession of bait, or hunting over bait is strictly prohibited. Baiting means the direct or indirect placing, exposing, depositing or scattering any salt, grain, powder, liquid or other feed or equipment to attract game species.

## Ban of trespassing

- Trespassing around responsible hunting areas is strictly forbidden. Any violation of this rule should require legal action to be taken.
- Removal and destruction of properties is not allowed. Archaeological artifacts or cultural resources, trees, shrubs, vines, plants, gravel, fill, sod, water, crops, firewood, posts, poles, or other property may not be mowed, clipped, cut, or removed from a RHA without a permit issued by the RHA management (except that firewood may be removed under certain stated conditions). Removal of property from a RHA by permit shall be only in a manner, limit, and conditions specified by the permit. Berries, fruits and snails may be picked, for non-commercial use unless prohibited by posted signs at public road entry points. Property may not be destroyed or defaced.

- Private properties and structures are not allowed within the RHA. No person shall construct or maintain any building, cabin, dock, fence, beehive, billboard, sign, or other structure on any RHA except by permit issued by the RHA management.

### Use of dogs and company of pets

- The use of dogs is relevant since this will help limit hunting accidents and it is a better way to hunt than using other illegal methods that harm or deceive the birds.
- No traps or snares should be placed in responsible hunting areas; this would help in avoiding any harm that might occur to the dog.

### Hunting License

- The hunting license is mandated by the hunting law 580 in Lebanon.
- The hunting license would allow the hunter to hunt in RHAs, and to hunt only allowed game species.

### Firearms and hunting weapons

- Hunters may carry and use any gun or firearm specified according to his hunting gun license, and in compliance with other applicable laws, rules, and regulations. Only fire arms, falcons, hawks, eagles, and dogs on RHAs are allowed (according to the hunting law, Article 9).
- All hunters may only possess and use shotgun shells containing approved non-toxic shot (a condition for the future).
- Archery (bows and arrows): Longbows, recurves, compound bows, and crossbows. There is no minimum or maximum draw weight. There is no minimum arrow length. Fixed or mechanical broadheads may be used.

### Habitat

- Vegetation is important in responsible hunting areas. This aspect is important because this will help maintain the birds' habitat; this is one way in assuring that the birds presence in the country continues to happen throughout time.

- Hunters should not be allowed to cut vegetation for any hunting purposes; also using vegetation from the site as camouflage should be prohibited. It is also important to manage the increasing grazing problem which has a negative and indirect effect on hunting especially when it comes to habitats of game birds. Livestock (domestic animals) shall not be permitted to graze or roam on any RHA except as provided for by a grazing permit or lease issued by the RHA manager within controlled grazing management plan.

- Preserving lakes, woodlands, olive groves, orchards and pine trees is important including the bushes and shrubs. This can be done by making sure no harmful chemicals are being used, because this will not only affect the habitats but the birds as well. The shrubs and hedges also should be cut in a certain manner, because certain bird species rely on eating them and so removing them completely will affect some birds' food chain.

- The cutting of holes, lanes, or any other manipulation of the vegetation (e.g. cutting of bushes and trees, mowing, herbicide use, and other actions considered harmful to birds) is strictly prohibited. The possession of saws, machetes, axes, or other tools for cutting vegetation is prohibited.

- No person may conduct any cropping, haying, or other commercial enterprise on any RHA, except by lease or permit issued by the RHA management.

- It is illegal to drive a nail, spike, or other metal object into any tree as these may be protected for a reason or another or may be hosting a protected species.

### No Litter

- There should be no dead or unwanted birds left on the site, and empty cartridges should not be left in the RHA. Any other types of litter should be disposed appropriately in the waste bins present nearby. The hunters should not leave on the RHAs their litter or any kind of garbage. The disposal of refuse, rubbish, bottles, cans, or other waste materials is prohibited except in garbage containers where provided.



Bird Identification and Monitoring Workshop at Women's Atelier - Hima Anjar, lead by Dr. Ghassan Jaradi © Asaad Saleh

### Alcoholic beverages

- Due to the sensitivity of the hunting activity and the security of hunters, the use or possession of alcoholic beverages is prohibited while on RHA lands and waters.

### Noise and disturbance

- Group activities attended, more than the carrying capacity are prohibited without a permit issued by the RHA manager.
- Excessive noise, which unreasonably disturbs other individuals, is prohibited.
- Fireworks, model rocket engines, or combustible or explosive materials are prohibited.

### Methods of hunting

As per the hunting Law 580/2004, there will be no use of recorders, nets, plastic bird samples (decoys), poison and lime stick allowed. The permitted technique would be using a rifle, archery bow and a trained dog if available.

One of the main reasons that these methods should be avoided is because they have many repercussions on the environment and birds, such as: over-harvesting of species. Other animals may also be affected since their populations will decline, and consequently the seed dispersal will change.



Training on hunter's safety in Hima Al Fakiha





© Matt Mills McKnight

## **E. LIST OF NEEDED INFRASTRUCTURE FOR RHAS**

- Parking
- Toilet facility
- Souvenir, guns and ammunition shop
- Trails
- Maps of the RHA
- First Aid Tools
- High level communication with emergency call numbers
- Benches for resting
- Camping area outside the RHA
- Quarantine facility for caring for found injured individuals of birds or mammals.
- Offices for manager and staff.
- Rubbish bins

## F. MANAGEMENT OF STAFF IN RHAS

The needed staff should be ideally formed from a manager, 2 officers, 1 driver and 2 labors to clean when and where necessary and to carry out garbage and evacuate the area from corpses left behind the hunters or to care for injured individuals if any. Members of the staff should know and recognize their duties. This will help ensure proper delegation of the duties of each employee, furthermore the staff should be provided with knowledge about the hunting law and how to be able to implement it. The staff should have surveillance shifts in the responsible hunting area; this will limit any illegal hunting that might take place.

### Training about safety skills

The staff should have training about the basic first aid skills, which involves knowing how to temporary take care of an injury until medical care arrives and where they should always have a first aid emergency kit available. **Guidelines on some common injuries are provided in Annex VII.**



Eurasian Sparrowhawk © Fouad Itani

### Financial management

It is important to train the staff about financial management, such as the entrance fees of the responsible hunting area, the income that is being generated, in addition to the management of salaries, and expenditure on maintenance issues. They need to use excel sheets which states the incoming and outgoing cash flow, also they should have a balance sheet which states the current assets and fixed assets, including a profit and loss sheet where it includes the costs of the maintenance and necessary changes they need to do in order to maintain the responsible hunting area's activity.

### Monitoring checklist

There should be a checklist where the staff monitors the number of species that have been hunted and their types as well as a report of illegal hunting activities or incidents; the season and times of hunting should also be recorded. In addition to that, the number of hunters and the region they come from should be documented, in order to find out how many hunters come from different areas of Lebanon to the responsible hunting area.



Head of Middle East Center for Sustainable Hunting, Adonis Al Khatib, training hunters in Hima Anjar/Kfar Zabad on Responsible hunting

# G.BENEFITS OF MANAGING RHAS TO THE COMMUNITY

Responsible hunting areas represent a positive solution that may lead to numerous benefits to the Lebanese communities and to the country as a whole, and it will perhaps have good impact economically, socially and environmentally to local community.

## Economically

Managing responsible hunting areas will help increase job opportunities; this will motivate the youth in getting involved and in hopefully trying to spread awareness. The community's economy will flourish since various hunters from different regions in Lebanon will be interested in hunting in specific responsible hunting areas, therefore the bakeries, restaurants, gas stations, and supermarkets will benefit from the hunters that visit these areas. This will also provide advantages to the guns and ammunition shops, especially from the marketing aspect where people would recommend the shops to each other.

This will be a great asset particularly for residential areas because no hunting is allowed nearby, their properties will be protected, and people would not be exposed to harm.

Setting responsible hunting areas will aid in sustaining game bird species, by maintaining their habitats and conserving them, giving them a chance to procreate. Enhancing revenues for better conservation efforts is one of the positive outcomes of having responsible hunting areas, because this will minimize the necessary funding needed from NGOs and other organizations for constantly trying to maintain these areas and in guaranteeing that no pollution or other anthropogenic activities shall negatively affect it.

RHAs will attract tourists from abroad who enjoy practicing this hobby of hunting, so when they arrive to Lebanon their presence will not only assist

in the prosperity of hunting in responsible hunting areas but also in the blooming of hotels and bungalows; and the remaining service chain.

## Socially

On the social level, RHAs will encourage interaction of Lebanese hunters from different regions in Lebanon and in sharing their experiences and stories about this hobby. It will strengthen ties and bonds between people leading to new friendships and this can lead to people inviting their fellow hunters to responsible hunting areas in another Mohafazat.

## Environmentally

The sustainability of game bird species will increase because hunting will not take place in a haphazard manner and hunters will not be hunting in one region, and because there will be a hunting season agreed upon. This will ensure that the game birds will not be hunted during breeding season; hence they will have the chance to procreate.

This will boost revenues from the responsible hunting areas because they will provide better conservation efforts and management of the place.



Great Cormorant © Fouad Itani



## H. BENEFITS OF MANAGING RHAS TO THE GREEN INFRASTRUCTURE

There is no doubt that Lebanon is committed to maintaining and enhancing ecosystem services and restoring degraded habitats and landscapes. This can be better performed by incorporating the concept of Green Infrastructure in spatial planning of the country as is done in the EU Biodiversity Strategy 2020 where Green Infrastructure and Hunters work with each other, not against each other.

Green Infrastructure can be broadly defined as a strategically planned network of high quality natural and semi-natural areas such as RHAs with other environmental features, which is designed and managed to deliver a wide range of ecosystem services and protect biodiversity mainly in rural settings. Better services are provided by healthy ecosystems whilst in Lebanon as in most countries many ecosystems and habitats are fragmented or degraded by human mal-oriented activities. The best solution for restoring these habitats or ecosystems is to adopt the concept of Green Infrastructure which consists of using natural resources for repairing altered functions of ecosystems.

The establishment and maintenance of Green Infrastructure needs the engagement of land managers or RHAs managers and users, such as farmers, foresters, shepherds and hunters. Hunters apparently have the greatest knowledge on movements of wildlife and hence can advise on functional connectivity of landscape features (e.g. for planning green bridges and corridors) as well as on coordinated management schemes (e.g. through Game Management in RHAs). Hunters are often among the few conservation and restoration force in ordinary landscapes outside and in vicinity of nature reserves (non-priority habitats) such as in intensive agriculture and responsible hunting areas (e.g. planting hedgerows and wild flower strips). Even though, hunters are not fully conservationist as pretended

in some reports if they don't exchange knowledge and cooperate with land managers (managers of RHAs for example) for restoration of habitats and spatial planning.

Whilst the primary goal of this management is for huntable species, there is good evidence of the positive effects for a wide range of flora and fauna. Therefore, Hunters' management experience and their knowledge of the practical issues linked to their activities and of the local landscape are relevant for the implementation of Green Infrastructure, which would take both the environmental and socio-economic aspects into account. Indeed, a variety of their activities is often done in collaboration with other stakeholders such as NGOs, farmers and shepherds, creating synergies for the maintenance of habitats and the sustainable development of rural areas. Hunters work mostly at local and regional scale, but they also undertake trans-boundary and interconnected actions. For their activities to be with maximum rewarding to ecosystem services, hunters will have first to maximize their experience by working in RHAs before extending their activities at wider scales. Similarly, RHAs managers will need to improve their knowledge through the establishment of partnership with hunters within the framework of Green Infrastructure concept.



Group picture after a workshop with hunting and shooting clubs authorized by the MoE that provide hunting exams

# I. CONCLUSIONS & RECOMMENDATIONS

All these guidelines above are key steps to ensuring the proper implementation of the hunting law by monitoring the hunters' illegal violations. The encouragement of co-operation between the hunters and communities shall lead to a better monitoring system, especially if this is done through continuous and improved collaboration between hunters and the RHA management. Communication networks between all of these RHAs will bring forth further exchange of experiences between the responsible hunting areas and it will create pathways for mutual assistance. This method will help highlight the success stories and the lessons learnt in each responsible hunting area; this can be done through the united efforts of all stakeholders in assessing the responsible hunting areas' experiences.

All stakeholders should unite efforts in carrying out thorough assessments and proper management of obstacles that responsible hunting areas might face throughout the process. After tackling all the crucial issues, their success would increase the responsible hunting areas' ambitions in continuously striving to be among the most successful examples in the Middle East region.

## The present study suggests the following recommendations:

- Ensure proper implementation of the Law by monitoring hunters and game species
- Encourage co-operation between hunters and the communities
- Enhance the collaboration between hunters and the RHA management.
- Promote assistance and exchange of experiences between the responsible hunting areas
- Collaboration of various stakeholders to assess the responsible hunting areas experience
- Propose solutions to the problems that might be encountered during the process
- Emphasize the role of stakeholders to be involved.

Further, it is recommended out of experience on the ground & based on the specificities of the areas, to divide the RHAs / Himas for sustainable hunting into 3 categories:

- 1-** Local RHA where only local people from the village are allowed to hunt in it.
- 2-** Regional RHA where only people from the designated region are allowed to use it for hunting.
- 3-** National RHA where all Lebanese public are allowed to visit & hunt in it within the national hunting law and its application decrees.

## Future recommendations would include the following:

- 1.** Investigate the potential for adding and involving hunting on private land (private hunting areas). It is important to note that private hunting areas are already in practice at many sites in the North and West Beqaa valley, by private land owners.
- 2.** Hunting on government land, especially on mountain tops in Anti-Lebanon, and Mount Lebanon, where responsible hunting areas (RHAs) could be established.

The Ministry of Environment may choose to apply responsible hunting on state or government owned land, and manage them similar to the nature reserves by government appointed committees.



Photo from "the honor agreement of the responsible Arabic hunter" conference





Training Homat al-hima on bird identification at Hima Kfar Zabad wetlands © Asaad Saleh



Photos of hunters that participated in the contest of "Spring Photo-shoot" © Michel Sawan



# VI ● DEVELOPMENT FOR ESTABLISHING MODEL RHAs

## A. SPNL AND GOLD TROPHY / BIOLAND:

A Mutual Partnership for  
the Promotion of Respon-  
sible Hunting in Lebanon

SPNL has identified 8 RHAs where concerned municipalities issued municipal decisions declaring them as Himas for sustainable use including sustainable hunting. This decision targets the preparation of infrastructure needed to build a RHA and create a sustainable management structure of each RHA.

SPNL has selected 3 out of the 8 identified RHAs to be established as model sites, hopefully to be replicated later on national basis. Several developments have been initiated such as partnership with Gold Trophy private hunting company, development of EIA study for Anjar RHA and for Qaytouli Roum RHA, Monitoring plan for Anjar RHA, and a basic business plan for Anjar RHA.

SPNL and Gold Trophy organized a Partnership ceremony at Bioland Farm Restaurant, Sghar, Batroun, Lebanon on 11 July 2015. The event witnessed also the signing of partnership between Gold Trophy and S.C.Vanatorul and Canisa Kris SRL (Romanian companies in the field of responsible hunting). The event was under the patronage of his Excellency Romanian ambassador to Lebanon Victor MIRCEA. This ceremony is considered as a pilot General Meeting where they were able to bring together: Environmental players (activists, associations), Hunting players (hunters, clubs, companies) and Public Authorities (municipalities, ministries, embassies). During this general first of its kind meeting, the following important elements achieved:

**A.** SPNL & Gold Trophy general partnership agreement signature

**B.** Gold Trophy and European association partnership agreement signature

**C.** Bird Life International 34 wonders of the world Exhibition



SPNL and Gold Trophy shall try to make it as a regular yearly meeting to follow up achievements and create a continuous partnerships.

The collaboration between Gold Trophy and SPNL will help in creating a platform where all concerned hunting parties will meet including hunting shops, shooting clubs, hunting associations, hunters, hot-spots, municipalities, RHAs / HIMAs, Ministry of Environment, etc.

This platform will assist in creating financial sustainability for all participating parties for the long run and serve as an awareness tool and learning curve for future generations.

Gold Trophy is a Lebanon-based hunting company, organizing hunting trips within Lebanon as well as to Romania, Morocco, and Iceland. SPNL, the BirdLife national partner in Lebanon, is non-governmental organization aiming at protecting nature, birds, and biodiversity in Lebanon. Gold Trophy and SPNL share common values and have joined forces to launch a first-of-its-kind collaboration to promote sustainable responsible hunting in Lebanon and the region; and collaborate in the management of these RHAs.



## Objectives

- A.** Implement the 580 law starting 15 September 2017 which shall improve control and stop chaotic and illegal hunting in Lebanon.
- B.** Promote responsible hunting in Lebanon.
- C.** Create twinning between selected Lebanese villages and similar European regions to smartly update the local hunting practices and behaviors.
- D.** Develop “Responsible Hunting Areas” with a model hunting management system inspired from European hunting association models.
- E.** Educate and train Lebanese hunters in an efficient, positive, and sustainable way.
- F.** Launch a free smartphone application as a platform for SPNL-Gold Trophy that features the common targets in terms of sustainable hunting and eco-friendly practices.
- G.** Organize a yearly meeting between all Environmental Associations, activists, and hunting players (companies, clubs, hunters, etc.) and public authorities (municipalities, ministries).

## RHAs & HIMAs

A HIMA is a traditional approach for the conservation of natural resources. Since 2004, SPNL is promoting the “HIMA” community based approach for the conservation of key biodiversity sites in collaboration with municipalities and local authorities. This approach concentrates on the involvement of local communities in decision-making, promotes

sustainable use of natural resources, and supports poverty alleviation through providing alternatives for income generation. SPNL is merging the traditions and values of the HIMA approach with the modern scientific techniques, such as identification of ecological sites, stakeholder analysis, and using participatory approaches for involving the local communities throughout the visioning, planning, and implementation. The HIMA system has proved to be the best solution for sustainable use of natural resources, for the conservation of culture and traditions, and for poverty alleviation.

Gold Trophy currently owns and manages an 8,000 hectares Responsible Hunting Area in Oradea, Transylvania, Romania that is similar, yet larger in size, to the Lebanese HIMAs. With this new collaboration, these HIMAs will be transformed into RHAs whereby only certified hunters can enter these lands and hunt inside, responsibly, while having all the needed facilities for a successful hunting trip including accommodation, food and beverage, security, guides, dogs, parking, etc., without of course forgetting the diversity of the games he/she is able to hunt. Gold Trophy will handle the business and marketing aspect of these HIMAs and make sure that Lebanon is present as a prime destination for sustainable responsible hunting on the world hunting map. The Co-management of RHAs shall introduce in Lebanon the best model for hunting areas and allows intensive training for employees and for selected hunters.

## Hunting Training Programs

Over the past years, Gold Trophy has provided practical trainings for hunters visiting Romania and exclusive hunting destinations. These trainings comprise local hunting laws, available games, hunting seasons, guns, eco-friendly practices, etc. SPNL will implement similar trainings for hunters wishing to get access to the identified HIMAs RHAs in collaboration with Gold Trophy. Any hunter wishing to become a Club Member and hunt within these HIMAs will have to take the course(s) and pass the respective test.



## Smartphone Application

SPNL has developed during the past years a valuable database of the 400 birds currently identified in Lebanon in addition to Lebanese hunting hotspots, migration lines, and RHAs. At the moment, Gold Trophy and SPNL are launching a unique Smartphone Application which will be FREE to download by the user and will serve as a sustainable hunting guide for the local hunter. The application will feature information about birds, seasons, laws and decrees, hotspots, eco-friendly tips, directories, in addition to a rating system for the hunters to provide their ratings about hunting hotspots featured in the application. Nevertheless, users of the application will collect points by simply interacting with the application (rating, commenting, clicking on ad banners, suggesting new locations, etc.). These points will be redeemed against valuable hunting tools and accessories from partner shops.

A financial flow will be created within the general management of the sites (RHA) and the smartphone application to stimulate continuous awareness and education for hunters and sustainable income for municipalities and villages. This financial scheme shall offer long-term sustainability and a positive learning curve.

[Partnership Brochure in PDF Format](#)



# B. EIA STUDY FOR ANJAR RHA

## Study Area

The study area encompasses the village of Anjar, which is located on the level plain of the Beqaa valley. The eastern border of the village of Anjar reaches the middle of the Anti-Lebanon western slopes.

Anjar has a high ecological value, with a rich biodiversity due to its various water resources. The area comprises a marshland formed by rivers and springs, which create a typical habitat for African Eurasian water birds, in addition to a breeding habitat for the Syrian Serin, a species which is considered to be globally threatened (Vulnerable). This is one of the major factors that led SPNL and Birdlife International to consider the wetlands of Anjar and Kfarzabad as an Important Bird Area (IBA) in 2005. Additionally, due to the high biodiversity in the area and due to the livelihood values, the area was declared as a Hima (community based management system) by SPNL and by the Municipality of Anjar. The marshlands sustain the livelihood of the surrounding farmers and fisheries, as well as supply fresh water to more than 30 villages nearby.

However, due to the over extraction, misuse and the lack of management of the available water resources in the villages of Anjar and Kfarzabad prior to their declaration as Hima, the water resources were affected in terms of quality and quantity, leading to the degradation of the biodiversity. Additionally, the water supply shares were apparently a conflicting issue between the various stakeholders, who are supported by different political and sectarian backgrounds. Some of the water resources available are shown in Figure 1. The study area is also rich in agricultural lands, and these can be seen in Figure 2.



**Figure 1** Water canals: one aspect of Water Resources within the Proposed RHA

This report will target a selected area that makes up to 3% of Anjar. The related area was selected according to a set of approved criteria, which define a Responsible Hunting Area (RHA). In addition, it is worth mentioning that the main guiding reports and papers for this EIA report are those of Arroya & Beja (2002), Fernandez et al. (2013), Mustin et al. (2011), Villanua et al. (2008) and Vinuela & Arroyo (2002). The national information is retrieved from the accumulated knowledge of SPNL members.



**Figure 2** Agricultural Lands within the Proposed Anjar RHA

## Objective

This report is an Environmental Impact Assessment (EIA), which is a tool used to establish the positive and negative impacts of certain activities on the environment and the biodiversity, in this case, establishing a controlled hunting area. The report will indicate the potential impact of game birds hunting with its associated expected management within the proposed Anjar RHA on biodiversity, with a focus on the non-target species and wider habitat.

## Practices Associated with the Different Types of Hunting

The impacts of hunting on biodiversity vary widely depending on various factors, which include:

- 1- Types and styles of hunting (shooting and trapping, ...)
- 2- Regulatory framework and laws
- 3- Current biodiversity and sensitivity of species

These factors will be further reviewed in this report, including a brief section on hunting with traditional and modern methods in relation to habitats and the management practices associated with game bird hunting in Lebanon and specifically in Anjar.

The information used to develop this report has been acquired from various sources including books and reports provided by the Society for the Protection of Nature in Lebanon (SPNL), literature review from general research, experts in the field of biodiversity and from various field visits to the site in question. The major part of this Environmental Impact Assessment relies on bird data and technical and scientific advices provided by Ghassan Ramadan-Jaradi, a professional ornithologist and expert in hunting management.

## Rationale

In Lebanon, hunting is practiced by people of all ages and occurs throughout all seasons of the year. Millions of birds are killed each year due to hunting, and many of the species hunted are considered to be internationally threatened species. Consequently, the protection of birds is a shared responsibility, which requires a coordinated

multinational approach. Hunting is an important socio-economic activity in Lebanon, and it includes shooting, trapping using nets, snares, lime sticks, traps and decoys, use of poisons and other methods in order to catch and kill birds. The hunting activities in Lebanon include a very large number of people and immense areas of lands with hunters, trappers, weapon and ammunition manufacturers, bird-trap makers, caged bird sellers and restaurant owners involved. There are nearly 20,000 officially registered shooters in Lebanon (statistics dating back to 20 years ago), though the actual number is believed to be more than 10% of the Lebanese population, a number high in comparison with the percentages present in countries like Finland (6%), Ireland (3.4%) and France (2.6%).

The number of birds being hunted in the country has increased to nearly the industrial scale in the country, due to new hunting methods and equipment, increased availability of guns and cheap ammunition, easier access to remote areas, and increased leisure time. These factors contributed to diminishing the population of native game species. A recent study related to illegally killed bird species in Lebanon in cooperation with BirdLife International in 2014 has revealed that almost 4 million birds are illegally hunted annually (Ghassan Ramadan Jaradi, pers. com) (refer to Figure 3).

In addition to the disturbance from shooters at hunting sites, the poisoning of birds and the pollution of their habitats from pesticides and lead shots, particularly in wetlands, also imposes a serious environmental threat. Nearly 40 million cartridges are being sold annually (25m by syndicate and 15m produced illegally), which are estimated to make up to 1,680 tons of lead. This is due to the lack of enforcement of the Law and the application of the relevant Decrees, in addition to the shortage in the number of internal security forces in charge of overseeing the enforcement of the Law. A proposed solution for all these major issues is to limit hunting to "Responsible Hunting Areas" (RHA) (shown in Figure 4), where hunting is managed over municipal/community lands and controlled by municipality police/rangers. To do so, an EIA



is a must to see what type of impacts hunting imposes on biodiversity and on non-target species, particularly globally threatened species, and to find out how to mitigate the negative impacts of hunting within the proposed Anjar RHA.



**Figure 3** Illegal hunting of 111 Beaeaters, 34 Orioles, 16 Turtle Doves, 4 Quails, 4 Rollers, 4 Lesser Grey Shrike, one Short toed Lark, and one Masked Shrike.



**Figure 4** Proposed RHA in Anjar

## Governance and Management of Hunting in the Anjar RHA

In Lebanon, governance and management of hunting is characterized by poor Law enforcement, poor resources and capacity among government institutions and NGOs concerned with hunting of birds, poorly developed communication and data-sharing systems, poor public and hunter awareness of the impact of hunting, and past conflicts between hunters and conservationists. Additionally, much of the debate on the management of bird hunting has taken place at the national level with relatively minimal local community input. Consequently, there is a need for cooperation to develop collaborative efforts and partnerships between all groups concerned with the hunting of wild birds in the country. In response to the above, the Lebanese Environment Forum (LEF), in collaboration with the Society for the Protection of Nature in Lebanon (SPNL) will test controlled hunting within an area located at Anjar. The Anjar Municipality, a well-organized local authority, will ensure that the hunting activities are in accordance to the hunting Law 580/4 and the wildlife through proper management and appropriate measures, in order to be a model that could be replicated in other areas of Lebanon. The proposed Anjar RHA will be legally distant from the Anjar IBA; hence, it is believed that the birds that flee from the RHA might find appropriate refuge in the Anjar IBA. Moreover, it is believed that the fleeing birds may also find a safe resting and feeding area in the Kfarzabad section of the IBA and the Kfarzabad Hima, which are located to the north of Anjar, and complement it. In the Kfarzaabd Hima, hunting is banned by the municipality-local authority, and implemented by the Hima management team and by the local farmers. The current situation in Anjar and Kfarzabad offers an opportunity for research, monitoring and comparing habitats and species in four different sites, managed in four different ways:

- 1- The IBA (Anjar and Kfarzabad)
- 2- The Anjar RHA
- 3- Anjar & Kfar Zabad Himas
- 4- The no hunting area (Kfarzabad Hima)

The game birds belong to three (3) species of ducks (Mallard, Teal and Garganey), three (3) species of doves (Woodpigeon, Turtle Dove and Stock Dove), three (3) species of thrushes (Song Thrush, Mistle Thrush and Fieldfare), Woodcock, Quail, Chukar, Calandra Lark and Chaffinch (refer to Figure 5). The game mammals are limited to the rare Cape hare (Wild boar is not available in Anjar).

In general, birds (game and non-game birds) are classified as *res nullis* (nobody's property). The allowed hunting methods include archery, shooting and falconry, according to the hunting Law in Lebanon. The hunting of birds is done at an individual level or in small groups, where it is typically done by "walked up shooting", where a line of guns walks through the habitat of the birds and shoots at the species that become visible to them. The Hunting Law in Lebanon imposes a bag limit for every game bird species. Habitat and species management, and predator control (if needed), will be carried out intensively for game bird hunting by LEF, SPNL and the Anjar Municipality at the proposed Anjar RHA.

Article 8 in the Hunting Law 580 states the following: "It is strictly forbidden to hunt in cities, villages, picnic areas, public gardens, protected areas; and areas that have been categorized as important heritage sites, or less than 500 meters distance from residential areas, religious sites, public or private infrastructure, even if the hunter is using arms that work by air or gas pressure. It is also prohibited to display hunted prey on the car and on main roads", while Article 7 of the same Law states the following: "None of the wild birds or animals in Lebanon is considered to be the property of anyone. The land owner or the investor of the land has the right to prohibit hunting on it by placing "No Hunting" signs on the entrance of the land, according to agreed practices". As for the hunter, there are 3 requirements in the hunting Law for him: to pass a mandatory hunting examination, in order to obtain a hunting permit, to have a license for the possession of a hunting rifle, and to buy, on annual basis, a hunting insurance from any insurance or reinsurance registered company. Where everything seems to be controlled by the government, land



**Figure 5** Different Types of Game Birds

management is at the discretion of the hunter. To summarize, the style of governance for game bird hunting in Lebanon is a government owned style, in which game and hunting rights belong to the government, or are otherwise controlled by the government, when the landowner ask the Ministry of Environment to forbid the hunting on his own or invested/leased land. Hunting is regulated by license, and there are usually imposed bag limits, which may or may not be based on monitoring of game populations.

## Hunting Styles in Lebanon

The hunting of quails in Lebanon is normally done by “walked up shooting” over dogs. The hunting of ducks however, is done by a “hide shooting” style. For partridges, the hunting style encompasses both,

the “walked up shooting” style and “hide shooting” style. The hunting style for doves, thrushes and larks is “stand up shooting” rather than the “walked up shooting” style, in which the hunter stands in a field or near tree stands, and waits for the game bird to pass over their head, or waits for the game bird to be flushed by dogs (dogs flush a game bird by first finding it and then driving it away from its hiding place, making it visible for the hunter).

Falconry is permitted, but it is not normally adopted in Lebanon, since it requires wide-open areas and special techniques, which are currently unfamiliar to the regular hunter in Lebanon.

The Law does not permit some hunting styles, and these will not be permitted within the proposed Anjar RHA, since the RHA is meant to be a demonstration and example of the proper implementation of the Lebanese hunting Law.



## Hunting Dependent Management Practices in the Proposed Anjar RHA and their Impacts on Biodiversity

The most commonly expected management activities for game bird hunting in the proposed Anjar RHA, and in other RHAs and other parts of Lebanon are examined in this section. Additionally, the popularity of practices and the impacts of these practices on biodiversity are also discussed. The management practices include:

- 1- Tree Stands Management
- 2- Grazing Management
- 3- Habitat Management
- 4- Crop Management
- 5- Field Margins and Hedgerows
- 6- Species Management
- 7- Predator Control

### Tree Stands Management

Due to the lack of natural forests within the perimeter of the proposed Anjar RHA, hunters and managers within the RHA should manage the artificial small strands currently available in the study area. The RHA management should take into consideration the game birds habitat suitability when managing tree-stands habitats, though the management itself is not usually aimed at game bird hunting specifically (Figure 6).

The management team of the Anjar RHA, as well as the hunters, is expected to be aware of the habitat requirements of tree-stand species, such as the thrushes. The management guidelines for tree-stands that benefit game birds do not exist in Lebanon, making it difficult to manage the existing tree stands, however, planting new stands rich in mixed deciduous and evergreen trees with a developed low story could be beneficial to both, the hunters and the birds. It is noteworthy that for the management of tree stands, the use of fertilizers and biocides should be avoided, as these impose detrimental effects, in addition to creating openings

in the canopy of the stands, in order to encourage herbaceous plant growth.



**Figure 6** Hunting of Thrushes near Tree Stands

### Grazing Management

The management of the proposed RHA in Anjar shall also include grazing control. Grazing management can be done by controlling the number and the regime of sheep and goats grazing over the areas where the crops are harvested or in the lands to be ploughed.

Having low levels of grazing could benefit most birds by revealing insects, crawling invertebrates and creating fire-protecting belts around trees. On the other hand, high levels of grazing should be avoided, since beneficial plant species could be removed, and grass covers could be detrimentally affected. The high number of grazers, in the absence of management, damages heather and reduces upland plant species diversity due to a dominance of coarse grass species (DeGabriel et al. 2011). The lands that will be managed for game birds will be under a rest-rotation, or deferred-rotation grazing system, in order to allow for reduced periods of disturbance during critical game bird life-cycle stages (Anderson & McCuiston, 2008). The most adverse effects of rangeland overgrazing on non-game spe-



**Figure 7** Riparian Habitat

cies result from heavy use of riparian areas, and a subsequent loss of food and cover, along with a general reduction in habitat diversity.

This is observed in places where there are riparian areas in the country, including Anjar, where the riparian habitat is shared by the IBA and the RHA (Figure 7). Grazing in riparian areas has adverse impacts for game and non-game birds too, which is why grazing in riparian areas should be stopped to allow shrub and understory species establishment, which will on its turn, stabilize stream banks and enhance the fish population.

### Habitat Management

In the proposed Anjar RHA, hunters are planning on burning and cutting grasses and heaths at different height levels, starting from the ground, this is in order to generate and maintain a mosaic of different grass heights to provide optimal foraging, attracting habitats and provide cover from natural predators (Figure 8). This practice is expected to be beneficial to most hunters and game birds, as it diversifies the microhabitats to attract a variety of game birds, but detrimental, at the preliminary stages of ecological succession, to many non-game species, chiefly passerine and particularly pipits that are targeted by hunters illegally (Ramadan-Ja-

radi, in prep) and that are preferably frequenting non-burnt areas.

In this kind of managed areas, passerine non-game species should be protected due to the fact that they prefer unmanaged natural areas (Haworth & Thompson, 1990; Tharme et al. 2001). Many species avoid short grass open habitats because these habitats don't offer them cover from predators, which is why the managing team of the RHA in Anjar should leave some patches of scrubs, in which birds can find refuges. The ideal practice would be to increase the richness of bird species in the RHA through a rotational grass burn/cut process, as it would allow for the growth of invertebrate population that is part of the bird species diet. It is also known that the birds' diversity increases with increased structural diversity of the vegetation (Ramadan-Jaradi, 1975 and 1984).

In North America, hunters disturb the habitat by burning, "disking" (mechanically opening up habitat patches) and by applying herbicides in game bird management in order to maintain a habitat mosaic, to promote the growth of food plants and to control brush and hardwoods (Holechek et al. 1982; Webb & Guthery, 1983; Peoples et al. 1994; Welch et al. 2004). If prescribed, burning may increase the abundance or diversity of non-game bird species, but this may not be the case right after the burning treatment, this may occur at later stages of ecological succession, when the structure of the vegetation becomes more complex. According to Petersen and Best (1987), prescribed burning of sagebrush to produce a habitat mosaic, including open patches of forbs and bare ground, increased the selective species of non-game bird relative to unburned areas, thus, "disking" in the proposed RHA may be used to create a mosaic of successional stages in scrub habitat to benefit Common Quail Management, and may reduce the number of scrub dwelling non-game birds, but may be beneficial to other non-game species (see Vega & Rappole, 1994).



**Figure 8** Mosaic Grassland Managed for Hunting

### Crop Management

Farmers in the proposed Anjar RHA will be invited by the hunters and managers of the RHA to grow game crops, which will in order, provide cover and food for allowed birds for hunting during critical seasons of the year, mainly post-breeding periods or hunting periods (Figure 9). For example, planting maize strips, cereals and kale based crops in a mosaic on the mountain slopes at Anjar may benefit the Chukar Partridge and Common Quails by ensuring both summer and winter cover, though this management may increase predation risks at strip-field edges. In general, the management needs the planting of food plant plots, such as wheat, millets and oats, and these plantings should be made in areas where native plants or agricultural plots do not provide sufficient food for birds. The planting of cover and food crops seems beneficial for a range of farmland species, though only a few studies have analyzed its effects in detail (Sage et al. 2005). For example, Sage et al (2005) showed that winter and summer game crops held higher densities of song-birds than did adjacent arable crops.

The use of agro-chemicals is not allowed around the crop edges during breeding periods. Evidence shows that the reduction of pesticide use needed in order to increase the food supply for game birds also increases diversity or abundance of invertebrates, birds and small mammals (Wilson 1994). Another management practice, also designed as a Chukar Partridge management tool, comprises of the creation of “beetle banks” (raised ridges

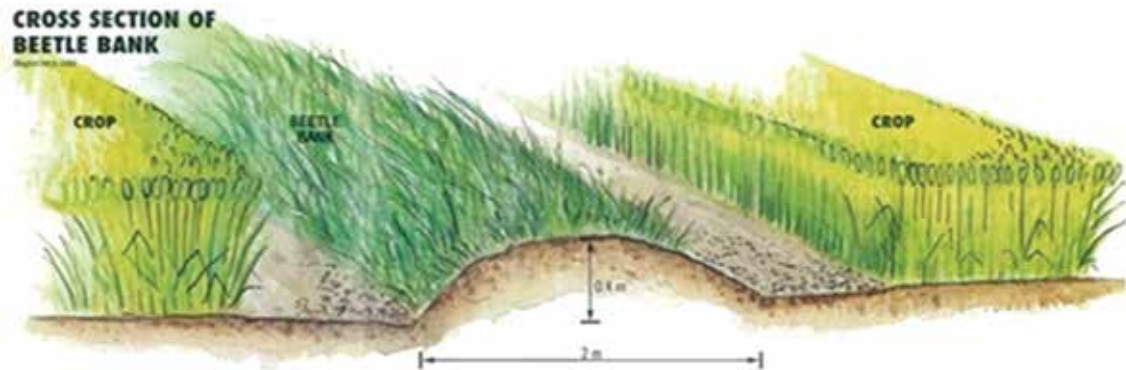


**Figure 9** Crop Management

across the middle of an arable field planted with tussock-forming grasses). These are designed primarily to enhance populations of polyphagous invertebrate predators in arable field systems, to help control aphid pests in the adjacent crop (Chiverton 1989; Anon 1995b). Beetle banks seem to be beneficial to game birds (Thomas, Goulson & Holland 2001), though they have not been designed originally with this purpose. Beetle banks are apparently beneficial for farmland wildlife overall, primarily by providing suitable habitats for a range of species and reducing the use of pesticides in crop protection. Nevertheless, there is no evidence that beetle banks are used in Lebanon to directly or indirectly manage game birds.

Finally, game bird management may include delaying crop harvesting outside the RHA to protect nests from destruction. Most of the threats identified to be responsible for the decline of seed eaters are from early crop harvesting, causing nest failure in Europe for Red-legged partridges, corncrakes and other species.





### Field Margins and Hedgerows

Hedgerows are important for both game birds and farmland wildlife. Accordingly, game management may have positive effects by contributing to the retention of hedges in the proposed Anjar RHA. However, game hedges may not be the most favorable to wildlife, as management for game bird shooting recommends relatively short and narrow hedges, with few mature trees (Rands & Sotherton 1987; Sotherton & Rands 1987), whereas for instance, the highest bird species richness and overall abundance is associated with tall and wide hedges, with many trees (Parish et al., 1994) (Figure 10). In all cases, the proposed Anjar RHA needs to have a variety of hedges (short and long, narrow

and wide) to benefit a variety of birds, mainly game birds. Herbaceous field margins are also beneficial to both, game birds and wildlife in general, mainly in areas with many farms. Management of herbaceous strips for game birds will be an essential part of the RHA management to reduce the negative impacts of farming operations like pesticide spraying, while improving the use of the area for breeding and wintering birds.



**Figure 10** Field Margins and Hedgerows

## Species Management

The two main practices associated with species management of game birds are: 1) the control of disease and parasites, and 2) the provision of supplementary food and water. These are largely frequent practices throughout Europe and North America.

### 1) Control of Diseases and Parasites

The control of diseases and parasites is related to species that are bred and reared in captivity like partridges, quails and released into the RHA or other types of hunting areas. These released birds are known to be more prone to high levels of parasitic infections than are wild birds. In the case of the proposed Anjar RHA, should the managing authority decide to release birds for hunting, it will need to use anti-parasite drugs to treat captive reared game birds prior to their release. These drugs can be added to feeders around release sites. This method is more likely to benefit wild birds than releases in the absence of such measures, as there is the potential to pass infections to the wild population.

### 2) Provision of Supplementary Food and Water

The provision of grain is a common management practice in hunting areas, particularly in agricultural habitats. Releasing partridges in the proposed Anjar RHA should typically be supported by provisioned grain from release until the end of the shooting season, in order to maintain body condition and retain birds in shooting areas. It is assumed that such provisioning has positive impacts on other grain/seeds eater species. There is also a suggestion that concentrating birds around feeders might increase the risk of disease transfer and predation. Provision of supplemental water that is common in arid parts of Europe and North America doesn't apply at Anjar.

## Predator control

Predator control is a traditional practice in game bird management and has been applied across many countries. Predator control targets a large variety

of predators, mainly raptors, foxes and jackals. This practice is particularly common in relation to the management of important socio-economic game birds, such as partridges and quails. In rural areas of Lebanon, some owners of hunting clubs that are using released birds for hunting, have eliminated foxes and jackals as a management tool in their artificial game hunting area and its surroundings. Crows, ravens, and members of the mustelidae family are frequently hunted in some areas, whilst in others, falcons and eagles, which are legally protected, constitute the main target. Hunting clubs, which are predominantly relying on released birds are less likely to operate consistent predator control outside the shooting season (Bicknell et al. 2010).

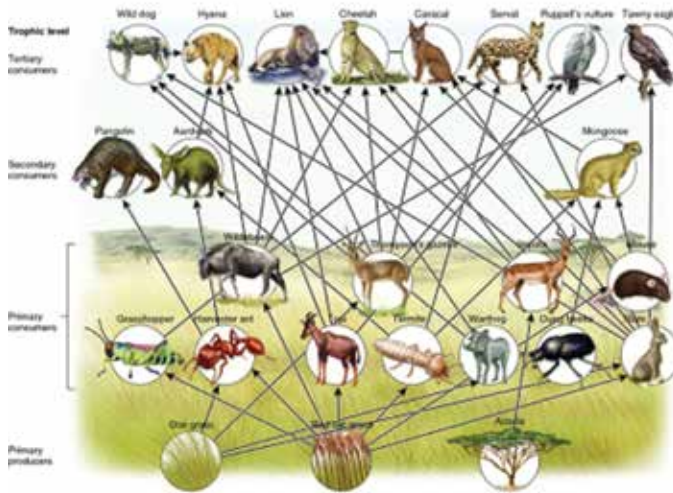
Predator control should not be applied for game birds in Lebanon, or elsewhere, instead predator management should tend to focus on managing habitats in order to minimize predation risk, and this is to be done by removing dens and perches, improving cover, increasing the size and density of habitat patches and reducing patch isolation. There is, however, a growing interest among some hunters and game managers in applying direct predator control (e.g. (Burger 2001). Rollins and Carroll (2001) suggest an "Integrated Pest Management" (IPM) approach, a concept that was developed in relation to the strategic control of crop pests. IPM advocates that non-lethal (i.e. habitat management) approaches are applied as a first defense, and lethal approaches (i.e. predator control) are applied "surgically" to reduce costs and minimize risks to non-target species. The Lebanese conservationists support are against predator control as to increase populations for hunting. This makes predator control a contentious subject, especially that predator control is also considered as a factor destabilizing predator guilds, and thus, being detrimental for conservation. Illegal predator control affects the abundance and distribution of legally protected species, such as birds of prey. The effects of predator control on game birds, non-game birds; and the illegal predator control are further discussed:



**Figure 11** Predator Control

### a) Effects of Predator Control on Game Birds

Predator control often increases the breeding success of small game birds, and thus, the size of the autumn (harvestable) population and the breeding density. However, because control of top predators may cause meso-predator release, predator management practices should be carried out carefully. Additionally, it should be noted that the most important factor in the efficacy of predator control, is the efficiency of predator management.



**Figure 12** Top Predators (top row) and Meso-Predators (below)  
SPNL policy is against such practices

### b) Effects of Predator Control on Non-game Species

Despite the fact that predator control may increase the breeding success of small non-game birds, and thus, the size of the autumn population, and because control of top predators may cause meso-predator release, predator management practices should be carried out carefully and must avoid harming raptors or other threatened species. Additionally, it should be noted that the most important factor in the efficacy of predator control, is the efficiency of predator management.



### **c) Illegal Predator Control**

There will be conflicts between the management of economically important game birds and the conservation of legally protected raptors. However, in Lebanon, this conflict is minimized due to rarity of raptors in term of richness and density. Species like the Golden eagle, Short-toed Eagle, Booted Eagle, Bonelli's Eagle, Long legged Buzzard, Marsh Harrier and Hobby Falcon have high proportions of game birds in their diets, and that harriers, buzzards and Bonelli's and booted eagles are locally important predators, however, the extent to which any of these species negatively impact game populations is very low due to their rarity in the country. Furthermore, the Short-toed Eagle feeds almost exclusively on reptiles and chiefly on snakes, which may feed on game species or their eggs and fledglings. A number of methods to reduce the conflicts between raptor persecution and game bird management includes habitat management, diversionary feeding, and control under a quota system.

### **d) Rearing and Releasing**

Releasing a number of partridges, quails and pheasants into nature in an irregular sequence and unregulated practice, may lead to increase the shooting bag limits. But the increase of game birds through releases may increase the number of predators, since more food will subsequently lead to more predators, which is a matter that at the same time will lead to a decrease in the game population. The introduction of game birds into hunting grounds is a widespread and growing practice around the world, though it remains rare in some countries and has been banned in others. The birds should frequently be released just before the shooting season, with the aim of achieving hunting yields higher than that possible from wild stocks. In other cases, the objective is to restock depleted or declining local breeding populations, thus assisting in their sustainable harvest. However, long-term survival of released birds may be lower due to altered behavior in relation to wild predators and generally high predation rates. Ecological effects of introducing hand-reared birds into hunting areas may result primarily in demographic interactions with the

native breeding populations, introduction of exotic species and genetic pollution, and the spread of diseases and parasites.

### **e) Effects of Rearing and Releasing on Wild Stocks**

The detailed quantitative assessment of the effects of releases and restocking on the demography of wild game bird stocks is lacking in Lebanon. The contribution of hand-reared birds to the breeding population may be small, because they have lower rates of survival and breeding success than their wild counterparts. This is related to the poor behavioral, morphological and physiological capacity of hand-reared birds to live in the wild, rendering them extremely susceptible to starvation and predation. In Lebanon, releases of Red-legged partridges into areas with Chukar partridges was associated with crashes in the wild stocks. However, the Red-legged shyly crossbred with Chukar. Hybrid and all other introduced Red-legged partridges had quickly vanished due to hunting, predation by foxes and jackals and raptors and due to the spread of pathogens through reared and released individuals. The spread of pathogens is a potential problem in any species translocation program, but it may be particularly serious in the case of hand-reared game birds, due to the artificial environment of aviaries and the high stocking densities. Furthermore, the high densities of game birds, from rearing farms in the wild impose another sanitary problem which is due to the spread of parasites. However, the spread of parasites can be controlled through intermittent release of birds into the wild and use of anti-parasite before release.

### **Other impacts**

Other possible biodiversity impacts may include accidental by-catch, which could for example be of Chukar partridge during another released partridge species shoot, lead poisoning from ingestion of ammunition (Kreager et al. 2008; Knott et al 2010) and disturbance for non-target species (Sastre et al. 2009).

## Mitigation Measures for the Safety of Hunters<sup>14</sup>

Handling firearms can be risky if not handled carefully. Preventing hunting accidents depend on knowing firearms and handling them skillfully and safely.

### Firearm Safety at Home

International statistics show that more than half of the fatal firearm accidents occur at home. Thus, it is important to stick to strict safety rules such as: Lock firearms in a safe place out of reach of children. Store ammunition in a different place.

Make sure that firearm is unloaded before allowing it in any living area.

Practice safety rules when handling firearm at home:

Point the firearm into a safe direction.

Always check that the chamber and magazine are empty.

Keep your finger out of the trigger.

If firearm is taken from storage, to show guests, make sure they understand safety rules of handling firearms<sup>15</sup>.

### Hunting Accidents

Hunting accident occurs when a hunter directly or indirectly causes injury to himself or another person while using a firearm. The most common causes of hunting accidents are:

Hunter Judgment Mistakes: e.g. mistaking a person for game or not checking the background before firing. Note that it is recorded that most hunting accidents occur due to these mistakes.

Safety Rule Violations: e.g. pointing the firearm in unsafe direction or forgetting safety rules while crossing a fence.

Lack of Control and Practice: which can lead to accidental discharges and stray shots.

Mechanical Failure: such as improper ammunition or obstructed barrel in the firearm<sup>16</sup>.

Firearms can be carried safely and still has it ready for quick action. The Four Rules of Firearm Safety are:

- **Firearm:** Control the direction of your firearm at all times.

- **Trigger:** Keep your finger outside of the trigger guard until ready to shoot, and directly after you shoot.

- **Action:** Treat every firearm as though it were loaded. Open the action and visually check if it is loaded.

- **Target:** Be sure of your target, and what is in front of it and beyond it<sup>17</sup>

### Proper Field Carrying Method for Firearms

- **Trail Carry**

Leave a hand free for balance, but don't use it when you're behind someone. Not recommended when walking in snow or brush – debris can get in the barrel.

- **Sling Carry**

Easy carry for long walks through open fields. Keep a hand on the sling so that it does not slide off your shoulder if you fall. Not recommended for thick bushes because the firearm could slip from your shoulder.

- **Elbow or Side Carry**

Comfortable, but it has the least muzzle control. Use it when no one is in front of you.

- **Two-Handed or "Ready" Carry**

Provides the best control, especially in thick bushes or when you need to fire quickly.

- **Cradle Carry**

Comfortable and secure. Reduces arm fatigue.

- **Shoulder Carry**

Good choice in waist-high bushes. Do not use it if someone is behind you.

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<sup>14</sup> This section is based on "Hunter's Guide", developed by Society for the Protection of Nature in Lebanon, 2012.

<sup>15</sup> Adapted from "Today's Hunter in Missouri, a guide to hunting responsibly and safely, Kalkomey Enterprises Inc., 2009/2011 edition, ch6, p62".

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<sup>16</sup> Adapted from "Today's Hunter in Missouri, a guide to hunting responsibly and safely, Kalkomey Enterprises Inc., 2009/2011 edition, ch6, p63".

<sup>17</sup> Pamphlet: Oregon Hunter Education Program, Teaching Safe and Responsible Hunting, Oregon Department of Fish and Wildlife, p3.

## Selecting the Right carry when hunting with Others

Carry selection is based mainly on muzzle control and the hunting field.

- If three hunters are walking side by side, the ones at the sides may carry their firearms pointing to the side away from their companions or to the front. The one in the middle should carry firearm to the front or upward.
- If three hunters are walking in single row, the one on the lead should have the firearm pointed to the front and never over the shoulder. The hunter in the middle should have his firearm pointed sideways. The hunter in the back can point his firearm to the side or the back.
- When facing another hunter, avoid the use of trail carry, forward facing or elbow side carry.
- Remember to choose the right carry when your hunting companion is a dog<sup>18</sup>.

## Crossing Obstacles

- Always unload the firearm before crossing any obstacle or fence.
- Place the firearm on the other side of the fence or obstacle, with the muzzle pointing away from you. Then, cross the fence and retrieve your firearm.
- Pull the firearm toward you by the butt, never by the muzzle.
- If two people are crossing, one person gives the other the two firearms, crosses first, then retrieves the unloaded firearms from the other person<sup>19</sup>.

## SAFELY LOADING AND UNLOADING FIREARMS

This is highly important as it might lead to tragedy if handled wrongly. Here are the instructions:

### Loading Correctly

- Point the muzzle in a safe direction.
- Open the action, check the barrel and chamber for obstruction.
- Put the safety on.
- Load the ammunition.
- Close the action.

### Unloading Safely

- Point the muzzle in a safe direction.
- Keep your finger outside the trigger guard.
- Open the action.
- Remove the ammunition; eject cartridges or shells.
- Count shells or cartridges in order to make sure the gun is empty.
- Ensure safety is on.
- Visually check that the chamber and barrel to make sure they are clear<sup>20</sup>.

## SAFELY TRANSPORTING FIRE-ARMS

The general rule for safely transporting firearms is:

- Always unload and case firearms before transporting them. The action should be open.
- Lean the firearm against a secure rest. The vehicle does not provide a secure resting place. If the firearm accidentally falls, it might discharge or be damaged.

## SAFETY ZONE OF FIRE

Safety zone of fire is the area where the hunter can shoot safely. Before starting the hunting trip in a group, hunters should agree on the zone of fire each hunter will cover. A zone of fire depends on many factors including;

- Hunter's shooting ability.
- The game being hunted.
- The hunting environment.

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<sup>18</sup> Adapted from "Today's Hunter in Missouri, a guide to hunting responsibly and safely, Kalkomey Enterprises Inc., 2009/2011 edition, ch6, p65-66".

<sup>19</sup> Adapted from "Today's Hunter in Missouri, a guide to hunting responsibly and safely, Kalkomey Enterprises Inc., 2009/2011 edition, ch6, p67".

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<sup>20</sup> Adapted from "Today's Hunter in Missouri, a guide to hunting responsibly and safely, Kalkomey Enterprises Inc., 2009/2011 edition, ch6, p68".



- Hunting strategy adopted.

A hunter's zone of fire changes with every step. This is particularly true when groups are hunting birds, rabbits or other small game.

- For safety purposes, it is best to restrict to three hunters in a group. For new hunter, two hunters is enough.
- Hunters should be spaced 23 to 37 m apart and always in sight of each other.
- Each hunter has a zone of fire of 45 degrees in front of him.
- If the game turns back to your direction, it is best that all hunters hold their fire<sup>21</sup>.

## OTHER SAFETY CONSIDERATIONS

### Self control and Target Identification

- Some hunters may become anxious or excited during hunting, which can lead to careless behavior. They may shoot at sounds, color, movement,...they might even swing a loaded firearm towards their companion.
- Take care of self control & shoot only in a clear zone of fire.

### Accuracy

- Practice for shooting accurately. This is not only important for successful hunting, but also a safety measure. Some accidents have occurred when stray bullets hit people around.

### Alcohol and Drugs

- Consuming alcohol before or during the hunt is risky because it impairs several functions such as: Coordination, hearing, vision, communication, and judgment.
- Drugs can have the same effect<sup>22</sup>.

### Important Safety General Reminders

- Never go on a hunting trip alone in the field.
- Wear Hunter Orange clothing (on your head and upper torso) to reduce chances of being mistaken for game.
- Wear eye and ear protection, and never play with

firearms.

- Only use the correct ammunition for your firearm, and be aware of the range of your ammunition.
- Be sure the barrel and action are clear of obstruction.
- Be sure your firearm is safe to operate, and know how to operate it safely.
- Remember to re-engage your firearm's safety after shooting, and double-check the safety frequently in the field.
- Unload your firearm in the field and keep the action open when the hunt is over. Never enter a vehicle, camp, or house with a loaded firearm.
- Never point a firearm at anything that you do not want to shoot.
- Never use firearm's scope as binoculars for spotting or looking for game – you may be pointing your loaded firearm at someone.
- Never climb a fence or tree, or jump a ditch or log, with a loaded firearm.
- If you slip while walking, control the muzzle, unload, and check the bore for obstruction before continuing to hunt.
- Never shoot a bullet at a flat hard surface or water.
- Always develop a hunting plan, let others know the plan, and then stick to the plan.
- Establish safe zones-of-fire, especially when hunting with companions.
- If companions violate any of these rules, bring it to their attention immediately. Refuse to hunt with anyone who refuses to correct their behavior.
- Store firearms and ammunition separately, locked up and out of reach of children.
- Avoid alcoholic beverages and drugs before or during hunting or shooting<sup>23-24</sup>.

<sup>21</sup> Adapted from "Today's Hunter in Missouri, a guide to hunting responsibly and safely, Kalkomey Enterprises Inc., 2009/2011 edition, ch6, p69-70".

<sup>22</sup> Adapted from "Today's Hunter in Missouri, a guide to hunting responsibly and safely, Kalkomey Enterprises Inc., 2009/2011 edition, ch6, p71".

<sup>23</sup> Pamphlet: Oregon Hunter Education Program, Teaching Safe and Responsible Hunting, Oregon Department of Fish and Wildlife, p3.

<sup>24</sup> Manual, "Today's Hunter in Missouri, a guide to hunting responsibly and safely", Kalkomey Enterprises Inc., 2009/2011 edition, internal cover page.

## Conclusions

Game birds will be widely managed at the proposed Anjar RHA in order to improve and maintain hunting yields. This shall be done by manipulating those factors considered limiting for their populations. In some cases, this management will be intensive, in order to maintain the high numbers of birds required for “driven shooting”, a practice which is usually common in hunting reserves of Europe where birds are released many days before the beginning of the hunting or shooting season, a matter that enables them to acclimatize and remain in the shooting area. A game keeper and his team of beaters drive the birds by tapping sticks and using flags to drive the birds towards a flushing point somewhat short of the guns that are waiting in a line. The main game bird species hunted and associated management practices vary from a RHA to another. There are however, some management practices which are common to many scales, including; improvement of breeding and feeding habitats, the control of natural predators or predator management, the direct provisioning of food and water, and the release of farm-reared game birds to increase harvest. These practices are widespread and implemented at large scales, and may have a significant impact on biodiversity at the levels of genes, species and ecosystems.

Two types of governance linked to game bird management in Lebanon were identified and these are: 1) state regulated, and 2) state owned. Under **state regulated governance**, hunting rights partially reside with the landowner, hunting is regulated, to some extent, by the state who, or whose agents set harvest limits, which may or may not be informed by monitoring of populations and/or harvest data. State regulation seems to discourage intensive private management of game populations and habitats. Under the **state owned governance**, the right to hunt resides with the state and hunting is regulated by license, and there are usually harvest limits set, which may or may not be informed by monitoring.

Hunting styles can be broadly categorized as ‘driven’ or ‘walked up’ shooting. Driven shooting requires

high densities of game birds and is associated with intensive management through rear and release of game birds, particularly partridges and quails, predator control, habitat management, and in some areas, provision of supplementary food, water and possibly medication. High intensity management has the greatest potential to impact positively on other species and wider biodiversity. In agricultural landscapes that are subject to intense management, there is **evidence** that game management can have a positive effect on other species, though whether these practices are more common in game managed areas or not remains to be identified. In more natural landscapes however, the effects of game management are less clear, with some positive and negative impacts documented, though the legal and illegal management of predators clearly impacts on the predator themselves and wider predator and prey assemblages and predator control remains the most controversial aspect of game bird management. Walked up shooting, on the other hand, requires much lower game bird densities, and consequently less, or in some cases, effectively no direct species or habitat management. While the less intensive management tends to cause fewer potential threats to non-target species, the fact that walked up shooting is more often carried out on common lands raises issues over potential over harvest and sustainability.

Habitat management for game birds is widespread and common mainly in Europe and North America. Some practices in Lebanon, such as habitat disturbance, planting of game crops and grazing control are specifically implemented to benefit game birds and there are a number of documented positive and negative impacts on non-game species, particularly in agricultural habitats. However, evidence suggests that they are more common in game areas than in non-game areas. The lack of evidence also makes it difficult to assess the overall benefits of supplementary feeding and provision of water, which are common practices in some lowland and rear, and release game bird management systems, while they likely have positive impacts on other species, there

may be some increased risk of disease transfer and predation.

Predator control is particularly common in relation to the management of important socio-economic game birds such as partridges and quails. Predator control is rarely applied in Lebanon for game bird populations, but it is practiced only at individual level. Predator control can reduce predator numbers and may also have an indirect impact on other species by altering the structure of the predator guild and non-game bird prey communities. The effect of predator control on species other than game birds remains undefined. Both positive and negative effects may be expected, and the relative importance of both would depend on the type and extent of control exerted. No studies have shown negative effects of predator control on other species, but the available information for positive effects is inconclusive. The (illegal) control of predators of conservation importance has detrimental effects in some areas and species.

Rear and releases of game birds tends to increase the harvestable population of target game species, but not necessarily the breeding populations. Releases may have major negative effects, through the loss of genetic diversity and the introduction of diseases and parasites, yet there is limited information about the extent and significance of these processes in the wild. The main way in which releases are likely to affect non-game species seems to be through potential habitat modification, competition, genetic contamination where release densities are high.



Lebanese Ministry of Environment and Hunting Higher Council declared Turtle Dove «No Game species» for year 2017, due to sharp decrease of its global population, as declared by BirdLife International. It will be reconsidered a game bird allowed for hunting whenever the status is improved © Fouad Itani



# C. MONITORING PLAN FOR ANJAR RHA

There is a need to monitor progress of ANJAR RHA as a site, habitat, species and people as variables against the objectives of the RHA. These objectives are: 1) Promoting Responsible Hunting, 2) Realizing the economic and social benefits of hunting management in Anjar, 3) Improving opportunities for hunting in Anjar and 4) Improving Wildlife conservation and land management outcomes.

The monitoring of sites – Responsible Hunting Area (RHA) – forms part of the monitoring activities. Other important components are monitoring of globally threatened birds and threats and, to detect habitat-level changes, for common bird species and game bird species. These elements are closely interlinked, contribute to each other and should not be viewed in isolation. In many parts of the world, however, bird monitoring at the species and habitat levels is not yet well developed. Most effort in the near future is expected to be devoted to site monitoring. The following guidelines, which have evolved as a result of input from many BirdLife Partners (BirdLife 2006) to monitor Important Bird Areas are adapted here to outline a framework for the monitoring of ANJAR RHA and perhaps other RHAs.

## THE MONITORING FRAMEWORK

Monitoring is used here to mean the repeated collection of information over time, in order to detect changes in one or more variables. We outline some general issues relevant to developing a monitoring scheme, detailing those features common to successful schemes.

### 1- Why monitoring the ANJAR RHA?

Our overall reason for monitoring ANJAR RHA is clear. RHAs are places where the Law of hunting is enforced and the game species as well as non-target species are managed beside the habitats. We need to understand what is happening to them in order to adapt our interventions accordingly. The monitored species should be placed within the information provided at the national and international levels, especially concerning the threatened species.

At the site level, we monitor the RHA in order to:

- Detect and act on threats in good time. Monitoring data provide ammunition for advocacy and information for designing interventions.
- Assess the effectiveness of sustainable hunting. Are bag limits actually bringing about an improvement of the hunting sector? Are they respected? Are 'sustainable use' approaches really proving sustainable?

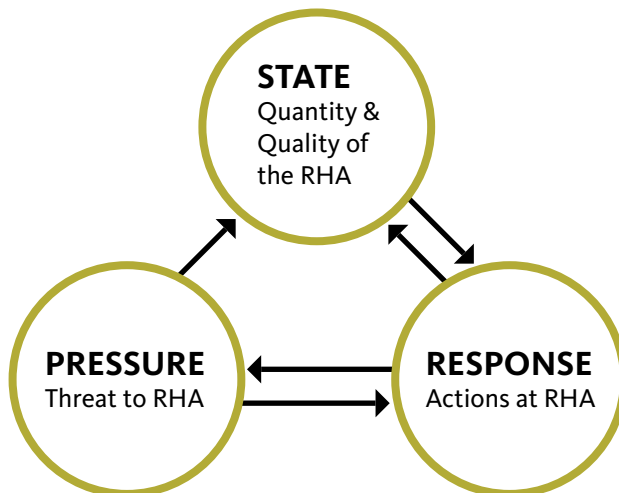
Additional site-level benefits of monitoring include:

- Provide a focus and wider framework for existing RHA-based activities, ranging from bird-watching events to systematic surveys.
- Allow the impacts of economic and environmental policies that affect the RHA to be assessed.
- Permit to see if the RHA continues to meet the criteria for which it was selected.
- Raise awareness of the biological and socio-economic values of the RHA and the threats to it, by tapping into the increasing engagement of local community in conservation issues.
- Deliver information that will help integrate RHA management into broader socio-economic and political agendas.
- Provide increased opportunities for the development of approaches to RHA conservation (sustainable use), through improved understanding of land-use issues that deliver socio-economic benefits to local communities.
- Control the spread of diseases from releases of reared birds.

## 2- What should be monitored in ANJAR RHA?

RHA should be managed to allow hunting in a sustainable way permitted species for hunting (game birds) while conserving non-target bird species through their protection and providing them with better habitats, particularly during the breeding season that doesn't fall within the hunting season for sustainability matters and in accordance with the Law of Hunting 580/2004. So it is needed to know:

What is happening to the RHA in relation to those bird species for which the site qualifies as RHA. Because we cannot monitor every relevant attribute of a RHA, we need to choose indicators that are appropriate for our conservation goal. There are many ways to classify indicators, but it is often helpful to think of them within a 'Pressure-State-Response' framework. This approach has also been adopted by the CBD.



### Pressure

Pressure indicators identify and track the major threats to selected bird populations at the RHA such as uncontrolled over-exploitation (unrespect of bag limit, wrong calculation of allowed bag limit), pollution, forest fragmentation, wrong created mosaic, bad designed grazing, widespread of diseases from releases of reared games, etc.

### State

State indicators refer to the condition of the site, with respect to its game bird populations and available habitats. State indicators might be population counts of the birds themselves or diversity of plants stratification and formations. They might also be measures of the extent and quality of the habitat required by these birds.

### Response

Response indicators identify and track management actions: for example, changes in conservation designation and implementation of conservation projects.

Indicators need careful selection. Obviously, a good indicator will actually indicate or track something – it will respond clearly to changes. Thus, numbers of song bird species following the plantation of hedgerows or recently cut stumps might be a good indicator of logging intensity in a forest. Changes in the equidistribution of game species may be indicating the degree of habitat artificialization. An indicator should also be linked clearly to the management goals for the RHA. For example, it might be useful to monitor the amount of dry grassland within a site if the species for which the site is important (ex: quail), but not useful if the species is arboreal (ex: Chaffinch).

It must be possible to collect information for the indicator within the likely constraints of capacity and resources. Many monitoring schemes are over-ambitious, designing indicators that are informative but that also require expensive and time-consuming data collection. Such schemes simply do not work. Indicators should also be scientifically credible, simple and easily understood,

and quantify information so that its significance is clear (SBSTTA 1999). Finding indicators that fulfil all these requirements is not always easy.

**In the ANJAR RHA, some of the following variables could be regularly monitored; but at a minimal level, what is required is the regular assessment for the RHA site of at least one appropriate indicator for each of Pressure, State and Response.**

- 1- Number of game bird species encountered.
- 2- Population size of game bird species found.
- 3- Number of lookalike species encountered.
- 4- Population of lookalike species encountered (it may indicate the rate of the increased risk of killing the threatened species)
- 5- Number of soaring bird species roosting/ resting.
- 6- Size of populations of soaring bird species roosting/ resting.
- 7- Trend of song birds.
- 8- Trend of game birds.
- 9- Percentage of mosaic areas created with cereals.
- 10- Diversity of habitats within the RHA.
- 11- Trend in number of refugee bird individuals and species into IBA (Impact of hunting on IBA when the RHA is about 500 meters distant from the IBA).
- 12- Percentage of people aware of the importance of responsible hunting and bird species not allowed for hunting.
- 13- Number of threatening factors to birds, particularly game and endangered species.
- 14- Quality of herbicides and trends of their use in RHA.
- 15- Degree of each threatening factors to birds, particularly game and endangered species.
- 16- Number and age of attendees of the security courses given during the hunting season in the RHA.
- 17- Trend in using services offered by RHA (Impact of hunting on economy of local communities and municipalities).
- 18- % of the Law respect.
- 19- % of the bag limit respect.
- 20- Degree of Landscape, habitat and land use changes in remote sensing photos.

### 3- How should we monitor?

Monitoring is worthless unless it produces results that can be interpreted meaningfully.

Thus, monitoring must be:

- Soundly designed.
- Systematic.
- Regular (though not necessarily frequent).
- Sustained.

In-depth RHA monitoring (for example, counts of a particular species) also must be consistent (carried out each time in the same way, in the same season, by people with similar expertise and experience). The local resources available for monitoring are scarce, and external project support is rarely available for more than a few years (Bennun et al. 2005 in BirdLife International 2006). It is essential therefore that RHA monitoring schemes operate as inexpensively as possible. In practice, this means making the best possible use of:

- Existing data-collection schemes and coordinating mechanisms.
- Personnel (of government institutions, conservation organizations or RHA staff) already on the ground.
- Other volunteers.

This implies that monitoring techniques need to be kept simple, robust and cheap. It is far better to collect basic data reliably over many years than to adopt a more ambitious scheme that soon collapses.

### 4- Who should undertake the monitoring?

Who undertakes the monitoring will vary from variable to variable and from situation to another. Wherever possible, existing institutions and personnel should be used, rather than creating new (and probably expensive) structures. Where there is one, the body charged with managing the site should be involved, at least in contributing information. National and even overseas volunteers can be useful in many cases, provided that there is adequate coordination. As far as possible, RHA monitoring should also involve the local community in collecting data. As well as considerations of

expense and sustainability, there may be several good reasons for this:

- Sharing responsibility
- Building and validating participation in management and a sense of ownership
- Building trust
- Providing means for feedback and encouragement
- Creating new skills

Whether or not it directly involves local communities, RHA monitoring should aim, wherever possible, to build capacity among those carrying out the work. Local institutions may need help in various ways to undertake monitoring. Where necessary, their personnel must be trained and equipped, and monitoring should be regarded by staff at all levels as both an important activity and part of their routine responsibilities. This is also important to ensure consistency in the data.

## 5- Monitoring design, programme and reporting

Monitoring data should feedback to assist adaptive management. The first step in ensuring this is proper monitoring design where the right questions need to be posed, and then answered clearly through a chosen methodology. If the outputs of monitoring are genuinely useful, they are more likely to be acted upon. A monitoring programme should produce monitoring reports to suit various target people (scientists, decision makers, hunters, NGOs, managers, etc.), but audiences need to be carefully considered, and reports targeted accordingly. For instance, it might be appropriate to provide a technical report for managers and a readable summary for higher-level decision-makers. RHA monitoring information should be shared in future with the Ministry of Environment, particularly Hunting Higher Council and with BirdLife International. Implementing this monitoring framework should allow the BirdLife Partnership to learn lessons about what approaches work best for controlled hunting in RHAs. The lessons learnt will be documented, analyzed, interpreted and published – and fed back into strategies for site management – by BirdLife Partners and the Secretariat.

## 6- How it works?

Considering the points discussed above, the challenge is to implement a monitoring scheme that is rigorous (credible), relevant (informative), and cost-effective (sustainable). At a minimal level, what is required is the regular assessment for each site of at least one appropriate indicator for each of Pressure, State and Response. It should be kept in mind that the actual indicators used can vary from site to site and country to country, so they should be carefully selected to match with the needs of each RHA. These indicators can be simple, quantitative or qualitative, and may only highlight fairly large changes. For instance, it is relatively easy to detect gross alterations in site condition – such as drainage of a wetland or clearance of a forest. More subtle changes – such as a moderate decline in population of a threatened species – may be much harder to detect. These can probably only be measured in a small number of experimental sites where more in-depth RHA monitoring is focused. In a step forward, it is strongly recommended that the managers should, in the long term, focus on setting up and maintaining national monitoring schemes that involve a minimal level of monitoring across the whole national RHA network in the country.

## 7- Monitoring frequency

Monitoring frequency depends on the variables and the intensity of the management activities. The hunting in Anjar RHA and other potential RHAs has a season with a pre and post-hunting season situations. So there is a tendency to plan monitoring work on annual basis. However, there are some variables that may require monitoring at least once every two years. Long term monitoring of more than 4 years will not enable IUCN and BirdLife to incorporate the new data related to threatened species into their evaluation.

## 8- Structures and processes

Effective ANJAR RHA monitoring requires coordination, communication and feedback. Homat al-hima (trained individuals from local community in charge of the Hima, including RHA) protection actions may



provide information on structured field forms and may monitor the variables of the site. The forms can be submitted to the RHA manager. More than one form may be submitted per habitat or locality, by different people or at different times.

Following the monitoring schedule (i.e. annually or every two or four years) the manager applies a standardized methodology to the information available and, in consultation with other experts, where possible, assigns indicator scores to give overall RHA status scores for each habitat or locality.

The manager uses the information and scores for each habitat or locality to compile a RHA status and trends report, and to provide appropriate feedback to the site-based monitors and the collaborating institutions. The SPNL ensures that the national RHA status and trends report is used (re-packaged as necessary) for national and site-level advocacy and intervention.

## Requirements for monitoring

The minimal resource requirements are:

- Personnel with appropriate skills for handling the data.
- Appropriate computer hardware and software to run ideally GIS; and a filing cabinet, for the paper RHA database.
- Funds for the production and circulation of forms and reports, and for copying materials to the RHA paper database.
- These resources may not be large but they are unlikely to be met from NGO core budgets. The costs for monitoring need to be built into future project funding, for the RHA programme. Anjar municipality needs to monitor its RHA to fulfil its own mandates. The more responsibility it can take on institutionally, the more likely it is that the system will be sustainable.

## The Monitoring Steps

The monitoring procedure described here is based on the above framework. This monitoring procedure should be applied to obtain a 'baseline' and it should then be repeated annually, bi-annually, etc. as part of the Anjar project monitoring. Information will

not only help monitor the impact of the hunting, but will also contribute to monitoring of other RHAs in Lebanon and subsequently to feed IUCN and BirdLife about national species conservation status. Some obvious linkages between these guidelines and other analysis carried out as part of the planning may be noted. For example, the results of problem analysis is likely to be reflected in the list of pressures and threats.

## Basic monitoring

For basic monitoring, it is necessary to monitor at least one appropriate indicator for each of Pressure, State and Response indicated far above. The actual indicators that are used can vary from site to site and country to country, so long as they are appropriate for making an overall rating. As well as data from the monitoring form, we should assemble and file other relevant information. This information, for example newspaper cuttings, project proposals or trip reports, should be stored in a paper database. Assessments should be preferably made every one or two years.

The proposed method for basic monitoring is set out below. This involves awarding simple scores for both status and trend for the selected indicators for each of Pressure, State and Response.

## Basic Monitoring: Pressure and Threat

The process for classifying threat status proposed here differs from that used hitherto by the IBA programme. It has been refined in the light of experience gained in the use of the previous system and seeks to address its shortcomings. It also adopts a refined list of threat classes, simplified from the IUCN Threats Authority File used in Red List assessment of pressures affecting species.

*Here, and for all other indicators, quantitative information should be supplied if it is available.*

### Threat status

The threat status at Anjar RHA concerns the non huntable species, and the habitats for both game and non target species, particularly key species

(those for which the site qualifies as a RHA), and is measured as high, medium, low or negligible using an impact score. This is derived from assessments of the timing, scope and severity for each threat class, where impact = timing + scope + severity. The threat with the highest impact is taken as the overall score for the site. *It is recommended that, wherever possible, notes are given explaining different scores assigned for each threat class and of the nature of any change.* This process may also be applied to all game key species individually (using the 'weakest link' to give the overall score), or to the site as a whole. Which approach to adopt is to be decided on a site by site basis, depending upon local circumstances.

### Threat classes

#### Habitat loss/degradation (human induced)

##### Agriculture

- Abandonment
- Crops
- Monoculture
- Livestock
- Non-timber plantations
- Wood plantations

##### Land management of non-agricultural areas

- Abandonment
- Heaths and grass cutting
- Sudden change of management regime

##### Extraction

- Groundwater extraction
- Non-woody vegetation collection
- Wood (small-scale subsistence to deforestation)

##### Infrastructure development

- Human settlement
- Industry
- Power lines
- Telecommunications
- Tourism / recreation
- Transport

**Invasive alien species (directly impacting habitat)**  
**Change in native species dynamics (directly impacting habitat)**

**Illegal Hunting / Over harvesting**  
**Accidental mortality/ diseases/ Saturnism**  
**Persecution/ increased meso-predators**  
**Pollution/ pollution with lead**  
**Natural disasters**  
**Intrinsic factors**  
**Human disturbance/ noise**

Scores for timing, scope and severity are assigned as follows:

#### Timing of threat<sup>25</sup>

Score

- |          |   |
|----------|---|
| <b>3</b> | Happening now                                       |
| <b>2</b> | Likely in short term (within 3 years) <sup>26</sup> |
| <b>1</b> | Likely in long term (beyond 3 years) <sup>27</sup>  |
| <b>0</b> | Past / not likely                                   |

#### Scope of threat<sup>28</sup>

- |          |                                     |
|----------|-------------------------------------|
| <b>3</b> | Whole population / area (>90%)      |
| <b>2</b> | Most of population / area (50–90%)  |
| <b>1</b> | Some of population / area (10–49%)  |
| <b>0</b> | Few individuals / small area (<10%) |

#### Severity of threat

(as a proportion of population or area affected)

- |          |  |
|----------|--|
| <b>3</b> | Severe / very rapid deterioration (expected to be >30% over 10 years)          |
| <b>2</b> | Rapid to moderate deterioration (10–30% over 10 years)                         |
| <b>1</b> | Slow but significant deterioration (1–10% over 10 years) or large fluctuations |
| <b>0</b> | No or imperceptible deterioration (<1% over 10 years)                          |

<sup>25</sup> For timing, scope and severity, estimates of time period and extent will usually be based upon informed guesses, rather than accurate counts or measurements etc.

<sup>26</sup> Expectation high that threat will be realised because e.g. plans are approved, permission has been granted, no serious obstacles to execution of threat anticipated.

<sup>27</sup> Imminence of threat more distant; plans not yet approved etc.

<sup>28</sup> Common sense needs to be used in dealing with small, incremental increases in scope of threat; annual changes may, directly, be small but their cumulative effect considerable.

## Calculating threat impact

Scores are then simply added to calculate impact. However, any threat for which the timing, scope and / or severity score is zero scores zero overall. Total threat scores thus range from 0 to 9. The threat with the highest score, whether to the site, or to trigger species if individually assessed, is taken as the score for the site as a whole.

This score is to be recorded in the RHA database but it can be summarized for reporting as:

Impact score	Class
8–9	High
6–7	Medium
2–5	Low
0–1	Negligible

## Threat trend

Trend is assessed by comparing threat impact scores between years for all threat classes. Where individual species are assessed separately, a simple average across species is taken for each threat score for each year. These averages, or the overall site scores, are then compared between years. The difference in impact score for each threat is calculated as (score in year 1 – score in year 2). The simple average of these differences gives the trend score for the year, on a scale of –9 to 9.

The threat trend scores can be summarized for reporting as:

Trend score	Class
-7– -9	Large decline
-4– -6	Moderate decline
-1– -3	Small decline
0	No change
+1– +3	Small improvement
+4– +6	Moderate improvement
+7– +9	Large improvement
U	Not assessed
–	Decline (unknown extent)
+	Improvement (unknown extent)

## Basic monitoring: State

The information available will often be on gross changes in habitat area or quality: for example, that a field has been flooded, a wetland has been drained (or filled), a grassland has been burnt or a forest has been illegally logged (or allowed to regenerate). In other cases more detailed or quantitative information on population sizes of the RHA key species will be available for use. As with pressure, which approach to adopt – habitat or species – is decided on a site basis, depending upon local circumstances. The 'habitat area' variable refers to area of natural (or restored or designed) habitat — i.e. it doesn't decline if natural areas are slightly converted to human use (hunting). Habitat may be heterogeneous within a RHA, however. If a particular habitat is crucial for the RHA birds, then attention should focus there. Thus habitat area might sometimes change without a change in land use (e.g. through encroachment of shrub or bush land on grassland).

## Status

A site is assessed as having a favorable conservation status if

- in structure, quality and extent, the key habitats for the RHA non-target species are known or thought to be within 50% of their potential optimum for the site<sup>29</sup>

and/or

- the conservation status of all or a selected subset of its non-target species is considered favourable<sup>8</sup>, i.e.

- the population size of the species is at least 80% of what it was when the RHA was first identified, in the absence of any evidence that the species' population then was declining or depleted

or

- the population size of the species is at least 80% of the optimum for the site based on estimated extent of potential habitat and population density in undisturbed conditions

A site is considered to have an unfavorable conservation status if these thresholds are exceeded.

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<sup>29</sup> Using the 'weakest link' approach, if any key habitat or key species does not meet this criterion the conservation status is 'unfavourable'. This needs to be applied with common sense...

## Trend

Trends may be scored on the basis of population changes of individual species or to the structure, quality and extent of key habitat within the RHA. The following scores are proposed:

Trend score	Class
-3	Large decline
-2	Moderate decline
-1	Small decline
0	No change
+1	Small improvement
+2	Moderate improvement
+3	Large improvement
U	Not assessed
-	Decline (unknown extent)
+	Improvement (unknown extent)

Suggested size of changes used to assign trend score class for reporting purposes is as follows:

<b>Large</b>	>3.5% per year (> 30% over 10 years)
<b>Moderate</b>	2–3.5% per year (20–30% over 10 years)
<b>Small</b>	some (non-trivial) change but <2% per year (< 20% over 10 years)

Change based on habitat extent or quality may be scored annually, if data are available. While recognizing that species populations tend to fluctuate, it is suggested that a change in the same direction in two consecutive years (or sets of observations, if less frequent) is sufficient to merit scoring. Changes may not be consistent across different species of concern or key habitats. In cases where for example one or more species show increases in population size while others show the opposite tendency, the trend for the site may be scored, using the 'weakest link' approach, based on that of the least favorable of the 'high priority' key species at the site. A common sense assessment of the comparative importance of the site for these species is required here, including, in some cases, an assessment of it in relation to the other places which are significant for the species concerned.

## Basic Monitoring: Response Status

Assessment of Response status is an attempt to score the level of formal designation for sustainable harvest within a responsible hunting area, management planning and implementation of conservation action for non-target species. Each of these is scored separately and then summed to give a combined figure. Scores are assigned as follows:

### Sustainable use designation

This refers to formal recognition (whether or not legally binding) that should effectively protect the site and its biodiversity from adverse human influence through sustainable use. It includes a range of governance measures, from gazettment under national law as a hunting Law, coverage by community management agreements or designation as a responsible hunting area by municipal decision.

- 3** More than 90% of the RHA covered by appropriate conservation designation
- 2** 50–90% of the RHA is covered by appropriate conservation designation
- 1** 10–49% of the RHA is covered by appropriate conservation designation
- 0** Less than 10% of the RHA is covered by appropriate conservation designation

### Management planning

- 3** A comprehensive and appropriate management plan exists that aims to maintain or improve the populations of qualifying game species (this is the case applying at Anjar-RHA).
- 2** A management plan exists but it is out of date or not comprehensive
- 1** No management plan exists but the management planning process has begun
- 0** No management planning has taken place

### Conservation action

- 3** The conservation measures needed for the site are being comprehensively and effectively implemented
- 2** Substantive conservation measures are being implemented but these are not comprehensive and are limited by resources and capacity
- 1** Some limited conservation initiatives are



in place

o Very little or no conservation action is taking place within the RHA (this is the case applying at Anjar-RHA now).

### Calculating Response Status

Scores are simply added to produce a summary score from 0 to 9. These scores are recorded without further processing but may be reported on as follows:

Status score	Class
8-9	High
6-7	Medium
2-5	Low
0-1	Negligible

### Trend

As for Pressure, Response scores are compared between years and the difference between them calculated, producing a score range from -9 to 9. These scores are recorded without further processing, but can be summarized for reporting as follows:

Trend score	Class
-7- -9	Large decline
-4- -6	Moderate decline
-1- -3	Slight decline
0	No change
+1- +3	Small improvement
+4- +6	Moderate improvement
+7- +9	Large improvement
U	Not assessed
-	Decline (unknown extent)
+	Improvement (unknown extent)

### Additional information

As well as the simple summary scores, other information on conservation actions should also be recorded. The suggested list of 'response' actions to be considered is given below.

1. Legal/responsible hunting area status
2. % of RHA under legal protection
3. Establishment of RHA Support Group(s)
4. Development of action plan
5. Implementation of action plan
6. General management and policing

7. Resource use controls/quotas
8. Eco-tourism initiatives
9. Visitor numbers
10. Number of RHA staff and volunteers
11. Revenue generated from site
12. Surveys and research
13. Conservation projects/actions: planned
14. Conservation projects/actions: implemented
15. Advocacy/interventions for site
16. Publicity generated for site
17. Environmental Impact Assessments
18. Mitigation measures implemented
19. Other (specify)

### Structured form for submitting basic RHA monitoring information

An answer should be given to the questions below (referring to the guidelines provided) together with an attachment of any additional information. Details should be given and changes should be quantified wherever possible.

The form should be completed as part of the project baseline, and then as part of annual reporting.

1. Project Title:
2. Name of the RHA (a new form for each site should be used)
3. Today's date:
4. Your name:
5. Your contacts:  
postal address:  
telephone/fax:  
e-mail:
6. Does this form cover (a) the whole RHA or (b) just part of the RHA? (tick one box)  
If (b), which part / how much of the whole area?

Please give below as much of the requested information as you can on threats, state and responses at the RHA, together with any other details that you think may be helpful. Please attach or send more sheets or other documents/reports if necessary. There is, however, no need to try to answer all the questions or fill in all the tables — please just put down the information that you have available. If possible, please attach a map (a copy of a top-

ographical map, or a simple sketch map) showing the location/extent of the threats/actions that you identify, and the location of any records.

## PRESSURE

### Details of threats / pressures

#### General comments:

#### Specific threat status:

Based on the information you have, enter the score below. Please assess the timing, scope and sever-

ity of each threat and whether this is increasing, decreasing or stable (using the scoring system indicated at the foot of the table), and give details or comments to explain your assessment.

Please provide quantitative information as far as you can. The threats of chief concern are those that may affect the game bird species for which the RHA is listed.

Note this table uses threat categories and scoring system different from those previously used by the IBA programme.

Threat class	Timing	Scope	Severity	Trend	Explanation/ details
<b>1 Habitat loss/degradation (human induced)</b>					
<b>1.1 Agriculture</b>					
1.1.1 Abandonment					
1.1.2 Monoculture					
1.1.3 Livestock					
1.1.6 Non-timber plantations					
1.1.7 Wood plantations					
<b>1.2 Land management of non-agricultural areas</b>					
1.2.1 Abandonment					
1.2.2 Change of management regime					
<b>1.3 Extraction</b>					
1.3.1 Heaths & Grass cutting					
1.3.2 Sudden change of management regime					
1.3.3 Groundwater extraction					
1.3.4 Non-woody vegetation collection					
1.3.5 Wood (small-scale subsistence to deforestation)					
<b>1.4 Infrastructure development</b>					
1.4.1 Human settlement					
1.4.2 Industry					
1.4.3 Power lines					
1.4.4 Telecommunications					
1.4.5 Tourism / recreation					
1.4.6 Transport					
<b>1.5 Invasive alien species (directly impacting habitat)</b>					

1.6 Change in native species dynamics (directly impacting habitat)					
<b>2 Invasive alien species (directly impacting species)</b>					
<b>3 Illegal Hunting / Over harvesting</b>					
<b>4 Accidental mortality/ diseases/ Saturnism</b>					
<b>5 Persecution/ increased meso-predators</b>					
<b>6 Pollution/ Pollution with lead</b>					
<b>7 Natural disasters</b>					
<b>8 Intrinsic factors</b>					
<b>9 Human disturbance/ noise</b>					

### Timing of threat<sup>30</sup>

#### Score

- 3** Happening now
- 2** Likely in short term (within 3 years)<sup>31</sup>
- 1** Likely in long term (beyond 3 years)<sup>32</sup>
- 0** Past / not likely

### Scope of threat<sup>33</sup>

- 3** Whole population / area (>90%)
- 2** Most of population / area (50–90%)
- 1** Some of population / area (10–49%)
- 0** Few individuals / small area (<10%)

### Severity of threat

(as a proportion of population or area affected)

- 3** Severe / very rapid deterioration (expected to be >30% over 10 years)
- 2** Rapid to moderate deterioration (10–30% over 10 years)
- 1** Slow but significant deterioration (1–10% over 10 years) or large fluctuations
- 0** No or imperceptible deterioration (<1% over 10 years)

### Trend score

- 7– -9** Large decline
- 4– -6** Moderate decline
- 1– -3** Small decline
- 0** No change
- +1– +3** Small improvement
- +4– +6** Moderate improvement

**+7– +9**

**U**

**-**

**+**

Large improvement

Not assessed

Decline (unknown extent)

Improvement (unknown extent)

### Summary of overall threat status (to the site as a whole)

Please summarize the overall impact of existing and future threats to the RHA, based on your observations and any other information you have, by circling a score below (refer to explanatory document for how to calculate this figure):

**8-9**

**6-7**

**2-5**

**0-1**

High

Medium

Low

Negligible

<sup>30</sup> For timing, scope and severity, estimates of time period and extent will usually be based upon informed guesses, rather than accurate counts or measurements etc.

<sup>31</sup> Expectation high that threat will be realised because e.g. plans are approved, permission has been granted, no serious obstacles to execution of threat anticipated.

<sup>32</sup> Imminence of threat more distant; plans not yet approved etc.

<sup>33</sup> Common sense needs to be used in dealing with small, incremental increases in scope of threat; annual changes may, directly, be small but their cumulative effect considerable.

**Summary of overall threat trend** (to the site as a whole)

Please describe the overall trend in threats since the last assessment (refer to explanatory document for how to assign this score for the RHA as a whole):

- 7- -9 Large decline
- 4- -6 Moderate decline
- 1- -3 Small decline
- o No change
- +1- +3 Small improvement
- +4- +6 Moderate improvement
- +7- +9 Large improvement
- U Not assessed
- Decline (unknown extent)
- + Improvement (unknown extent)

**STATE**

**Sheet/Details of current site status (to be filled in)**

- (a) General comments:
- (b) Specific changes

Please give information on the extent and rate of recent change (state the period) – provide numbers wherever possible.



Chaffinch © Fouad Itani

Period assessed		From:	To:
Status variable	Change score	Details	
Habitat area			
Habitat quality			
Bird populations (key species/groups - specify)			
Other			
Diseases			



**Scores for changes** (refer to summary document for how to assign scores):

- Decline (unknown extent)
- + Improvement (unknown extent)
- 3 Large decline
- o No change
- +1 Small improvement
- 2 Moderate decline
- N/A Not applicable
- +2 Moderate improvement
- 1 Slight decline
- U Not assessed
- +3 Large improvement

### Summary of overall status

(for the site as a whole)

Based on the information you have, circle the score below which best describes the current overall status of the key habitats or the trigger species as compared to the previous assessment:

- 3 Large decline (>3.5% per year)
- 2 Moderate decline (2–3.5% per year)
- 1 Small decline (some [non-trivial] change but <2% per year)
- o No change
- +1 Small improvement (some [non-trivial] change but <2% per year)
- +2 Moderate improvement (2–3.5% per year)
- +3 Large improvement (>3.5% per year)
- U Not assessed
- Decline (unknown extent)
- + Improvement (unknown extent)

## RESPONSE

### Response / conservation action status

#### (a) General comments

**(b) Please indicate the statement that best characterizes the degree of protection of the site:**

- 3 More than 90% of the RHA covered by appropriate conservation and sustainable use designation

2 50–90% of the RHA, including the most critical parts for the trigger threatened species, covered by appropriate conservation and sustainable use designation

1 10–49% of the RHA is covered by appropriate conservation and sustainable use designation

o Less than 10% of the RHA is covered by appropriate conservation designation

**(c) Please indicate the statement that best describes the status of management plans for the site:**

3 A comprehensive and appropriate management plan exists that aims to maintain or improve the populations of qualifying game species

2 A management plan exists but it is out of date or not comprehensive

1 No management plan exists but the management planning process has begun

o No management planning has taken place

**(d) Please indicate the statement that best characterizes the level of practical conservation measures in place at the site:**

3 The conservation measures needed for the site are being comprehensively and effectively implemented

2 Substantive conservation measures are being implemented but these are not comprehensive and are limited by resources and capacity

1 Some limited conservation initiatives are in place (e.g. action by Site Support Groups)

o Very little or no conservation action is taking place

### Summary of overall response status

Please summarize the overall level of response currently being undertaken at / for the RHA, based on your observations and any other information you have, by circling a score below.

- 8-9 High
- 6-7 Medium
- 2-5 Low
- o-1 Negligible

Response trend

Please indicate the overall trend in responses since the last assessment (refer to explanatory document for how to assign this score):

- 7- -9 Large decline
- 4- -6 Moderate decline
- 1- -3 Small decline
- o No change
- +1- +3 Small improvement
- +4- +6 Moderate improvement
- +7- +9 Large improvement
- U Not assessed
- Decline (unknown extent)
- + Improvement (unknown extent)



Black-Headed Bunting © Fouad Itani

Additional information

As well as the simple summary scores, other information on conservation actions and sustainable use should also be recorded, where known. The suggested list of ‘response’ actions to be considered is given below.

Topic	Details
Legal RHA status	
% of RHA under legal protection	
Establishment of Site Support Group(s)	
Development of action plan	
Implementation of action plan	
General management and policing	
Resource use controls/quotas	
Eco-tourism initiatives	
Visitor numbers	
Number of conservation and sustainable use staff and volunteers	
Revenue generated from site	
Surveys and research	
Conservation and sustainable use projects/actions: planned	
Conservation and sustainable use projects/actions: implemented	
Advocacy/interventions for site	
Publicity generated for site	
Environmental Impact Assessments	
Mitigation measures implemented	
Other (specify)	

# D. A BASIC BUSINESS PLAN FOR ANJAR RHA

## 1. From Ecological Point of View

Anjar Hima encompasses the first RHA demonstration site in Lebanon; as in this country, controlled areas for hunting don't exist yet and our experience in running them is inexistent. This is why Anjar's RHA Business Plan is expressed in the following loose collection of ideas and guidelines for developing practices that work for Anjar RHA business and marketing. They are based on our knowledge gathered from Europe, America, our partial engagement in few of them, and from the experience of others. In general, there are six basic steps to successfully market any product:

- Define your market.
  - Learn about your market.
  - Know the benefits of your product to your market.
  - Advertise to your market.
  - Teach your market about your product (advertise the benefits of your product).
  - Capture your customers and keep them coming back.
- By turning those steps into questions, a brainstorming process starts to identify the products that can be produced and to find out if the administrators of Anjar RHA are suited to run the business.

## THE RELATION HUNTER-GUN-DOG OWNER IN BUSINESS

This business is about people wanting to work their dogs and guns on live birds. It is about dogs, guns owners business. Quality habitat and quality of service to gun-dog owners is what this business is all about. Many highly successful western bird-hunting controlled areas blur the quality habitat and quality service by augmenting their wild populations with released birds. It seems like a truly wild experience



to the client, but habitat is may be well stocked prior to the clients hitting the field. For the operator of Anjar RHA, this game is about creating memberships, return of clients who renew memberships, and bringing new guests. In this business, success depends on selling memberships and renewals. Consistent return-members are almost always gun-dog enthusiasts. Memberships and renewals are critically important. Memberships, paid well before the season opening, guarantee a certain amount of operating revenue to cover pre-ordered birds, habitat management, bill paying (insurance, feed) and similar overhead costs.

Elsewhere, most, but not all, controlled hunting areas may service "walk-in" non-member clients at roughly twice or more the going rate for members. Walk-ins tend to be non-dog-owners who have a dog-owner friend, or the casual bird-dog owner who wants a pre-season warm-up<sup>34</sup>. Members or hunters who are obviously going out of their way to bring guests and other paying clients to the doorstep of the RHA, should be acknowledged for their patronage and assistance in sustaining and growing the RHA business. When considering the business plan's mission statement, communications and promotions, or talking with local or state legislators, business leaders or the media, always it should be kept in mind that the local authority – municipality – is an important contributing member of the country's rural-development, business and environmental communities.

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<sup>34</sup> Warming up doesn't mean hunting but exercising the dog probably on released quails for example.



## QUALIFICATION OF THE OPERATOR/MANAGER IN BUSINESS

The operator or the manager of the RHA should be:

- Knowledgeable about the natural system in which he will work,
- Willing to meeting and working with all types of people,
- Ready to entertain strangers,
- Having in-depth (or the minimum appropriate) outdoor skills,
- Skilled in the operation and maintenance of (the applicable) equipment,
- Willing to work long hours (or those necessary to: deal with the public, maintain birds and or bird pens<sup>35</sup>, provide clean rest-rooms and common areas, work with various suppliers) in difficult environments,
- Successful at managing and organizing expenses (undertake business planning and accounting)

## CONCEPT OF ANJAR'S RHA FROM BUSINESS POINT OF VIEW

The RHA concept, where wild game birds are primarily hunted and where additional game birds to be secondarily hunted, where games are reared in confinement and released for recreational hunting.

Interest in shooting in RHAs has grown in Lebanon in recent years, largely because of the predicted difficulty of gaining public access to private lands for hunting in the near future, especially that the Hunting Law 580/2004 allows owners and legal users of private lands, including municipalities, to ban hunting on their lands.

Some facilities may offer a place for hunters to participate in other recreational shooting sports, such as skeet, trap or sporting clays, even outside the hunting season, provided the RHA is larger than one million square meters. The reason behind this is to keep away this kind of simulating clay to birds from nearby IBAs, especially when practiced outside hunting season and where breeding birds can be affected. Hunting within RHA should preferably be coupled with bed and breakfast lodges that form important local ecotourism operations. Such lodges are already established for hunters and their families in some private areas of the country. Many studies have demonstrated that game bird populations sustain enough reproductive capability to replace their losses if properly managed. Private bird production provides RHAs game managers birds for release and birds for local reservoir populations. A big attention should be given regarding the potential effects that the release of pen-reared birds could have on diseases, population genetics and other environmental concerns. However, the game meat of released birds marketed per year is usually for high-value gourmet markets. Game farms producing birds for urban meat markets or

<sup>35</sup> Wide cages for breeding and rearing birds in captivity for ultimate release into wild.



for recreational shooting areas assist in diversifying traditional farming operations. In some cases, they help to transform farmland into more sustainable wildlife-friendly habitat for both game- and non-game species and encourage agro-tourism through multi-use recreational development.

## GENERAL BUSINESS-DEVELOPMENT ADVICES

There are some universal business-development ideas that are expounded by successful entrepreneurs, business schools and top leadership teams. These summarized ideas or thoughts are written by Quagraine et al. (2007) and are highly adapted to game-bird RHAs and many other agro-tourism ventures:

- The 4-Ps of Marketing: Product, Price, Place (distribution) and Promotion.
- Produce what you can market and grow the market. Traditionally, marketing has been viewed as selling what you have. This is backwards. Modern marketing focuses on producing what you can sell. Find where the market is, understand it and develop it.
- Your market is probably more competitive than you think. Quality service and quality product demonstrates that you care about your customers and win customer loyalty. A quality product sells itself. Your quality product is a quality experience.
- Little extras (recipes, personal contact, newsletters, putting the customer first) matter.
- See yourself as a marketer selling your operation. Assess the needs of potential “new buyers” and existing customers; communicate with them how and why you deliver a quality product that meets their needs. Do some market research; it can be as easy as asking a few questions of your clients.
- Think about making money from as many levels of the supply chain as you can. For a RHA business consider “levels” as all the steps from raising birds, guiding the hunt, cleaning birds for the customer, and then retailing a souvenir shirt, cap, locally-produced bottle of drink, sausage, or pre-packaged frozen game bird when they leave to go home.
- Have a marketing plan. This should be part of a comprehensive business plan. Neither need to be elaborate, but should be road-map documents that

change as your business changes.

- Do your best to develop the “slow times” of your season.
- Look for and develop the un-serviced or poorly serviced market (consider novel ways to reach your audience, or introduce your operation to potential clients who would not normally go out of their way to try it).
- If you realize that you have a niche, exploit it.
- Diversification is a great thing; however never lose sight of strengthening and ensuring the success of your core business. View “diversification” as a form of risk-management that can come in the form of changes in marketing, production, or income-generation.
- Increased scale does not mean larger profits. Profitability of a business depends on a number of factors. A smaller complimentary enterprise can be more sustainable and profitable than a huge stand-alone venture.
- Price yourself according to the value of the product that you deliver and your accessibility to the market. Attempt to deliver above-average to outstanding value-for-the dollar.
- Be sure to have secure restrooms and changing areas where women and children can feel secure. After a long drive to your facility, it is no big deal for most men to “run back around the tree.” It is a bit more of a hassle and quite a bit more emotionally and physically uncomfortable for women and children to do so. Also, it is great to have a place to change out of overly warm, dirty or cold, sweaty clothes. Encourage your clients to bring a comfortable change of clothes for the after-hunt visit to the local restaurant or the ride home.

## QUALITY RHA

Agriculture in almost every form is about the land and developing an appropriate crop on that land to ensure successful production. The same is true with a “RHA cropping system.” In this case, it is all about the habitat. Having a dull place for hunters to run dogs, the RHA will be viewed as a dull, artificial environment. Having an interesting and challenging place to run dogs, the RHA will be viewed as a quality and fulfilling outdoor experience.



Good habitat means bird cover and food plots, as well as edge habitat that usually take the form of mowed paths. One of the best RHAs would have a grid of mowed paths through grass of different heights and varieties. Running across this grid and intersecting with one another are food plots of sorghum, millet, oats, buckwheat or corn. These food plots does not only provide food and additional cover. Since the mowed paths, create escape routes for birds not ready to fly, they also allow to test dogs with evasive ground tactics. It is essential to receive hunters-clients in the RHA before the hunting season is open, in order to look over the cover and give their opinion about the preparation of the land for the hunting activity.

It is the chance of the RHA manager to put his best foot forward, have brochures on hand, get the clients contact information and make a note to return a follow-up call. If the potential client has decided on a different RHA, the manager should politely inquire as to what factors went into their decision and then encourage them to stop back to visit and consider the manager's RHA in the future. The manager should keep both active and potential-client mailing lists and think about how to use them as off-season marketing tools.

Some people are inundated with texts, e-mails and phone calls, while some still rely on land-line phones and paper snail mail. The degree of communication is always an interesting problem. Few RHAs take the time to do even a simple newsletter, yet a quarterly e-mail, especially with a few nice

photos, can be a very effective communications tool. Regular e-mails or social-media communications throughout the season can keep the operation on the client's radar. Knowing the clientele; the manager may take a few minutes to think about what could be the least costly and most effective communicates medium for him to regularly reach them. In this day and age, that is tending to be e-mail and social media.

## QUALITY BIRD

Finding "hard-flying" birds is always a potential problem for RHAs operators. Attention to quality of the bird is extremely important. Selecting good strong birds, or non-overly dizzy birds when releasing them is especially important early in the operating season. Dogs catch birds on the ground. It happens in RHAs and occasionally with wild birds; however, if the client's dog catches half or more of the birds on the ground, it is a definitely a "lousy RHA day," and hardly an experience that anyone would wish to repeat. RHA habitat is about cover for birds and dogs. Hard-flying birds are great, but unless the birds are absolutely lousy, they are really only a small part of the total equation. Well-managed habitat that is a great challenge but not impossible to hunt, and services for dogs are what quality RHAs deliver. That translates into exploiting released birds by using varied cover with ample edge habitat (mowed trails and food-plots) in which dogs can work their magic noses and birds can show off their escape and evasion skills.



The mechanics of how birds are released and the weather (rain, dew, and fog that prevails in Anjar) can make a big difference on how birds fly. Sometimes pen-reared chukars and quails just need habitat with some space in which to move. If these birds are released by burying them in heavy wet cover, there is a very good chance that they will not flush and fly when they would normally blast out of the cover. Having the releases adjacent to lanes, or within the rows of a food plot, will give the birds a chance to dry off, move from the release point and at least have an opportunity to escape a dog's nose that suddenly appears right over them.

If the fields are large and conditions are tough (warm early season, tall and thick grass); or if beginner hunters or young or inexperienced dogs are part of the mix, it is wise to discuss the logistics of release and tactics of the hunt with the hunting party. Feel free to suggest placing the birds in the central area of the field where they can be found, then flushed on to other habitat included in the hunting area. This is common with chukars and quail, but is not a bad plan with pheasants that may be introduced to Lebanon in the near future, especially that their ecological niche doesn't interfere with that of other wild game and non-game birds in the country. The manager should always remember to not release too many birds and to think about their limitations and to choose the cover accordingly.

## BIRD SPECIES

### CHUKAR



The Chukar Partridge or Chukar (*Alectoris chukar*) is a Eurasian upland game bird in the pheasant family. It has been considered to form a “super-species” complex along with three other closely related partridges. This partridge has well marked black and white bars on the flanks and a black band running from the forehead across the eye and running down the head to form a necklace that encloses a white throat. For hunting purposes, the species has been widely introduced around the world. In Lebanon, the species is indigenous and pure wild. Chukars are a highly-prized game bird and native to dry and mountainous areas. At Anjar, it is found on the western slopes of the Anti-Lebanon Mountain. The species is impossible to establish in areas with moist soils, due to a soil-transferred nematode and other diseases that can kill or seriously reduce the vitality of the bird. Rearing chukars can present some challenges. The birds need to be raised and maintained off the ground on an artificial substrate (wire or slats) to prevent disease infection. Also, when startled or stressed, chicks have a tendency to mob into piles in the corners of pens, often suffocating one another. This can be prevented by fitting curved metal ramps, simply constructed from aluminum flashing or a similar material, into the corners of the confinement.

The birds are a highly-prized RHA species and wild game bird in dry regions of the Mount Lebanon and Anti-Lebanon Mount. Midway in size between a pheasant and a diminutive quail. The Chukar is a robust, hard flying bird with the ability to be both highly evasive on the ground in cover, the propensity to flush at times and in odd directions. Chukars may fly tight to the ground, or go almost perfectly vertical for 7 to 9 or more meters on take-off before heading off in some lateral direction. In most hunting area situations, chukars are priced less than a pheasant, but more highly than quail.

In wild open-country situations, the birds, like quail, will covey (assemble in groups). This makes for exciting hunts where “pinning” the covey (the birds tend to run), usually in steep rocky terrain, is highly demanding of man and dog. Once the covey is “busted,” flushed and the birds dispersed, the “singles,” single birds, are individually hunted. Eventually, the surviving birds will call to one another



and reform the covey. In hunting area situations birds can be released in groups, although some hunting areas may not have the extensive surface area to make chasing busted covey chukars a viable option. Individually released birds constitute a highly challenging, hard-to-pinpoint prize with a high probability of evasion and escape either on the ground or in the air. Again, the surviving birds will call to one another and form a covey.

## COMMON QUAIL

The Common Quail (*Coturnix coturnix*) is very similar bird, taxonomically in the old-world pheasant family. *Coturnix coturnix* has rich cultural heritages as well-respected table fare.

Quails are the most inexpensive and cost-effective training bird for dog handlers, so are widely reared for use in the RHA's industry. Quails can be found in RHA bird lines. For rearing and releasing there is no need to use other than the original and respected *Coturnix coturnix*. The latter has a long history as docile easy-to-rear domestically-produced table bird. From a flight standpoint, individually released birds are somewhat less challenging than chukars or even pheasants; they are, however, a very small target. Picking targets within a flushed covey is highly challenging. In a group, they are easier to pin-to-point than chukars, but the flush is often a whirring roar of confusion as a high number of birds simultaneously take to the air. Some RHA operators shy away from covey quail hunts in areas where the hunters may not be aware of the safety challenges associated with a rising covey. In covey situations it is extremely important that firearm safety, particularly attention to safe fields of fire and what lies beyond the target, is followed. Safety briefings and limiting the number of hunters in groups hunting conveys is highly advisable.

Like chukars, the surviving birds will call to one another and form or reform a covey. Also like chukars, when startled or stressed, chicks have a tendency to mob into piles in the corners of pens, often suffocating one another. This can be prevented by fitting curved metal ramps, simply constructed from aluminum flashing or a similar material, into the corners of the confinement.



## PURCHASE OF REARED OR REARING GAME BIRDS

Not all RHA operators choose to rear their own game birds. Rearing game birds, like all livestock operations constitutes an enhanced profit center if properly handled. Many operators, especially smaller preserve operators will not want the added overhead, infrastructure, hassle and risk posed by bird rearing. Other operators “rear-out” or “grow-out” birds from two-day old chicks purchased from a supplier. However, rearing on site can be profitable if one can match or come in under the price-per-bird of major suppliers.

## PRICING RHA BIRDS

The pricing of RHA birds cannot be dependent upon how one may want to increase the ROI (Return On Investment). A RHA operation needs to price their birds and membership fees so that they are competitive with other RHA in the area.

With respect to getting a decent ROI and covering the expenditures, consider membership packages that reflect your costs and a decent return on your birds, as well as a price-break to your members rather than a higher bird price charged to “walk-in” non-member clients. The higher walk-in prices promote membership. Pre-season membership sales are where you will get much of your operating revenue for the upcoming season.





Bird prices vary geographically and by how member, non-member, group or individual packages are designed. For instance, the average walk-in client retail price range for RHA birds could be:

- **Pheasant:** \$18.00 to \$25.00 (in case of future (potential) release).
- **Chukar:** \$15.00 to \$20.00
- **Quail:** \$5.00 to \$10.00

## RISK MANAGEMENT

Standard operating procedure throughout the industry is to offer a safety briefing and require some orange clothing and a signature on an activity waiver. Waiver is presented in this document under the title “Indemnification Agreement” below.

Statistics show that RHAs and clay-target shooting venues are extremely safe operations. They usually are attended by seasoned shooters who consider safe gun handling the hallmark of a true sportsman. The average shooter is well versed in range-safety procedures and will routinely correct others if any unsafe behavior is observed. Of course, nothing should be left to chance. All employees should be well versed in firearm safety through a certified hunter-safety course or national firearms training program. These programs are usually available from SPNL, Hunting clubs, as well as through on-line resources (<http://www.sayd-magazine.com/>). Regular training and refresher courses should be part of

an operation's risk-management planning.

With respect to risk management, it is important to consider all safety and liability issues and plan for them with a written risk management plan that has been reviewed by the insurance provider and may be the attorney too. There are many insurance providers who handle the specialized insurance needs and risk-management planning associated with shooting venues and Responsible Hunting Areas (RHA). Indemnification release forms may include:

- Eye protection required, and hearing-protection also required on clay-target ranges.
- Firearms should always be pointed in a safe direction.
- When transitioning between hunting zones, clearing any obstacles or when around vehicles or loitering parties, all firearms should be unloaded with the actions open so that they can be visually checked as “safe.” All guns will remain open and void of cartridges at all times, except when the shooter is actively hunting birds.
- Encourage clients to have the gun out-of-the hands and unloaded when taking a retrieved bird from a dog.
- Continually reaffirm that the gun's safety is engaged in the ON position while moving within the field.
- Finger off the trigger and alongside the trigger guard until the bird is flushed.
- Any client who acts in an unsafe or discourteous manner as so deemed by preserve staff or fellow hunters, or is observed using drugs or alcohol, may be asked to leave the RHA, potentially forfeiting fees.
- Responsible post-hunt alcohol use for non-drivers permitted in designated areas after all firearms have been unloaded, cased and stored for transit.

Additional risk-management safety planning should include perimeter “no trespassing, shooting range” and “licensed shooting RHA” signage, and employee training should include emergency equipment and procedures. Fire-suppression equipment and first aid kits should be visible and readily available with the nearby posted emergency and non-emergency numbers for local emergency services and law enforcement.

Accidents big and small happen with every business operation. All training should include first-aid and CPR training. Please note: Shooting accidents are highly unlikely; however, with our aging and predominantly out-of-shape population heart-attack and stroke are all too common, as is dehydration and heat-stroke at during hot-weather activities. For these reasons, any agro-tourism venture of any type should have risk-management plans that include first-aid and CPR training for managers, operators and field staff. Do not approach this training from a “what-if” it happens possibility; consider it a “when” it happens likelihood.

### How to deal with the Anjar RHA clients

A few details can help you cover a few bases to turn a bad day for your client into the reason that the client will be a repeated customer:

- Communicate that you value your client.
- Have ammunition in several gauges and loads available for those who forgot their ammunition at home, as well as have some extra “loaner” safety-yellow or orange vests on hand.
- Have simple on-site handouts for the hunt and quality printed brochures about your business for clients to pass on to friends.
- Have an area for hunters to relax after the hunt, bird-cleaning facilities, and changing rooms.
- Many RHAs may host dog trials and training workshops. Discounts on these events usually are extended to all clients on the operation’s mailing list.
- Warm beverages or soup, free or for a reasonable price are great for a little post-hunt relaxation.
- Have cool stuff to sell, yours and from other local businesses. You are part of the buy-local scene; support businesses you like and encourage their staff to support you.
- Consider a thank-you event, post-season communication, or a thank-you drawing for a gift where each visit by the member or client counts as an entry into the contest. Some preserve operators have events like a pre-season summer client-appreciation grill-out and clays shoot; or a spring open house, perhaps with a speaker, food or similar “pull”

to bring in clients to mix and talk. Well done, this can be a solid incentive for your clients to renew memberships or to be a repeated customer.

- Some RHAs may offer hunter-safety classes, Becoming an Outdoor Woman programs, off-season outdoor-education workshops, and host clay-target shoots and tournaments. Consider partnering with organizations that have funding for educational outreach. Local hunter-safety instructors are another underserved group. Many RHAs may offer off-season member access for dog training. These are all great ways to generate interest in the business and provide additional value to your clients.
- Put in a good word for the little local eatery, and be sure to have your clients mention that the RHA recommended the restaurant. Restaurants are great places to start and magnify positive local word-of-mouth buzz about your business.
- RHA accelerating the learning curve when new canine or human hunters are introduced to the sport is appreciated<sup>36</sup>. A private environment where there is game, and the client can concentrate on developing the charges in his or her care, is well worth a monetary investment compared to slogging miles of public ground before finding the first and perhaps only bird of the day. Often overlooked by RHA operators is the fact that their businesses usually help to make mediocre dog handlers into far better handlers who become more enthusiastic about participating in the sport.
- This is an important selling point for any RHA operation. If clients are aggravated by a particularly serious dog-training problem, you can offer them a list of contacts and services provided by local professionals. If a handler is willing to ask for and be open to advice, the RHA is a great place to meet new friends, learn about training clubs, and get a lot of free and very useful handling tips.
- This also is true for RHA operators. Experienced guns and handlers like to talk about what they know. They share their thoughts because they honestly want you to enjoy the experience at the

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<sup>36</sup> RHA that hurry up learning and training is appreciated. Canine are dogs.

level they have devoted much of their lives and a good portion of their income to attain. Listen to them and consider what has worked for them on your RHA, what they like, and seriously consider any problems or inconveniences they experienced.

- As a RHA operator, these handlers are your specialist “field salesmen.” They sell your operation by word-of-mouth at their local gun clubs, place of business, or when they bump into a friend at the local hardware store. If they are active in Partridge or Quail club, are hunter-safety instructors, or prefer certain breeds of dogs, these are all things you should note in your records. If the person is a gun or gundog-writer for national or regional magazines, works in the agro-tourism industry or rural-development, is an officer with one of the conservation advocacy organizations, works for a major local or regional sporting goods store, or is one of the hot-shot trainers or clays shooters in the area, this is really your person. For example, active clays shooters are especially poised to sell your operation. They are present at one or more venues every week for most of the non-hunting year, they talk shooting and hunting every day, and usually have a wide range of friends who know them and respect their judgment.

- Consider gifting your active and enthusiastic members with a thank-you card and a shirt or hat embroidered with your logo. Logo clothing generates conversations and interest in your preserve. This sets up your active “salesperson” member to sell your operation by telling a good story about a memorable hunt or dispelling misconceptions about RHA hunts. Keep good records of what you do for promotions, and be sure to check with your accountant to see what expenses you can legitimately claim at tax time.

- There are few things as fulfilling as operating a safe, sustainable, profitable business that gets people outside and enjoying life. The more we learn, the more deeply we appreciate the dogs, birds and every other wonderful aspect of upland-game hunting. After all, any upland experience is not really about birds, it is about spending precious moments with friends and family and enjoying the outstanding performance of a great-working

gundog; something a great RHA-operator never forgets.

## INDEMNIFICATION AGREEMENTS

**Release of Liability between Client and Operator**  
The following is an example of an Indemnification Agreement between a RHA and its clients. Each client is given a safety briefing and then asked to respond to the following document. It is provided here as a sample for the RHA manager and the client review and as an educational tool. (All agreements could be reviewed by an attorney.):

### INDEMNIFICATION AGREEMENT

#### Release of Liability:

I the undersigned, agree to hold ANJAR RHA and its owners, management, employees, agents and guides completely harmless and waive all claims of liability for any injury, accident or death resulting from any cause, whether natural or man-made.

Being in possession of a Hunting Insurance that is obligatory by the Lebanese Hunting Law 580/2004, and in the event that I cause, or am alleged to have caused any injury, accident or death to another person or damages to another person's property, then I agree to indemnify and hold harmless from any claim against ANJAR RHA and its owners, management, employees, agents and guides.

I have read and fully understand the above release/waiver and fully understand that I have given up substantial rights by voluntarily signing this document.

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Signature of Parent or Guardian if under 18 years of age \_\_\_\_\_

Name (first, middle, last) \_\_\_\_\_

Address (street, city, state, zip code) \_\_\_\_\_

Home telephone Number \_\_\_\_\_

Mobile phone number \_\_\_\_\_

## 2. From Financial Point of View (as suggested by Gold Trophy for Hima Lezzab in Upper Akkar)

Two plans should be clearly identified for each RHA: Security Plan and Management Plan. The following plans are inspired from the European Hunting Associations and shall be implemented in each RHA. These principles have been chosen to identify the main economical parameters of each RHA in order to build up its Business Plan.

### Security Plan

1. Features guarded objective: description limits of the hunting area and the area (ha)
2. Number of hunting positions and their location  
Every hunting domain, following the migration route and the feeding habitats, has hot spots for hunting. These hot spots should be well determined and placed and numbered in harmony with the maximum number of hunters authorized in the hunting domain.
3. Staffing needs for security (example: 2 guardians with arms, supported by police)
4. Staff obligations
5. Contact and cooperation with other control guards (Police and Fireman)
6. Mode of action in different situations: terrorist attack, fire situations, natural disasters,...
7. Access routes  
Every hunting domain has asphalted roads and off-roads. The access on each road should be identified on a clear map in order to avoid any accident.
8. Security service specific documents: unique control register, register for events, register for arms and ammunition  
The control register is a register including all data about visiting hunters: dates, names, hours, permits number, hours of hunting, comments, hunting details.  
Arms should be in a special room, well controlled, with a separate register on arms including all details. In international hunting domains, this room is accessible at any time by the local Police and hunting authorities.
9. The hunting territory map

### Management plan

1. Territorial administrative situation  
Presentation of site conditions: geomorphologic conditions, climatic conditions, edaphic conditions<sup>37</sup>, hydrological conditions, vegetation conditions (forest types)
2. Presentation of hunting fauna
3. Actual herds study in respect of the herds optimal
4. Theoretical calculation of the animals that will be hunted
5. The influence of anthropogenic factors
6. Hunting constructions and arrangements
7. Quiet area (you need this area for the animals like a retreat, a safe zone where the hunting is not allowed)
8. Major trophies
9. Animals found dead and the cause: diseases, car accidents or poaching
10. Priorities in the promotion of game species  
The authorized game species could be “promoted” for the RHA hunters within the declared seasons, optimized hunting dates, and the adoption of the hunting law.
11. Revival of existing populations by actions of “Blood refresh”  
This option exists for specific hunting species like pheasants
12. Increasing the potential nutrient of the hunting area  
For many hunting species, it is important to introduce feed by the RHA authority to stimulate the presence of these species and create feeding habitats and help during the winter time
13. Improving network design in construction and hunting equipment  
The choice of hunting equipment, especially for big game, could be important and determinant to help efficient (avoid injuring animals without killing) and responsible hunting. The only “big game” available in Lebanon is the wild boar.
14. Additional food demand calculation (for the animals)
15. Combating predators
16. Statistical data: map and others statistics

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<sup>37</sup> Soil condition



Financial Model

MAABOUR EL ABYAD (Hima Lezzab) has been chosen as an example to build the following financial model of the RHAs. The contract has been already signed with SPNL and shows a lot of motivation and commitment in environmental conserva-

tion and respect of nature. The following list details the parameters needed (employees, equipment, vehicles, buildings, branding<sup>38</sup>, etc.) to describe the business model of the MAABOUR EL ABYAD (Hima Lezzab).

RHA Parameters:

MAABOUR EL ABYAD (Hima Lezzab)	Akkar	Manager monthly salary	\$2,500
Department	Northern Lebanon	Guide monthly salary	\$1,500
Altitude m	800-1700	Employee monthly salary	\$800
Area m2	5,500,000	Number of employees	3
Municipality name	Maabour El Abyad - Rouayme	Yearly membership fees	\$350
Responsible	Mr. Yassine Jaafar	Daily RH trip fees	\$60
Contact phone	00-961-3- 335 274	SUV <sup>39</sup> price	\$15,000
Members maximum number	117	EDL - water monthly cost	\$450
RH months number	6	Communication monthly cost	\$100
SPNL % fee	5%	Gasoil monthly cost	\$1,000
Gold Trophy % fee	5%	Printings monthly cost	\$150
Average full RH days per month	15	Insurance monthly cost	\$750
Percentage of members visiting per RH day	20%	Equipment (phones, cameras...)	\$5,000
Income coffee shop – extras	0	Buildings (coffee shop, kiosk, parking, office)	\$80,000
Income outside hunting season (fishing)	0	Sponsors income per month	\$500
		Social Security CNSS %	23.50%

The above parameters injected in a yearly operational budget are summarized in the table that follows:

It shows that this Responsible Hunting Area needs an approximate financial investment of 120,000 USD (80K USD building, 15K USD vehicle, 25K USD starting operations budget) to be able to start up the activity. The first year of operations results show despite the pessimist hypotheses (no income from coffee shop, no income outside the hunting season, low percentage of members visiting the site

etc.) a financial sustainability starting the first year with a Net Margin of approximately 10K USD (6% of the 173K USD expected turnover).

The advantages of this project are numerous: possibility of duplicating it easily especially with other RHA contracts signed with SPNL/Hima municipal decisions, job opportunities (5 employees per site), implementation and training for responsible controlled hunting, conservation of nature, income for municipalities etc.





<sup>38</sup> Annex VIII: RHA Branding Example: Hima Lezzeib in Upper Akkar  
<sup>39</sup> 4 Wheel drive car.

RHA yearly P&L in USD	January	February	March	April	May	June	July	August	September	October	November	December	TOTAL
INCOME													
Membership fees	0	0	0	0	0	0	0	40,950	0	0	0	0	40,950
Daily RH trip	21,060	21,060	0	0	0	0	0		21,060	21,060	21,060	21,060	126,360
Sponsors - ads	500	500	500	500	500	500	500	500	500	500	500	500	6,000
Income coffee shop - extras	0	0	0	0	0	0	0	0	0	0	0	0	0
Income outside hunting season (fishing)	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL INCOME	21,560	21,560	500	500	500	500	500	41,450	21,560	21,560	21,560	21,560	173,310
EXPENSES													
Manager salary	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	30,000
Guide salary	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	18,000
Employee salary	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	28,800
Social Security	1,504	1,504	1,504	1,504	1,504	1,504	1,504	1,504	1,504	1,504	1,504	1,504	18,048
EDL - water cost	450	450	450	450	450	450	450	450	450	450	450	450	5,400
Communication cost	100	100	100	100	100	100	100	100	100	100	100	100	1,200
Gazoil cost	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	12,000
Printings cost	150	150	150	150	150	150	150	150	150	150	150	150	1,800
Insurance	750	750	750	750	750	750	750	750	750	750	750	750	9,000
SPNL % fee	1,078	1,078	1,078	1,078	1,078	1,078	1,078	1,078	1,078	1,078	1,078	1,078	12,936
Gold Trophy % fee	1,078	1,078	1,078	1,078	1,078	1,078	1,078	1,078	1,078	1,078	1,078	1,078	12,936
TOTAL EXPENSES	12,510	12,510	12,510	12,510	12,510	12,510	12,510	12,510	12,510	12,510	12,510	12,510	150,120
AMORTIZATIONS													
SUV price	104	104	104	104	104	104	104	104	104	104	104	104	1,250
buildings	833	833	833	833	833	833	833	833	833	833	833	833	10,000
Equipment	139	139	139	139	139	139	139	139	139	139	139	139	1,667
TOTAL AMORTIZATIONS	1,076	1,076	1,076	1,076	1,076	1,076	1,076	1,076	1,076	1,076	1,076	1,076	12,917
MARGIN	9,050	9,050	--12,010	--12,010	--12,010	--12,010	--12,010	28,940	9,050	9,050	9,050	9,050	23,190
AMORTIZATIONS	1,076	1,076	1,076	1,076	1,076	1,076	1,076	1,076	1,076	1,076	1,076	1,076	12,917
NET MARGIN	7,974	7,974	-13,086	-13,086	-13,086	-13,086	-13,086	27,864	7,974	7,974	7,974	7,974	10,273
													6%



Chukar Partridge released in Hima ..© Fouad Itani

## Annex I: Draft Action Plan for Hima Akoura RHA

### Action plan and timetable for the implementation of the RHA in Akoura

**Abbreviation:**  
 RHA: Responsible Hunting Area  
 RHF: Responsible Hunting Federation  
 SPNL: Societe pour la protection de la Nature au Liban  
 YED: Youth for Energy and Development  
 GA: Georges Akoury  
 AS: Asaad Serhal  
 HBO: Henri Bou Obeid  
 AK: Adonis Khatib  
 KBY: Khaled Bou Younes

week 14 Aug- 20 Aug	
GA	- Setting individual meetings between Georges Akoury and Bioland/ Khaled Bou Younes/ Yed / Adonis to discuss on the organization of the Hunting activity, the duty, the rights and obligation of each one. A draft of the discussed agreements will be written down before final version.
GA	- Setting individual meeting with Dr Wehbe (Mayor of Akoura) to discuss on the organization, duties, rights and obligations.  A draft of the discussed agreements will be written down before final version.
<i>We will set our next meeting with all the parties on Monday 4th September (with CABS visitors)</i>	
week 21 Aug- 27 Aug & week 28 Aug – 3 Sept	
SPNL/Bioland/ MECRH	- Discussing with Assad Serhal on the identity and legal structure of the organization, will it be a Federation RHF (responsible hunting federation) including (SPNL/ Bioland and MECRH) or other structure? <i>(to be practical: in the Action plan I consider the organization is RHF)</i>
SPNL	- Find all the information to create the RHF
RHF (GA)	- Write down the draft of the collaboration agreement between Akoura Municipality and RHF (or other)
RHF/ Bioland	- Write down the draft of the contract of exclusivity between Bioland and RHF (or other)



RHF/YED	- Write down the draft of the contract between MECRH (or RHF) with YED
SPNL/ Bioland	- Finalize the legal docs for the RHF (with the financial model)
GA	- Write down the internal rules of the RHA area for the hunters
GA/ KBY	- Write down the job description of the Guides in the RHA
RHF (GA)	- Write down the operation procedure between RHF and TRIGGER
Bioland	- Estimation of the date when the breeding species could be delivered for the season and the prices.
MECRH	- Preparation of the Logo of the RHF - Preparation of the trainings courses for YED
<b>week 4 Sept – 10 Sept</b>	
AS/HBO/AK/ GA	- Monday 4th Sept: Meeting set with the Municipality of Akoura: discussing about the contract between RHF and the Municipality of Akoura with all the details (Duties, rights, financial) to prepare the draft of the contract.
MERCH/SPNL /TRIGGER	- Start the promotion on social media the RHA of Akoura. Making mini clips to send by social media.
SPNL/Bioland/ MERCH	- Creating the RHF or the other decided structure.
SPNL/Bioland/ MERCH	- send all the draft of operation agreement and contracts to the lawyer to prepare the official documents
	<i>This week the team will be busy with CABS visitors.</i>
<b>week 11 Sept – 17 Sept</b>	
SPNL/Bioland/ MERCH/ AKOURA	- Presentation of the official documents to all the parties for validation, before signature.
MERCH / YED	- Meeting between MERCH and YED to present the training courses documentation and planning the training session to the 2 trainers of YED.
<b>week 18 Sept – 24 Sept</b>	
SPNL/Bioland/ MERCH	- Set a meeting at the Municipality of AKOURA for signature of the official documents
SPNL/Bioland/ MERCH/TRIG- GER	- Signature of the official documents by all parties
Bioland	- Establish a plan for the breeding of species

SPNL/ MERCH	- Preparing the design of the Logo, member cards, business cards, stickers for the cars, badge for the guides.
TRIGGER	- Prepare the clothes to the guides with the Logo RHF
AKOURA / GA	- preparation and validation of the RHA equipment and installation following our instruction: parking, WC, steel boards, entrance gate, Guard cabin at the entrance, Relay antenna for telephone network, talkie walkie, etc.
MERCH / YED	- starting the training sessions for the trainers
RHF/GA	- negotiate the service fees with the suppliers
<b>week 25 Sept – 01 Oct</b>	
AKOURA	- Starting the installation (20 days forecast)
MERCH/GA	- design the website of the RHF
MERCH/GA	- Design the entrance tickets for the 3 types of hunting (Wild/breeding/ boar)
MERCH/GA	- Design the 3 types of brochures (wild, breeding, boar)
RHF	- Validation of the several designs by AS/HBO/AK/GA
GA	- looking for sponsors to print the documents
<b>week 02 Oct – 08 Oct</b>	
AKOURA/ YED/ MERCH	- starting the training sessions for the municipality guards and guides.
GA	- Prepare all the procedure for the beginning of the activity (reservation calls/ payment/ organization of the day/ records/ etc.)
GA	- Organizing the printing of the documents (paid by sponsors and other)
TRIGGER/ RHF/ AKOURA	- Promoting the opening of the RHA for the 21 October
<b>week 09 Oct – 15 Oct</b>	
AKOURA/ RHF	- Review all the procedure of the activity, ensure that nothing is missing
AKOURA/ RHF	- Set an inauguration event for the opening of the RHA expected at 21st October.
<b>INAUGURATION OF THE RHA on Saturday 21st October</b>	

## **SUMMARY OF THE DUTIES OF ALL PARTIES DURING THE OPERATION**

### **AKOURA MUNICIPALITY**

The forest Guards will keep patrolling in the Hima for the safety of the team and the clients

#### **The guides will be collaborating with TRIGGER to:**

- Take the hunter at the dedicated areas
- Ensure that the hunters are following the rules (internal and national law)
- Stick the stickers in the feet if the hunted animal (green for the wild hunting) RED (for the breeding hunting)
- Bring the hunters to the lunch break follow the instruction of the organization of the day

#### **Officer:**

- Staying at the guard office
- Sells the entrance tickets for members and non-members
- Ensure that all the hunters (min 6 per groups) and the guides are here as instructed by the RHF
- Record all the sales and rental equipment or dogs (cars, shotgun, dogs, other..)
- Ensure that all the hunted animals have the stickers attached according to the type of hunting
- Ensure the safety of the activity by being in touch with the guards and the red cross
- Record and report the cash activity to the RHF & the municipality

### **SPNL**

- SPNL or someone dedicated takes the calls from the clients, and send a quotation according to what they request.
- Plan the schedule of the hunting dates. (minimum 6 hunters per group) and try to schedule many groups at same day.
- Plan the day or the journey (breakfast, lunch, dinner, stay at night, equipment needed, cars, ATV, rental equipment needed, etc.) and send to TRIGGER
- book the rooms from the hotel or guesthouse.
- Collect the figures from the controller
- Monitor the financial activity
- Make reports and statistic of the activity
- Organize regular meeting with the member of the RHF and partners
- Work on a continuous improvement program.

### **BIOLAND**

- Breeding 5 species: Pheasant, partridge, Quail, Duck, Rabbit
- Always discuss with SPNL for improvement plan
- Be able to implement new species for breeding
- Take the order from the RHF organizer for the quantities of games needed for the coming groups
- Display and sell the Hima food products in the RHF kiosk and RHF office in the RHA area.

### **MECRH**

- . Promoting the hunting season through their network
- . Follow up the training sessions with YED
- . Update the training program accordingly to the needs
- . Display the documentation in the Kiosk of the RHA

### **TRIGGER**

#### **Marketing:**

- promoting the hunting activity among his social media network.
- Promoting the hunting activity among his portfolio

#### **Operation:**

- khaled is RHF organizer on the field.
- Take instruction from the RHF to organize the day and send the schedule to the guides (the cars, dogs, bring the equipment, organize the food, etc.)
- Monitor all the day with the people and ensure that nothing is missing.

### **YED**

#### **Give the training sessions prepared by MECRH for:**

- . The forest guard of Akoura municipality
- . The Guides
- . Members of the RHA
- . Non-Members of the RHA
- . Training for the preparation of the Hunting permit exam

## Annex II: Various ways of hunting and trapping birds in Lebanon

1. Shooting using hunting rifles or automatic rifles
2. Trapping using cages with 2 compartments: one with captive bird and one empty with door open.
3. Trapping individual birds using net live trap
4. Trapping individual birds using Gin nets
5. Trapping group of birds using blaster nets and snares.
6. Mass trapping of birds using mist-nets
7. Catching birds using lime sticks
8. Catching birds using poisonous fruits (azadirachta fruits).
9. Taking using alfachloralose powder at feeding places
10. Blurring birds with spotlights at night in trees
11. Shooting roosting birds in artificially lightened trees on top of houses using air gun
12. Fixing nails on plywood and placing the latter against a wall after being lightened and having a drawing of a tree on it. Birds will hit the wall/wood or nails and fall down injured.
13. Producing smoke in a rocky hole where pigeons usually roost and covering the top opening with a net. Every pigeon will try to escape will be hit by a stick on its head.
14. Using calling machines to attract birds to a site and massively shooting them.



.. after captive breeding by responsible hunters



### Annex III: Examples of Decrees and ministerial decisions issued by Ministry of Tourism for responsible Tourism

مرسوم رقم  
٦٢٩٨ تنظيم بيوت الضيافة

إلى رئيس الجمهورية  
بناءً على الدستور

بناءً على القانون رقم ٦٦/٢١ تاريخ ١٩٦٦/٣/٢٩ وتعديلاته (إنشاء وزارة السياحة)،  
بناءً على المرسوم الاشتراعي رقم ٢٧ تاريخ ١٩٦٧/٨/٥ (الإجازة للحكومة بتحديد وتنظيم  
وتصنيف المهن السياحية)،  
بناءً على المرسوم رقم ٩٤٢٧ تاريخ ١٩٦٨/٢/٧ (تحديد المؤسسات والمهن السياحية)،  
بناءً على المرسوم رقم ١٥٥٩٨ تاريخ ١٩٧٠/٩/٢١ وتعديلاته (تحديد الشروط العامة لإنشاء  
واستثمار المؤسسات السياحية)،  
بناءً على اقتراح وزير السياحة،  
وبعد استشارة مجلس شورى الدولة (الرأي رقم ٢٠٠٨/٢٠١ - ٢٠٠٩ تاريخ ٢٠٠٩/٤/٢٨  
والرأي رقم ٢٠٠٩/٢١٩ - ٢٠١٠ تاريخ ٢٠١٠/٥/٢٧)،  
وبعد موافقة مجلس الوزراء بتاريخ ٢٠١١/٨/٨،  
يرسم مما يأتي:

#### المادة الأولى: تعريف بيوت الضيافة

هي بيوت لبنانية خاصة مؤهلة لاستقبال وإيواء رواد الرياضة التي تمارس في الطبيعة وهواة  
السياحة البيئية والثقافية على أنواعها، يتم انتقاؤها في مناطق وقرى لبنانية، وذلك بهدف تعريف  
السياح الأجانب واللبنانيين، على حد سواء، على العادات الشعبية والتقاليد والحياة العادية للمواطن  
والمطبخ اللبناني.

#### المادة الثانية: مواصفات بيوت الضيافة

- يستحسن أن يكون موقع البيت قريباً من أماكن جذابة و/أو الساحة العامة للبلدة.

- ١٧- للمستثمر الحق بدخول الغرف المؤجرة في البيت بواسطة المفتاح الرئيسي العام بغية ترتيبها وتنظيفها وتأمين ما ينقص من حاجات فيها فقط وعليه في كل الأحوال عدم إزعاج المسافر واحترام راحته وخصوصيته.
- ١٨- على مستثمري بيوت الضيافة الاحتفاظ بدفاتر وسجلات حول دخول وخروج النزلاء وتقديم عند اللزوم للجهات الرسمية التي تطلبها.

#### المادة السادسة: نظام الرقابة

تخضع بيوت الضيافة لأحكام الملحق رقم ٣ في المرسوم رقم ١٥٥٩٨ تاريخ ١٩٧٠/٩/٢١ وتعديلاته.

المادة السابعة: يعمل بهذا المرسوم فور نشره في الجريدة الرسمية.

بعيدا في ٩ ايلول ٢٠١١  
الامضاء: ميشال سليمان

صدر عن رئيس الجمهورية  
رئيس مجلس الوزراء  
الامضاء: محمد نجيب ميقاتي

وزير المالية  
الامضاء: محمد الصفدي

وزير العدل  
الامضاء: شكيب قرطباوي

وزير الداخلية والبلديات  
الامضاء: مروان شربل

وزير السياحة  
الامضاء: فادي عبود

وزير الأشغال العامة والنقل  
الامضاء: غازي العريضي

وزير الصحة العامة  
الامضاء: علي حسن خليل



الجمهورية اللبنانية  
وزارة السياحة  
الوزير

قرار رقم ٢٠٠

تحديد شروط الترخيص لمحلّات صنع أو بيع التّحف والتذكارات

إنّ وزير السياحة،  
بناءً على المرسوم رقم ٣ تاريخ ٢٠١٦/١٢/١٨ (تشكيل الحكومة)،  
بناءً على القانون رقم ٢١ تاريخ ١٩٦٦/٣/٢٩ (إنشاء وزارة السياحة)،  
بناءً على المرسوم رقم ١٥٥٩٨ تاريخ ١٩٧٠/٩/١٢ المادة ١١ منه، والمعدل بالمرسوم رقم ٤٢٢١ تاريخ ٢٠٠٠/١٠/١٨ (تحديد الشروط العامة لإنشاء واستثمار المؤسسات السياحية) ولاسيما المادتين ٢١ و٢٦ منه،  
بناءً على المرسوم رقم ٦٤٤٢ تاريخ ٢٠١١/١١/٦ (إلغاء دائرة الرقابة وإحداث دوائر جديدة في مصلحة الضابطة السياحية)،  
بناءً على إقتراح مدير عام الشؤون السياحية،  
وبعد موافقة اللجنة السياحية الاستشارية بجلستها رقم ٩ المنعقدة بتاريخ ٢٠١٧/٥/١١،  
وبعد استشارة مجلس شوري الدولة (رأي رقم ٢٠١٦/٢٤٨-٢٠١٧ تاريخ ٢٠١٧/٧/٤)

يقرر ما يأتي:

**المادة الأولى :** تخضع المؤسسات والمحلّات التي تقوم بصنع أو بيع التّحف والتذكارات لغايات سياحية لرقابة وزارة السياحة وفقاً لأحكام هذا القرار.

**المادة الثانية :** إنّ المؤسسة أو المحلّ الخاضع لأحكام هذا القرار، هو الذي يبيع أو يقوم بالصناعة التقليدية وذلك بتحويل مادة أوليّة عن طريق العمل اليدويّ إلى منتج جاهز للبيع سياحياً، أو يقوم باستيراد سلع جاهزة للبيع سياحياً.

تعتبر صناعات تقليدية على سبيل المثال لا الحصر:

صناعة الخزف والفخار، الأرتيزانا، صناعة الزجاج المنفوخ اليدويّة، صناعة البورسلين الفنّي، صناعة النحاسيات، صناعة التّريّات والمرابا الشرقيّة، الحفر الفنّي على الخشب، صناعة السكاكين، صناعة العبايات والشراشف اليدويّة، صناعة الهدايا وعلاّقات المفاتيح، الحياكة اليدويّة، حياكة السجاد اليدويّة، التّعتيق الفنّي، صناعة الألعاب التّرائيّة، صناعة الخشب المطعّم بالموزاييك، صناعة المنمنمات والموزاييك، الرّسم الفنّي على الزجاج والفخار والسيراميك والأقمشة...

خاص بالهوية  
رقم الملف  
تاريخ الورود

الجمهورية اللبنانية  
وزارة السياحة  
المديرية العامة للشؤون السياحية  
مصلحة تجهيز السياحي

طلب استثمار "بيت ضيافة"  
الموافقة المبدئية

تعليمات

- يستلم صاحب العلاقة إيصال من الإدارة بعد تقديم الطلب
- منع غلاصة X على الخيار الصحيح داخل المربع ☐

صاحب العلاقة	
<input type="checkbox"/> شخص طبيعي	<input type="checkbox"/> شخص معنوي (جمعية أو شركة أو منظمة)
الاسم	اسم الشهرة للشخص الطبيعي <sup>1</sup> أو الاسم القانوني للشخص المعنوي (الشخص الطبيعي) الاسم الأول <sup>2</sup> اسم الأب <sup>3</sup> (الشخص المعنوي) اسم الام <sup>4</sup> (الشخص الطبيعي)
معلومات عن صاحب العلاقة مع نسخة عن الهوية	فقط للشخص الطبيعي الدع <sup>5</sup> <input type="checkbox"/> شركة <input type="checkbox"/> جمعية <input type="checkbox"/> منظمة إذا كانت شركة <sup>6</sup> <input type="checkbox"/> مؤسسة فرعية <input type="checkbox"/> شركة تضامن <input type="checkbox"/> ش.م.م حدد نوعها <input type="checkbox"/> ش.م.ل <input type="checkbox"/> غيره موضوعها <sup>7</sup> تاريخ الولادة <sup>8</sup> / / (يوم شهر سنة) (مسن الهوية) الجنس <sup>9</sup> <input type="checkbox"/> ذكر <input type="checkbox"/> أنثى التهنية <sup>10</sup> رقم التسجيل <sup>11</sup> تاريخ التسجيل <sup>12</sup> / / (يوم شهر سنة) مكان التسجيل <sup>13</sup>
الجنسية <sup>14</sup>	
المفوض بالتوقيع (نسخة للشخص المعنوي)	الاسم <sup>15</sup> / / (يوم شهر سنة) الجنسية <sup>16</sup> الاسم <sup>17</sup> اسم الأب <sup>18</sup> الشهرة الصفة <sup>19</sup> / / رقم الهاتف <sup>20</sup>
عنوان السكن للشخص الطبيعي أو عنوان المركز الرئيسي للشركة أو الجمعية المؤسسة	المحافظة <sup>21</sup> / / (يوم شهر سنة) الشارع <sup>22</sup> / / (يوم شهر سنة) رقم الهاتف <sup>23</sup> / / (يوم شهر سنة) البلدية <sup>24</sup> / / (يوم شهر سنة) رقم الفاكس <sup>25</sup> / / (يوم شهر سنة) ص.ب <sup>26</sup> / / (يوم شهر سنة) الموقع الإلكتروني <sup>27</sup>
نوع المؤسسة <sup>28</sup>	
عنوان المؤسسة	المحافظة <sup>29</sup> / / (يوم شهر سنة) الشارع <sup>30</sup> / / (يوم شهر سنة) البلدية <sup>31</sup> / / (يوم شهر سنة) رقم الهاتف <sup>32</sup>
الاسم <sup>33</sup>	(جرى تسجيل الاسم المطلوب لعدم وجود اسم معالج) رئيس الدائرة

لما المتواضع أدناه أصرح على مسؤوليتي المدنية و الجزائية بصحة المعلومات كافة الواردة أعلاه	
الاسم	الاسم الأول / / (يوم شهر سنة)
الاسم الأول	الاسم الأول / / (يوم شهر سنة)
الترقيم	الترقيم / / (يوم شهر سنة)

يرفق بهذا الطلب

<input type="checkbox"/>	1	طلب حجز اسم تجاري لدى وزارة السياحة
<input type="checkbox"/>	2	سجل عدلي يثبت أن صاحب البيت و زوجته و أولاده المقيمين معه غير محكومين بجناية أو جنحة شائنة
<input type="checkbox"/>	3	إفادة من المختار تثبت أن صاحب البيت معروف من قبل المجتمع المحلي و أنه و زوجته و أولاده المقيمين معه حسنو السيرة و الاخلاق و يتصرفون بالكرام و حسن الشيفقة
<input type="checkbox"/>	4	صور مصدقة عن سند الأجراس مسجل لدى البلدية أو صورة مصدقة عن سند التملك
<input type="checkbox"/>	5	شهادة صحية من البلدية أو المرجع المختص
<input type="checkbox"/>	6	صور فوتوغرافية من الداخل و الخارج
<input type="checkbox"/>	7	تعهد موقع من المستثمر لدى المراجع المختصة يلتزم خلاله بتطبيق القوانين السياحية المرعية الاجراء
<input type="checkbox"/>	8	إفادة أو شهادة تثبت أن المستثمر أو من يبوب عنه قد خضع لقرورات تأهيلية
<input type="checkbox"/>	9	إفادة أو شهادة تثبت أن المستثمر أو من يبوب عنه أو أحد أفراد عائلته المقيمين معه يلمون بتعدي التفتيش الرقابي أو الإنكيزية، و يمكن الاستغناء عنها شرط تاتيت دوائر وزارة السياحة المختصة من توفر هذا الشرط
<input type="checkbox"/>	10	المستندات المتعلقة بالتركة (الشخص المعنوي) سجل تجاري - إيداع تجارية



## Annex IV: Questionnaire to assist selection of RHAs in Lebanon

Mohafazat	Site Name	Mayor Name	Wetland/dryland
Coordinates			
Landscape			
Date of visit:		Companion if any:	
Weather			
Vegetation Cover			
Vegetation Structure			
Area:		Property:	
Protected Areas (Nature Reserves, Ramsar Site, IBBA, Hotspot, Biosphere Reserve, sensitive area, riparian area, etc) within, part of, or in the proximity of the site: YES: Type YES: Distance NO:			
Any human construction within 500m from the site?			
Species recorded			
Game species recorded			
Maps availability			
Observation by local community			
Primary Contact Information for the Site			
• Name • Title • Municipality • Mohafazat • Address • Phone • E-mail			
1. What is the size of the site in square meter surface area:		construction:	
2. Mention the central and peripheral coordinates of the site:		16. Give the Perimeter/ boundary of the site:	
3. Indicate the nature of the site (wetland, forest, grove, etc) and its land use and cover in %:		17. Availability of maps with scales if possible:	
4. Describe the substratum of the site (soil, rock, sand, etc) and its land use and cover in %:		18. Any possibility of joint sites made of more than one municipal property:	
5. Describe the topography: heights, slopes, cliffs, valleys, etc):		19. Indicate the number of the population in summer:	
6. Who is the Land Owner of the site:		20. Indicate the number of the population in winter:	
7. Indicate the interests of the Land Owner and the reasons behind these interests:		21. Number of municipal police individuals:	
8. What is the Land use of the site:		22. Number of forest guards covering the site:	
9. What is the nature of the dominant trees (conifers-deciduous):		23. Any infrastructure available to support the site as a public hunting area:	
10. Describe and/or assess the general natural (flora, fauna) and cultural diversity of the site:		24. Is there an eco-tourism activity or planned ecotourism activity within the site:	
11. Briefly describe and/or assess the general natural (flora, fauna) and cultural diversity of the site's immediate surroundings:		25. Indicate the socio-economic structure (including wood cutting, charcoaling, grazing among others) of the local community(ies) of the site:	
12. Is there a presence of human construction within the site:		26. Species (birds-mammals) most hunted within the site:	
13. Explain the nature of human construction within the site:		27. Best period of hunting per species in the site:	
14. Any presence of isolated farms within the site; if yes, indicate their surface areas in square meter:		28. Is there a presence of IBA or Hima (Community Based Protected Areas) within or near the site:	
15. Indicate the distance of site's borders from any human		29. Is there a presence of PA within or near the site:	
		30. Is there a presence of Bottle neck within or near the site:	
		31. Is there a presence of main Flyway within or near the site:	
		32. Is there a presence of Hotspot for birds within or near the site:	

## Annex V: Sample of RHA Hima Municipal Decisions



الجمهورية اللبنانية  
وزارة الداخلية والبلديات  
محافظة البقاع-لضواء بعلبك  
بلدية الفاكهة-الجديدة  
عدد ٢٠١٣ / ٤٧

قرار بلدي  
رقم ٤٧ / م.ب

إن مجلس بلدية الفاكهة-الجديدة  
بناءً على قانون البلديات المنفذ بموجب المرسوم الاشتراعي رقم ١١٨ تاريخ ١٩٧٧/٦/٣٠ وتعديلاته .  
بناءً على المرسوم رقم ٥٥٩٥ تاريخ ١٩٨٢/٩/٢٢ ( أصول المحاسبة في البلديات ) وتعديلاته .  
بناءً على الدعوة الموجهة بتاريخ ٢٠١٣/٤/٢٣ الى السادة أعضاء المجلس البلدي لحضور جلسة مجلس بلدي رقم  
(٤) في الساعة الخامسة من عصر يوم الخميس في ٢٠١٣/٤/٢٧ .  
بناءً على محضر جلسة المجلس البلدي رقم (٤) المنعقدة بتاريخ ٢٠١٣/٤/٢٧ برئاسة المحامي انطوان الخوري  
وبحضور كل من : نائب الرئيس هيثم غنام والاعضاء السادة : فادي شلفون- هارون خلف- حسين المسلماني-  
جورج عيود- نجيب عون- عبدالله الحاج- د.محمد ناصر سكريّة- ميشال عون- فادي خليل- معروف سلوم -  
فارس كلاس - نصري مراد .  
وتغيب الاعضاء السادة : دنيل محي الدين بعذر والسادة : لا احد بدون عذر  
وتدارس المجلس مسألة إقامة حصى ضمن منطقة الفاكهة العقارية بناءً على الخريطة المرفقة وبالتعاون مع جمعية  
حماية الطبيعة في لبنان (SPNL) ؛ وذلك من أجل تنظيم الاستخدامات المستدامة في المنطقة والمحافظة على  
مواردها الطبيعية ، بناءً على دراسات علمية محددة أماكن ووجهة استخدام هذه الموارد مثل الصيد المستدام والرعي  
المستدام وخلافه، لإعادة تكوين نظام بيئي مستدام ومتجدد والأفادة منه. كما سيجري تصنيف وترتيب (زونينغ)  
للمنطقة العقارية . وبعد الدرس والتصويت  
وبناءً على ضرورات المصلحة العامة .

يقرر ما يأتي

**المادة الأولى:** وافق المجلس البلدي إقامة حصى ضمن منطقة الفاكهة العقارية من طريق وادي فجرة غرباً حتى  
حدود منطقة الشرقي بالتعاون مع جمعية حماية الطبيعة في لبنان (SPNL).

**المادة الثانية:** ينشر ويبلغ هذا القرار حيث تدعو الحاجة .

الفاكهة في : ٢٠١٣ / ٤ / ٢٧

رئيس بلدية الفاكهة-الجديدة المحامي انطوان الخوري	نائب الرئيس هيثم غنام	ميشال عون	فادي شلفون	دنيل محي الدين	د. محمد ناصر سكريّة
					
	جورج عيود	عبدالله الحاج	نصري مراد	نجيب عون	فارس كلاس
					
	معروف سلوم	فادي خليل	حسين المسلماني	هارون خلف	
					

## Annex VI: Request Form for Establishment of RHA on municipal land

رقم التسجيل:-----	في:-----
صاحب الطلب:-----	
العنوان :-----	
رقم الهاتف :-----	
رقم الفاكس :-----	
جانب وزارة البيئة	
الموضوع: طلب إنشاء "منطقة مخصصة للصيد المستدام" في بلدة _____	
تحية وبعد؛	
لما كان القانون رقم 690 تاريخ 2005/08/27 المتعلق بتحديد مهام وزارة البيئة وتنظيمها قد انطى بالوزارة صلاحية تنظيم الصيد البري،	
ولما كان المجلس البلدي في بلدة _____ قد وافق بموجب قراره رقم _____ تاريخ ____/____/____ (المرفق ربطاً نسخة مصدقة عنه) <sup>1</sup> على إنشاء "منطقة مخصصة للصيد المستدام" في الموقع التالي:	
<ul style="list-style-type: none"><li>• العقار او العقارات رقم _____ (كما ما هو مبين في الإفادة العقارية<sup>2</sup> رقم _____ تاريخ _____ (المرفقة ربطاً)،</li><li>• المنطقة العقارية: _____</li><li>• القضاء: _____</li><li>• المحافظة: _____</li></ul>	
نطلب منكم الموافقة على درس امكانية إنشاء "منطقة مخصصة للصيد المستدام" في الموقع المذكور،	
وتفضلوا بقبول فائق الاحترام.	
الجهة المستدعية	
الاسم:-----	التوقيع:-----
الوظيفة:-----	
مرفق ربطاً <sup>3</sup> :	
<ol style="list-style-type: none"><li>1. قرار المجلس البلدي أو اتحاد البلديات بالموافقة على إنشاء "منطقة مخصصة للصيد المستدام" في الموقع المذكور</li><li>2. إفادة عقارية للموقع مع بيان مساحة</li><li>3. خريطة مساحة طوبوغرافية / عقارية للموقع موقعة من المراجع الرسمية تظهر حدود العقارات الملوي إنشاء "منطقة مخصصة للصيد المستدام" عليها</li><li>4. افادة مساحة (في حال المساحة غير مذكورة في الافادة العقارية)</li><li>5. افادة تخطيط وارتفاق (إذا أمكن)</li><li>6. وثيقة بالأسباب الموجبة التي تتوافق مع الشروط المعتمدة لإنشاء "منطقة مخصصة للصيد المستدام" في الموقع المذكور</li></ol>	
نسخة تبليغ الي:	
- مصلحة الموارد الطبيعية/ دائرة الانظمة الايكولوجية	

## Annex VII: FIRST AID GUIDELINES

### Bleeding

Severe bleeding can be life-threatening, leading to shock and loss of consciousness. To stop bleeding, follow the following instructions:

- Apply direct pressure on the wound.
- Cover with sterile gauze or the cleanest cloth available.
- Press the pad firmly with the palm of your hand. Don't lift the pad to check the wound as bleeding will resume.
- When the pad is soaked, put a new one above it.
- If the wound is on a limb and there is no fracture, raise the limb above the level of the heart. Gravity will reduce the bleeding.
- If bleeding continues, try shutting off circulation in the artery that supplies blood to the injured limb.

### Broken Bones

- You can assume that someone has a broken bone, if pain persists for more than a few minutes, moving the injured area becomes difficult or there is swelling in the injured area.
- If you have to transport the victim, try to immobilize the joint above and below the injury in order to prevent further injury and pain. Don't try to straighten the limb, leave it as you found it.
- For a broken foot or ankle, splint without attempting to change the position of the ankle or broken bone. To splint a broken leg, do the following:
  - Place a blanket or some other type of thick padding between the legs.
  - Bind the injured leg to the un-injured one with strips of cloth.
  - Bind the legs together firmly at several places above and below the painful area.

### Burns

- First and second degree burns with closed blisters are best treated with cold water.
- Cover the burned area with cloths that have been soaked in cold water (do not use ice water).
- Second and third degree burns with open blisters should be wrapped with a loose, dry dressing.

### Shock

Shock can result from any serious injury such as bleeding. Symptoms of shock include pale, cold, rapid pulse, shallow breathing, and fear. To treat shock:

- One should keep the victim lying on his back; it might be even better to raise his feet.
- If the victim is having difficulty in breathing, raise the victim's head and shoulder instead of his feet.
- Maintain the body temperature and loosen any restrictive clothing.
- Try to keep the victim calm and comfortable, and get medical help as soon as possible.

### Snakebite

- Most doctors agree that the best response is to rush the victim to the nearest emergency room. Do not try to remove poison from snakebites as you might do more harm than good. Fear and panic aggravates the situation. Calm the victim as much as possible. Keep the victim in a lying position to slow the spread of the poison. If the bite is on a limb, keep the wound at or below the level of the heart.



## Annex VIII: RHA Branding Example: Hima Lezzab in Upper Akkar





White Trail Hima (Maabour El-Abyad) - Upper Akkar, for responsible hunting and nature based tourism





Hima Kherbet Qanafar/Ain Zebdeh - West Beqaa © Asaad Saleh

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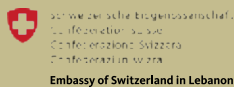
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