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Raptor Count Lebanon 2019

REPORT

Martin Käch | m.kaech@me.com | BirdLife Switzerland | 09.11.2019

Picture:

A Eurasian Sparrowhawk passing the count site. Wing damage likely to have been caused by gunshot. © DR

Abstract

Lebanon lies on a very important flyway for European and Asian migratory birds. Every year in spring and autumn millions of birds migrate through this small country. The hunting pressure is high and illegal shooting takes place at an incredible extent.

The Society for the Protection of Nature in Lebanon (BirdLife Lebanon) and the Municipality of Hammana together with the Ornithological Society of the Middle East (OSME), BirdLife Sweden and BirdLife Switzerland started an initiative to raise awareness for bird migration and address the problem of illegal shooting.

Hammana lies at the upper end of Beirut River Valley, which makes it a good place to watch the migration of soaring birds. The municipality established a Hima – in Arabic a protected area of land where hunting is forbidden. Within the Hima, a bird observation spot was set up, where foreign volunteer bird counters as well as Lebanese birdwatchers counted migrating birds during a period of 25 days in the autumn 2019. The focus of the count was on birds of prey – therefore the project was given the name «Raptor Count Lebanon 2019».

At the same time, the team also received visitors – individuals as well as school groups – at the counting site and posted their observations on Facebook. They maintained a close contact with the local inhabitants and the authorities of the municipality of Hammana, who supported the project in various practical ways.

During the project the team recorded the passage of more than 32 000 birds, of which 20 000 were raptors of 25 different species. Two species, the Lesser Spotted Eagle and the Levant Sparrowhawk, were the most abundant. For these two species Lebanon carries a high responsibility because almost their whole world population migrates across the country.

The project was a success due to the involvement and support of the municipality and local people. The communication on social media reached a lot of people all over Lebanon and beyond. The counting spot in the Hima Hammana proved to be a good place for bird watching and as an educational site.

لبنان يقع على المسار الشرقي للطيور المهاجرة الأوروبية والآسيوية. كل عام في فصلي الربيع والخريف، تهاجر ملايين الطيور عبر هذا البلد الصغير. ضغط الصيد مرتفع والصيد غير المشروع يحدث بدرجة عالية جداً. بدأت جمعية حماية الطبيعة في لبنان - بردليف لبنان وبلدية حمانا مع جمعية علم الطيور في الشرق الأوسط (OSME) و بردليف السويد و بردليف سويسرا مبادرة لزيادة الوعي بهجرة الطيور ومعالجة مشكلة الصيد غير المشروع.

تقع حمانا في الطرف العلوي من وادي نهر بيروت، مما يجعلها مكاناً جيداً لمشاهدة هجرة الطيور المرتفعة. أنشأت البلدية حمى، وهي منطقة محمية يحظر فيها الصيد. داخل الحمى، تم إنشاء مكان لمراقبة الطيور، حيث قام عدادو الطيور الأجانب المتطوعون بالإضافة إلى مراقبي الطيور اللبنانيين بإحصاء الطيور المهاجرة خلال فترة 25 يوماً في خريف عام 2019. كان التركيز على الطيور الجارحة - وبالتالي فإن المشروع أعطي اسم «Raptor Count Lebanon 2019».

وأيضاً استقبل الفريق الزوار - أفراد ومدارس - في مكان العد ونشروا ملاحظاتهم على Facebook. كما أنهم حافظوا على اتصال وثيق بالسكان المحليين وسلطات بلدية حمانا.

خلال المشروع، سجل الفريق مرور أكثر من 32000 طائر، منها 20000 من الطيور الجارحة من 25 نوعاً مختلفاً. نوعان الأكثر وفرة هما عقاب ارقط صغير وباشق ليفانت. بالنسبة لهذين النوعين، يتحمل لبنان مسؤولية كبيرة لأن جميع أفراد هذين النوعين يهاجرون في جميع أنحاء البلاد تقريباً.

كان المشروع ناجحاً بسبب المشاركة والدعم من البلدية والسكان المحليين. بلغ هذا المشروع على وسائل التواصل الاجتماعي إلى الكثير من الناس في جميع أنحاء لبنان وخارجها. أثبتت نقطة العد في حمى حمانا أنها مكان جيد لمشاهدة الطيور وموقع تعليمي.

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1 BACKGROUND

Lebanon is situated straight in the eastern Mediterranean flyway and sees the annual migration of hundreds of thousands of raptors, storks and other soaring birds. The illegal shooting situation is alarming and there is a need to train local conservationists and bird watchers and to spread awareness for reducing the widespread illegal bird hunting.

I visited Lebanon for the first time in spring 2018. During that visit I personally realised the potential for bird watching in this country, particularly during migration season. However, I also learnt about the massive problem of illegal shooting and witnessed it to some extent. Furthermore, during this visit I got to know Assad Serhal and André Bechara from the «Society for the Protection of Nature in Lebanon» (SPNL, the BirdLife Partner in Lebanon), who have been engaged in nature and bird protection for many years. While we were sharing a dinner together, the first ideas of how we could help the birds and the bird watchers came up.

In early October 2018, Tomas Axén Haraldsson initiated a bird camp¹ for several days in the mountain village of Ras el-Matn in the central Mount Lebanon range above Beirut. Three young Swedish bird watchers and Tomas met with local students and introduced them to bird watching. The core aim of a bird camp initiative is to bring together young people from different countries and cultures with an interest in birds and nature and to learn about conservation and awareness. The camp was a cooperation between SPNL, BirdLife Sweden and the Ornithological Society of the Middle East, Caucasus & Central Asia (OSME). During that camp they witnessed spectacular migration over the area.

In discussions following the camp, SPNL asked me if I would help them to set up a migratory bird observation viewpoint in the Hima² of Hammana, a municipality at the upper end of the Beirut River Valley some 6 km east of Ras el-Matn. It was the municipality's wish to promote ecotourism, and bird watching was to be one component. I subsequently agreed and visited the area in April 2019³ to meet with the local partners – SPNL and the municipality of Hammana – and to find an appropriate place to set up the bird observation spot. Simultaneously there was the second bird camp⁴ organized by Tomas in Ras el-Matn. At that time we agreed that an autumn migration count would be a good way of continuing the bird camp initiative.

Later, Tomas suggested the name «Raptor Count Lebanon 2019» for our project. He also managed to raise some funds from OSME, and together with SPNL he launched a call for volunteers to help with the counting. I myself received some funds for the project from BirdLife Switzerland and BirdLife Luzern (the local BirdLife partner where I live) as well as some donations from personal friends.

Our project is one of several initiatives that aim to reduce the widespread and rampant illegal shooting in Lebanon. Beside the local nature protection organisations such as the «Society for the Protection of Nature in Lebanon (SPNL)», the «Association for Bird Conservation in Lebanon (ABCL)», and «Lebanese Wildlife», the German NGO «Committee Against Bird Slaughter (CABS)» has also been very active for three years. In addition, it is important to mention that even at the highest political level there is a great effort to stop illegal shooting. Michel Aoun, the President of Lebanon, has publicly announced his support for the rigid implementation of the hunting law, and the Internal Security Forces (ISF) have arrested several offenders and made their successes public in the national and social media.

¹ **Bird Camp** 1–4 October 2018 report www.osme.org/wp-content/uploads/2019/10/Trip-Report-Bird-Camp-Lebanon-October-2018.pdf

² **Hima** means protected area in Arabic; it is a community-based approach used for the conservation of sites, species, habitats, and people in order to achieve the sustainable use of natural resources: www.spnl.org/hima

³ Trip Report www.dropbox.com/s/0xsdp4d9tl9g9d6/Trip%20Report%20Lebanon%20Spring%202019.pdf?dl=0

⁴ **Bird Camp** 5–8 April 2019 report www.osme.org/wp-content/uploads/2019/10/trip-report-Bird-Camp-Lebanon-April-2019.pdf

2 AIMS

The aims of the «Raptor Count Lebanon 2019» have to be seen in the wider context of a project called «Empowering Local Communities, for Awareness and Eco-tourism in Hima Hammana through Hima Approach», initiated by SPNL and the Hammana municipality. The raptor count should be seen as one part of that project and it had the following aims:

- to improve knowledge of raptor migration through this area
- to train young local Homat Al Hima in Hammana in raptor field identification
- to develop a community-based project
- to raise awareness of bird migration among Lebanese people

3 PARTICIPANTS

I personally spent ten weeks in Lebanon to work for the project and to do important preparatory as well as finishing works. I and initially Tomas acted as co-leaders together with representatives from SPNL and the Hammana municipality. In addition to us there were nine volunteer counters from various countries. These were, in order of their arrival: Johan Tengholm and Elias Melchert Thelaus (joining Tomas from Sweden and staying 5 days), Valentin Moser (Switzerland, 11 days), Martin Grienberger (France, 18 days), Richard Porter and Doug Radford (England, 9 days), Jason Gregg (USA, 4 days), Albert de Jong and Gerard Troost (Netherlands, 8 days).



The team and local visitors on the opening day. © AB



André Béchara and Richard Porter. © MK

All the volunteers were competent bird watchers and all of them contributed well to the project objectives. Among them, two names need to be highlighted: Richard Porter, the author of the field guide «Birds of the Middle East», and Gerard Troost, the founder of Trektellen, a computer application that is widely used for recording migratory birds. Both the Arabic app version of the field guide and the Trektellen app were used with great success during the project period. Thanks Richard and Gerard for your outstanding gifts to Middle East bird conservation!

There were also many Lebanese people involved in the project; notably André Bechara, Assad Serhal and Maher Osta from SPNL; officials of Hammana municipality: Bechir Farhat (former mayor), Fadi Slaiby (current mayor) and Jihad Nasr (vice-mayor); the two local Homat Al Hima participants Louis Junior Saad and Tony Bu Mitri; other people of Hammana such as Joe Nassif, Joe Slaiby, Chadi Saad and the local policeman Ziad El Biri. Our project also attracted Lebanese birdwatchers to join us, namely Fouad Itani, Samer Azar, Shadi Indari, Maher Rouhana, Rami Chami and Tamima Itani.



At breakfast: Rayan Naba, Valentin Moser, Tomas Haraldsson, Elias Melchert, Johan Tengholm, Martin Käch and Louis Junior Saad. © AB



Counting at sunset from our flat in Hammana: Richard Porter, Doug Radford, Martin Grienberger and Jason Gregg. © MK



Maher Osta, Rafic Makarem, Richard Porter, Doug Radford, Martin Grienberger, Martin Käch and Valentin Moser. © RM



Chadi Saad and Jihad Nasr. The Lebanese who joined us at the bird count didn't have binoculars and telescopes, but they had cameras and good eyes! © MK



Doug Radford, Richard Porter and Martin Käch in action. © MK



Joe Slaiby, Gerard Troost, Martin Grienberger and Albert de Jong counting in the evening. © MK

4 TRANSPORT, ACCOMMODATION AND COSTS

Some costs were covered by the project, others had to be paid by the participants. The participants themselves organized and paid for their return flights to Beirut. Transportation within the municipality of Hammana was provided for free by employees of the municipality. They did a very good job in this and helped to reduce the costs drastically. All other transport (e.g. airport transfers) was provided by our project driver Rayan Naba, who was very reliable and service minded. The costs of his services were covered by the project funds.

For the first 10 days, the participants stayed in a private house in Ras el-Matn. Then they all moved into a spacious flat in Hammana. They paid \$25 USD per night for accommodation in twin rooms and shared toilets and showers. Drinking water, breakfast (sometimes in the house, sometimes in the local bakery) and lunch (normally a warm sandwich delivered to the count site) was organised by me with the help of the municipality and paid for by the project. Evening meals were paid for by the participants themselves and were often eaten in the Souk in Hammana, which was only a short distance walk from the flat. The flat was ideal for such a project, whereas the house in Ras el-Matn was considered to be a bit far away from the count site (20 minutes' drive) and with not much personal space.

5 COUNT SITE

The Beirut River Valley was declared an IBA⁵ following bird counts in 2007. It is known for a significant number of southerly migrating soaring birds. Our count site is located at the upper end of the Beirut River Valley at an altitude of 1500m above sea level and 50m below a mountain top facing northwest. From this spot, you get an excellent view over the valley.



Count site seen from above looking west towards Beirut (left), and from the south looking north (right). © MK

Coordinates of the count site: 33°48'19"N and 35°44'21"E

Google Link: www.google.com/maps/yMMEMXYaX91bLvHP6

⁵ IBA = Important Bird Area, www.datazone.birdlife.org/site/factsheet/beirut-river-valley-iba-lebanon

Together with the municipality and SPNL I chose this place for the following reasons:

- The count site is within the municipality of Hammana and, most importantly, within the Hima of Hammana. The local authorities fully support the project.
- It offers a view of 300 degrees from NE to the N, the W and the S. In clear weather the city of Beirut at a distance of 20 kilometres is visible. This makes it useful for observation of bird migration in spring and autumn.
- In quiet days with few migrating birds to see you still have a stunning view over the Hammana region, and nature around the spot is beautiful.
- Being within the Hima means that hunting is prohibited and there should be no hunters to bother us.
- The Homat Al Hima⁶ will be included in the project and are important people for the local connections of the project.
- The count site is easily accessible by car, as it is not far away from the Damascus Highway, which is the main road between Beirut and the Bekaa Valley. It takes only about 30 minutes to drive there from the centre of Beirut. There is a small kiosk by the parking lot, and it is only a short walk along a level dirt road to reach the site.
- Even though it is near the Damascus Highway, it is still quiet and shielded from traffic disturbance by a hilltop.
- It is on the «Hima to Hima trail»⁷ that is going to be established by SPNL and the local authorities.

The count site consists of a flat area on the hill side of about 5 x 8 meters, the base of which has been covered by gravel. A simple sunroof of plastic sheet and branches on a metal structure was put up in September 2019 before the count started. It offers enough space for about 6 people to sit and count and move around with spotting scopes, but the shade was not big enough when there were many visitors. We arranged a plastic table and six plastic chairs at the count site which were safely chained to the frame of the sunroof every night, using a metal chain and padlock.

6 COUNTING

Preparations for the counting took place in September by setting up an account on www.trektellen.nl and buying a small tablet device to use at the site. Also, in the first weeks of September the municipality finished the sunroof of the count site. I was personally present in Hammana from the beginning of September to consult the municipality and get everything ready. The first volunteers arrived on 9 September and counting started the following day. Subsequently, official counting took place every day from 10 September to 3 October, and on 12 October⁸. We started daily between 8 and 9 am and finished in the late afternoon (exact times are available on Trektellen), depending on the weather conditions and the number of birds. The total observation time of these 25 days was 193 hours and 42 minutes.

The count site was staffed with an irregular number of people (skilled volunteering bird watchers from abroad as well as Lebanese with different bird watching skills). We counted all raptors, storks, pelicans and bee-eaters that we could see and identify from the count site, even if they were far away. On some days we had excellent visibility, so we were able to identify birds up to 5 km away. All those species were recorded on the Trektellen app and uploaded to the website in the evening. In addition to that, we submitted an eBird-list (www.ebird.org) every day, in which we included all the birds that we had been able to identify. These included in particular roosting and foraging songbirds in the immediate vicinity of the count site, and

⁶ The guardians of the Hima, or so-called rangers

⁷ A hiking trail connecting the Himas of different municipalities.

⁸ We opened the count site again that day for the «World Migratory Bird Day», which is an annual awareness-raising campaign highlighting the need for the conservation of migratory birds and their habitats.

sometimes we did a «passerine round» which meant a walk in the surrounding area of the count site as far as about 0.7 km away.

On 21 September and 2 and 5 October 2019 some of our team went to Saoufar, a small town about 4 km WSW of our count site. This site was chosen during the count period in order to explore options for another count site. It is on the same main migration flyway, but the raptors pass even closer than at Hammama. The birds observed there were not uploaded on Trektellen but were recorded in a separate eBird-list.

7 WEATHER

The weather during the 24 days of counting was mainly dominated by high pressure. The mornings were normally very clear with no clouds at all. During the day, mainly around early afternoon, haze often crept in from the west (from the sea) and the visibility got worse. On some days the haze turned into high clouds, sometimes also into low clouds, which then covered our count site in fog so that we could not see anything at all and had to give up counting, but sometimes it remained very clear all day and on one occasion we experienced a sea of clouds with a crisp clear blue sky above us.

There was no rain on any of the days. The wind was mainly light. The prevailing wind direction was W to NW, but local winds sometimes changed according to thermal changes. On many days, there was a light easterly wind in the early morning that stopped about 9 or 10am to give way to a westerly breeze.

The general weather conditions were pretty much the same during the whole time, but still every day proved to be slightly different in direction and strength of the wind as well as the development of haze, fog and clouds.

The temperatures were very pleasant from a birdwatching perspective, fresh in the morning and quite warm at noon, particularly in the sun, between 20 and 30°C.



Blue sky and visibility of over 20 km in the morning allowed us to overlook the whole Beirut River Valley as far as Beirut (left). Often low clouds built up in the afternoon and led to poor visibility (right). © MK

8 RECORDED SPECIES

8.1 DATA RECORDING

All recorded data for raptors, storks, pelicans and bee-eaters at the count site in Hammana is public and can be seen on the website of Trektellen: trektellen.nl/site/totals/2462/2019. Other birds, such as swallows and passerines roosting in the area were also recorded. In addition to Trektellen, we submitted an eBird list for every day. This data is also public and can be accessed here: ebird.org/hotspot/L9774215. The birds counted in Saoufar were only recorded on eBird and are not included in the following chapters. They are treated separately in chapter 8.6.

8.2 RAPTORS

We recorded 25 species of raptors on migration, some in their thousands, others only once or twice. Two species, Lesser Spotted Eagle and Levant Sparrowhawk, made up 17 000 out of the 20 000 raptors counted which was quite expected. Given the comparatively humble total numbers of the count, the variation with up to 16 different raptor species in one day must be regarded as excellent. This was both entertaining and also convincing for the site given the social and awareness raising aspects.



Lesser Spotted Eagle © DR



European Honey-buzzard © DR



Levant Sparrowhawk © DR



A flock of Levant Sparrowhawks © VM

The following list displays the total numbers of southbound migration only; for daily details see Trektellen. English names and the order of species follow the eBird taxonomy.

English name	Scientific name	Total number
Osprey	<i>Pandion haliaetus</i>	3
Egyptian Vulture	<i>Neophron percnopterus</i>	7
European Honey-buzzard	<i>Pernis apivorus</i>	648
Crested Honey-buzzard	<i>Pernis ptilorhynchus</i>	3
Griffon Vulture	<i>Gyps fulvus</i>	1
Short-toed Snake Eagle	<i>Circaetus gallicus</i>	179
Lesser Spotted Eagle	<i>Clanga pomarina</i>	6046
Greater Spotted Eagle	<i>Clanga clanga</i>	1
Booted Eagle	<i>Hieraaetus pennatus</i>	87
Western Marsh Harrier	<i>Circus aeruginosus</i>	221
Pallid Harrier	<i>Circus macrourus</i>	3
Montagu's Harrier	<i>Circus pygargus</i>	10
Levant Sparrowhawk	<i>Accipiter brevipes</i>	11562
Eurasian Sparrowhawk	<i>Accipiter nisus</i>	477
Northern Goshawk	<i>Accipiter gentilis</i>	4
Black Kite	<i>Milvus migrans</i>	801
Steppe Buzzard	<i>Buteo buteo vulpinus</i>	201
Long-legged Buzzard	<i>Buteo rufinus</i>	29
Lesser Kestrel	<i>Falco naumanni</i>	4
Common Kestrel	<i>Falco tinnunculus</i>	83
Red-footed Falcon	<i>Falco vespertinus</i>	2
Eleonora's Falcon	<i>Falco eleonora</i>	3
Eurasian Hobby	<i>Falco subbuteo</i>	67
Lanner Falcon	<i>Falco biarmicus</i>	1
Peregrine	<i>Falco peregrinus</i>	2
Unidentified Raptor		253
Total		20698



Short-toed Snake Eagle © MG



Crested Honey-buzzard (male) on 26 Sep. 2019 © MG

8.3 CRANES, STORKS AND PELICANS

Given the dates and period of the count, the absence of storks and cranes was quite expected. White Storks pass through in late August and Common Cranes later in October.

English name	Scientific name	Total number
Common Crane	<i>Grus grus</i>	29
Black Stork	<i>Ciconia nigra</i>	15
White Stork	<i>Ciconia ciconia</i>	1
Great White Pelican	<i>Pelecanus onocrotalus</i>	7 116



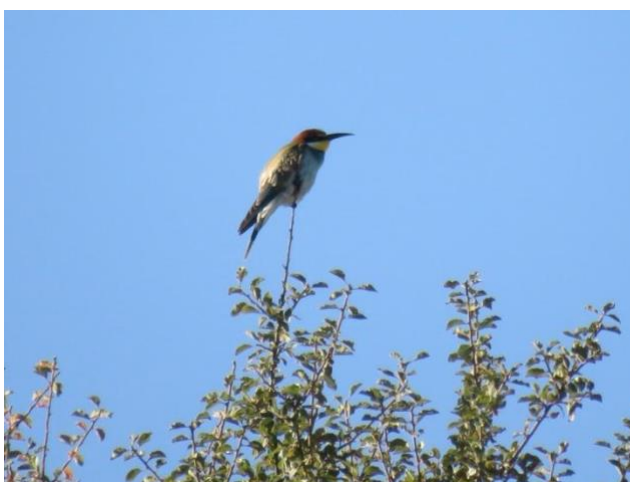
The migration of Great White Pelicans was spectacular with flocks of up to 2 000 birds! © MK

8.4 OTHER MIGRATING BIRDS

In addition to the target birds of the count listed in chapters 8.2 and 8.3, we also recorded other birds that were obviously migrating. They were in particular bee-eaters and swallows, but also other birds that migrate during the day. European Bee-eaters were the most abundant amongst them.



A European Roller roosting in Aammiq Wetland © MG



A European Bee-eater resting near the count site. © MG

The following list shows the total number of these birds recorded at the count site. For full details see eBird lists.

English name	Scientific name	Total number
Great Cormorant	<i>Phalacrocorax carbo</i>	5
Grey Heron	<i>Ardea cinerea</i>	2
Great White Egret	<i>Ardea alba</i>	2
European Bee-eater	<i>Merops apiaster</i>	4 897
European Roller	<i>Coracias garrulus</i>	9
Eurasian Jackdaw	<i>Corvus monedula</i>	12
Greater Short-toed Lark	<i>Calandrella brachydactyla</i>	4
Wood Lark	<i>Lullula arborea</i>	1
Sand Martin	<i>Riparia riparia</i>	85
Barn Swallow	<i>Hirundo rustica</i>	2 860
Red-rumped Swallow	<i>Cecropis daurica</i>	153
Common House Martin	<i>Delichon urbicum</i>	1104
Alpine Swift	<i>Apus melba</i>	115
Pallid Swift	<i>Apus pallidus</i>	1
Little Swift	<i>Apus affinis</i>	2
Yellow Wagtail	<i>Motacilla flava</i>	25
Pied Wagtail	<i>Motacilla alba</i>	1
Tawny Pipit	<i>Anthus campestris</i>	3
Red-throated Pipit	<i>Anthus cervinus</i>	1

8.5 LOCAL AND ROOSTING BIRDS AT THE COUNT SITE

During the period we recorded a variety of species around the count site. These were seen or heard either directly from the count site or during casual birding walks in the area. Some can be considered local residents whereas others were resting migrants. Most of the recorded species are quite common or regular in Lebanon but some are noteworthy, like the declining European Turtle Dove and the local speciality Palestine Sunbird.



A Common Redstart resting near the count site. © MG



The Cream-coloured Courser photographed at our count site was a big surprise! © VM

The following list shows the total number of these birds recorded during the official counting. For full details please refer to eBird.

English name	Scientific name	Frequency
Common Quail	<i>Coturnix coturnix</i>	2 birds
Rock Dove / Feral Dove	<i>Columba livia</i>	regularly up to 30 birds, unclear if feral or wild
European Turtle Dove	<i>Streptopelia turtur</i>	1 bird
Collared Dove	<i>Streptopelia decaocto</i>	1 bird
Common Cuckoo	<i>Cuculus canorus</i>	2 birds
Common Snipe	<i>Gallinago gallinago</i>	1 bird
Green Sandpiper	<i>Tringa ochropus</i>	1 bird
Cream-coloured Courser	<i>Cursorius cursor</i>	1 bird
Short-toed Eagle	<i>Circaetus gallicus</i>	regularly 2 local birds
Long-legged Buzzard	<i>Buteo rufinus</i>	regularly 2 local birds
Eurasian Hoopoe	<i>Upupa epops</i>	3 birds
Eurasian Wryneck	<i>Jynx torquilla</i>	1 bird
Common Kestrel	<i>Falco tinnunculus</i>	regularly at least 3 local birds
Red-backed Shrike	<i>Lanius collurio</i>	regularly, up to 5 birds
Eurasian Jay	<i>Garrulus glandarius</i>	regularly 2–3 birds
Hooded Crow	<i>Corvus cornix</i>	daily up to 27 birds
Common Raven	<i>Corvus corax</i>	regularly 1 or 2 birds, once 9 birds
Great tit	<i>Parus major</i>	daily several birds
Crested lark	<i>Alerida cristata</i>	regularly 2–3 birds
White-spectacled Bulbul	<i>Pycnonotus xanthopygos</i>	1 bird
Willow warbler	<i>Phylloscopus trochilus</i>	regularly 1 or 2 birds
Common Chiffchaff	<i>Phylloscopus collybita</i>	regularly 1 or 2 birds
Eurasian Blackcap	<i>Sylvia atricapilla</i>	2 birds
Lesser Whitethroat	<i>Sylvia curruca</i>	3 birds
Sardinian Warbler	<i>Sylvia melanocephala</i>	regularly 1 or 2 birds
Western Rock Nuthatch	<i>Sitta neumayer</i>	almost daily 1 or 2 birds
Eurasian Wren	<i>Troglodytes troglodytes</i>	regularly 1 or 2 birds
Eurasian Blackbird	<i>Turdus merula</i>	regularly 1 or 2 birds
Spotted Flycatcher	<i>Muscicapa striata</i>	1 bird
Bluethroat	<i>Luscinia svecica</i>	1 bird
Common Redstart	<i>Phoenicurus phoenicurus</i>	1 bird
Black Redstart	<i>Phoenicurus ochruros</i>	1 bird nominate race and 1 bird semirufous
Blue Rock Thrush	<i>Monticola solitarius</i>	1 bird on 3 days
Whinchat	<i>Saxicola rubetra</i>	regularly 1 or 2 birds, on one day 7 birds
Stonechat	<i>Saxicola rubicola</i>	1 bird
Northern Wheatear	<i>Oenanthe oenanthe</i>	3 birds
Isabelline Wheatear	<i>Oenanthe isabellina</i>	2 birds
Palestine Sunbird	<i>Cinnyris osea</i>	1 bird
House Sparrow	<i>Passer domesticus</i>	regularly
Rock Sparrow	<i>Petronia petronia</i>	on 3 different days 1–7 birds
Tree Pipit	<i>Anthus trivialis</i>	regularly 1–5 birds
Common Chaffinch	<i>Fringilla coelebs</i>	regularly 1–2 birds
European Greenfinch	<i>Chloris chloris</i>	regularly 1–5 birds

English name	Scientific name	Frequency
European Goldfinch	<i>Carduelis carduelis</i>	3 birds
Corn Bunting	<i>Emberiza calandra</i>	6 in one day
Rock Bunting	<i>Emberiza cia</i>	regularly 1–3 birds
Ortolan Bunting	<i>Emberiza hortulana</i>	regularly 1–2 birds
Cretzschmar's Bunting	<i>Emberiza caesia</i>	1 bird

8.6 BIRDS AT SAOUFAR (ALTERNATIVE COUNT SITE)

On three days (21 September, 2 and 5 October) some of our team counted birds in Saoufar (see chapter 6). The following list shows the numbers of raptors observed there. Because of possible double counting, these numbers are not included in the list above (chapter 8.2) but are recorded separately.

English name	Scientific name	Total number
Egyptian Vulture	<i>Neophron percnopterus</i>	3
European Honey-buzzard	<i>Pernis apivorus</i>	5
Short-toed Snake Eagle	<i>Circaetus gallicus</i>	72
Lesser Spotted Eagle	<i>Clanga pomarina</i>	1499
Booted Eagle	<i>Hieraetus pennatus</i>	8
Steppe Eagle	<i>Aquila nipalensis</i>	4
Western Marsh Harrier	<i>Circus aeruginosus</i>	49
Levant Sparrowhawk	<i>Accipiter brevipes</i>	502
Eurasian Sparrowhawk	<i>Accipiter nisus</i>	111
Black Kite	<i>Milvus migrans</i>	133
Steppe Buzzard	<i>Buteo buteo vulpinus</i>	43
Long-legged Buzzard	<i>Buteo rufinus</i>	1
Common Kestrel	<i>Falco tinnunculus</i>	1
Eurasian Hobby	<i>Falco subbuteo</i>	6

8.7 DISCUSSION

The total numbers were below expectations and a bit of a disappointment. The chosen site in Hammana sits high with extensive views towards the north and west and the dates should have covered the peak period for many raptors. From many previous reports, by both visiting birders and locals, the raptor stream along the western slopes of Mount Lebanon is intensive here. The weather during the period was basically fine for raptor migration, although two factors might have affected the numbers of birds observed. On the one hand, on many days low clouds and fog disrupted visibility in the afternoon. On the other hand, during noon birds flew too high for us to see due to perfect thermals. Our conclusion, which is along the lines of previous raptor counts⁹, is that the raptor passage over Lebanon takes place on a geographically wide east-west front across the country, and depending on winds, weather and visibility the best observation places vary from day to day.

With 25 species of raptors we recorded a good selection of species. These included 7 individuals of the globally threatened Egyptian Vulture and 3 individuals of Crested Honey-buzzard, of which there are only two previous documented records in Lebanon. The Egyptian Vulture is the rarest vulture in Europe and is currently the focus of an extensive project run by BirdLife International and the EU. Fewer than 90 pairs

⁹ Autumn routes of migrating raptors and other soaring birds in Lebanon, Colin M. Beale and Ghassan Ramadan-Jaradi, Sandgrouse 23 (2): 124–129, 2001

remain in the Balkan region and in Greece, and many of them migrate along the eastern Mediterranean¹⁰. The Crested Honey-buzzard mainly winters in India and South East Asia, but some birds migrate across the Middle East to Africa. Our three records are well documented with photos.

Levant Sparrowhawk was the most abundant raptor with 11 562 individuals recorded, followed by Lesser Spotted Eagle with 6 046 individuals. The majority of the populations of these two species migrate along the eastern Mediterranean, and Lebanon is in the centre of their flyway.

The number of European Honey-buzzards was much lower than expected. Despite its early migration peak from late August to mid-September, we expected at least a couple of thousands. Also, Short-toed and Booted Eagle were expected to be more numerous given their numbers passing through the region.

The migration of the Steppe Buzzard peaks at the end of September and early October. This might be a reason for the relatively small numbers observed during the official counting. High numbers were recorded in mid-October in Hammana¹¹ as well as further north in Ehden but outside the project¹².

9 VISITORS

In the first week of counting, we had mainly officials and Lebanese bird watchers visiting us. We received Jihad Nasr, project coordinator and vice-mayor of Hammana, as well as Bechir Farhat, the former mayor of Hammana who initiated the project. We were visited by Assad Serhal (general director of SPNL), André Béchara (project coordinator of SPNL) and Maher Osta (coordinator in Lebanon of the Egyptian Vulture project). The Lebanese birdwatchers were Fouad Itani, Samer Azar, Shadi Indary, Chadi Saad, Joseph Doumet and Maher Rouhana. We also had a group of four students from Ras el-Matn join us for several hours. These students had previously taken part in a youth exchange programme with Sweden (see chapter 1) and spent two weeks in Sweden in August 2019. And we had Louis Junior Saad with us a couple of times; he is one of the local Homat Al Hima who showed a lot of interest in bird watching.

On Saturday, 21 September, we had lots of visitors. Staff and volunteers of SPNL passed by with a trainee group of young Homat Al Hima. Accompanying them was Dr Ghassan Ramadan-Jaradi, the leading ornithologist in Lebanon. This day was a great day of exchanging knowledge and passion for birds.

On Saturday, 28 September, we had two scout groups (6 girls and 15 boys) visiting us at the count site. School visits peaked in the last week of our raptor count when we received 5 classes of two upper secondary schools, in total 126 students. We were also visited by 7 youth of the Cedar Rehabilitation Centre in Hammana. On Saturday, 12 October, 14 members of Chabibeh Sporting Club Chiyah passed at our count site for an early morning visit.

In total, we received about 180 young Lebanese at our count site and got the opportunity to introduce them to our project and the migration of soaring birds, and we also talked to them about illegal shooting and the problems of hunting.

¹⁰ www.old.lifeneophron.eu/en/index.html

¹¹ www.ebird.org/barchart?r=LB-JL&bmo=1&emo=12&byr=1900&eyr=2019&spp=combuz1

¹² www.ebird.org/checklist/S60637109



A group of girl scouts at the count site. © MK



Several classes learned about bird watching and the miracle of bird migration. © JV



Teaching was an essential activity of our team during the last week of our counting period. © JV



A class of Hammana Secondary School at the entrance to the Hima. © TB



For many students it was the first time that they ever used a telescope. © MK



Unforgettable moments: lots of visitors and lots of birds! © MK

10 OTHER ACTIVITIES

10.1 AWARENESS-BUILDING AND NETWORKING

On 20 September, we were invited to talk to young hunters in Ras el-Matn. The meeting was organised by Talal Gharzeddine, a member of Al Matn Organisation for Environment & Sustainable Development (MESD). We first met on the rooftop of an old but ruined building from where we could do some bird watching and also observe illegal hunting activities. Then indoors, we had a talk about the problem of hunting of birds. For us it was lucky that a girl (one of the four young people who visited Sweden) brought a bee-eater that was injured by shots and couldn't fly anymore. That was a perfect show-and-tell for our cause.

On World Migratory Bird Day, 12 October 2019, the municipality of Hammana organised a special visit in the Hima. We unveiled an information board about the Egyptian Vulture New Life Project¹³. This happened in the presence of the Polish ambassador, Przemysław Niesiołowski, a representative of the Ministry of Environment, Marc Beyruti, and the mayor of Hammana, Fadi Slaiby. There were also representatives of «Lebanese Wildlife» present, a new NGO that aims at the conservation of nature by education and by establishing the first wildlife rehabilitation centre in Lebanon. During this event, I got the opportunity to explain our project «Raptor Count Lebanon 2019».

On two occasions, our team were invited by the municipality of Ras el-Matn for dinner, and on one evening Richard Porter and I were invited for dinner by the municipality of Hammana. These were always important gatherings of decision makers and excellent opportunities for networking and lobbying for the protection of birds.

Here I would also like to mention two meetings with representatives of new NGOs for nature protection in Lebanon. On one night, we had dinner with Julie Lebnann, a member of the «Association for Bird Conservation in Lebanon» (ABCL) and another night we had dinner with Alexandra Youssef and Samara El-Haddad, co-founders of «Lebanese Wildlife». Both NGOs illustrate the new trend of public opinion against the illegal killing of birds. These young NGOs need support and international attention and therefore were very happy to meet us.



Martin Grienberger and Valentin Moser talking to young hunters in Ras Al Matn. © MK



In Anjar, sightseeing and bird watching can easily be combined. © JV

¹³ www.old.lifeneophron.eu/en/About-the-project.html

10.2 OTHER BIRD WATCHING ACTIVITIES

On several occasions some of our team went to other places for birding. These included Ras el-Matn and some sites in the mountains (Shouf Cedar Reserve, Forest of the Cedars of God, Col de Kafraya, Col des Cedres, the forest above Aammiq) as well as two sites in the Bekaa Valley which are always worth a visit.

Aammiq Wetland is the most important freshwater area in the Bekaa Valley and well protected from hunting activities by the owners, the Skaiff family. To visit you need to contact Skaiff Estate to open the gate. Aammiq wetland is full of birds, particularly during migration season where there are lots of herons and egrets, but also raptors and lots of passerine birds can be found. Two species that are rare in a Western Palearctic context are quite reliable at this place – White-throated Kingfisher and Spur-winged Lapwing.

Anjar is home to the most special bird species of the region, the Syrian Serin. Currently probably the best place in Lebanon to see these birds as they breed within the ruins of Anjar (Anjar Citadel), and they can also be seen there after the breeding season. As the ruins are a tourist attraction it is safe to visit, and binoculars and cameras are not a problem.

11 HUNTING

The extent of illegal hunting in Lebanon is enormous, and illegal shooting can be observed almost any time and anywhere. The hotspots for shooting are in the north of the country and in the Bekaa Valley. The municipality of Hammana in the centre of the Lebanon Mountain range has declared itself «A safe haven for migratory birds» and proclaimed this by banners displayed above the three main roads leading into town (see picture on the following page). This happened with the beginning of our raptor count. They do not tolerate any illegal bird hunting within their municipality. At the same time, the local authorities designated the policeman Ziad El Biri to tackle illegal shooting. We were asked to contact him whenever we noticed any kind of illegal hunting within the municipality.

Basically, Lebanon has a hunting law that meets our standards. There are hunting seasons and closed seasons, and there are huntable species and protected species. There is a restriction on the number of animals that can be shot per hunter, and there is a precise description of the aids allowed.

But the reality on the ground is one of rampant bloodshed! Electronic decoys are widely used and are sold in every hunting store. Live lures are used, although they are banned. Nets, traps and glue rods are used, although prohibited. Night hunting with headlights is practised, although forbidden. Protected songbirds are hunted, birds of prey and storks are shot, although prohibited. Hunting is prohibited in the breeding season and during spring migration, but people hunt at any time. This is a consequence of the widespread lack of law enforcement combined with a strong hunting sentiment arising from public and social traditions.

There are a limited number of huntable bird species¹⁴ in Lebanon, which are defined by the Minister of Environment. I have not managed to find consistent lists of these species. There has always been some confusion, partly due to faulty translations of the Arabic names into English or French, and the use of different local Arabic as well as standard Arabic names. But the following list is probably accurate: Quail (20), Woodcock (5), Chaffinch (25), Calandra Lark (50), Song Thrush (20), Mistle Thrush (20), Fieldfare (10), Wood Pigeon (5), Stock Dove (5), Mallard (5), Teal (5) and Garganey (5). It is therefore clear that most of the small birds as well as all the soaring birds are protected. So, it was relatively easy for us to decide whether the hunting activities we observed were illegal or not.

We didn't observe **any** shooting of raptors or other soaring birds from the count site, so in that respect the municipality of Hammana has done a great job. But we heard shots every day and observed several hunters/poachers, mostly outside Hammana. In other places than Hammana, we recorded lots of illegal hunting activities, sometimes irresponsibly and dangerously close to people.

¹⁴ In addition to these birds, there are also two mammals on the game list: Wild Boar and Hare.

We alerted the policeman of Hammana several times, and almost always he responded quickly and talked to the hunters. He also confiscated three illegal decoy machines that were used for hunting quails. Within the Hima, hunting is forbidden. But on two occasions we observed hunters even there and we also found an Ortolan Bunting that was shot as well as fresh cartridges on the ground. In all these cases the policeman was quickly on the spot for investigation. He was very helpful and friendly at any time. The municipality didn't fine these poachers, they were only given a warning.



The official flyer produced by SPNL to discourage illegal hunting.



The municipality of Hammana declared itself a haven for migratory birds. © AB



Representatives of a sustainable hunting group, SPNL and the Internal Security Forces distribute the leaflet to car drivers at a security checkpoint. © SPNL



A typical scene of illegal hunting. A hunter drives with his SUV to a vantage point and waits for birds to pass by. Most hunters will shoot at any bird, regardless of the species. © MK

12 ASSESSMENT

Looking back at our aims (chapter 2), we can conclude that we have achieved most of them well, but of course there is room for improvement.

We have ***improved our knowledge of raptor migration through this area***, as outlined in chapter 8. We counted a big number of migratory soaring birds, composed of a wide range of species. The most important finding is that migration across the Lebanon doesn't happen on a narrow front (although in a wider perspective, the Lebanon itself is a kind of a bottle neck), but migration happens anywhere between the coastline and the mountains of the Anti-Lebanon. The width of the country varies from 50 to 80 kilometres and has different altitudes from the sea up to high mountains (3 000 m) with deep and narrow valleys as well as the wide valley of Bekaa. This landscape offers many options for the birds to find their best route according to the weather situation. So, they will not always migrate on the same local routes. Our site in Hammana didn't prove to be the best for counting, as we experienced much more bird migration further south on several occasions. If we want to continue counting and get more significant numbers, we need to include other count sites lower down Beirut River Valley or in Bekaa Valley.

We have ***trained local young Homat Al Hima in Hammana*** in raptor field identification, although this proved to be very difficult. The municipality of Hammana and SPNL only assigned two people as Homat Al Hima, Louis Junior Saad and Tony Abou Mitri. Although both tried hard to join us, they didn't have that much time because they both have full-time jobs. It should be mentioned that in particular Louis Junior was very interested in bird watching and tried really hard to identify the passing birds. However, starting bird watching with the identification of raptors is probably not the best idea. So, we should have approached this subject in another way and maybe should have invested more in a formal rather than purely informal training. I should also mention that after the official counting had finished in early October, I did a lot more birding and training with Louis Junior until I left Lebanon on 11 November.

The ***project was community-based***. We were in close contact with officials of the municipality as well as other local people. We hired a local driver for airport transfers, other local transports and for our excursions. As we stayed in a house near the centre of Hammana, we often went out for dinner in local restaurants and we bought our food in local shops. The project funding as well as the personal expenses were spent into local services. We were very visible in Hammana and beyond. The visibility was enhanced by me staying in Hammana for ten weeks and I used Facebook a lot. So, the local people, not just the hunters and nature lovers, knew about us. Lebanese are very hospitable. We were very well received by extremely generous and friendly people and all of us quickly felt at home in Hammana.

We ***raised awareness of Lebanese people of bird migration***. We are convinced that our project has a very big impact. Regular posting on Facebook played an important role, as did the fact that we lived in a small community, i.e. in very close contact with the population and the authorities. We were very generously supported by the local community of Hammana. Many people shared our fascination for bird migration. We also maintained contacts to Lebanese NGOs and received around 170 pupils at the counting station. This has made us famous far and wide in the country, certainly among hunters and shooters. Many locals talked to us well and were happy about our efforts against this senseless bird hunt, which they themselves regard as a disgrace to their country. They want the basically modern hunting law to be finally applied and illegal shooting to stop. Many people we talked to had given up hunting. Also, the contact with responsible hunters was good.

It can be concluded that thanks to our «Raptor Count Lebanon 2019» a lot more people are now aware of the importance of Lebanon for bird migration as well as the killing that takes a high toll on birds.

13 OUTLOOK

The project has to continue somehow. This is the will of all the partners expressed explicitly. Lots of experience has been gained by this year's project and numerous contacts have been established. There is a lot of goodwill and it would be a pity not to build on all of this!

It is in the nature of such a project with many different partners that there are many ideas about the future goals. The following main goals can be identified:

- Develop the Hima concept and engage more local people as Homat al Hima.
- Build bird watching skills for Homat al Hima, Lebanese naturalists and nature lovers.
- Raise awareness of birds (in particular bird migration) and thereby contribute to better protection of birds and stop illegal hunting.
- Create income for the local economy by establishing some kind of ecotourism in Hammana with activities in the Hima and around the village, including bird watching and nature spotting.
- Attract international bird watchers by continuing bird migration counts in the Beirut River Valley as well as in Bekaa and thereby putting Lebanon onto the international bird watching map.

There are many ways to achieve these goals and things have to be taken step by step, especially considering the current political crisis in Lebanon.

For next year, the following steps could be done:

- Train the Homat al Hima during bird counts but also by inviting those that have shown real promise and commitment over a longer period to visit Europe to gain more experience.
- Prepare appropriate teaching materials and presentations that are available at the count site for school visits.
- Improve information and infrastructure (parking, signs, toilet) at the count site in Hammana.
- Establish a nature trail with information panels along the path to the count site in Hammana.
- Receive groups and schools at the count site and schedule these visits properly.
- Do another migratory bird count next autumn in Hammana and other count sites in the Beirut River Valley.
- Support all the activities by setting up a project page or group on Facebook.
- Organise a bird tour for foreign bird watchers during autumn migration.

In a later stage, the following steps could be done:

- Do a migratory bird count in spring in Hammana and thereby explore the opportunities for spring migration.
- Establish more bird watching opportunities around Hammana, especially in the forest at lower altitudes.
- Extend walking trails within the Hima but also around the village of Hammana.
- Extend the bird counts to places in the Bekaa Valley.
- Invite young birdwatchers from other Middle East countries to join the international counting team in order to establish Hammana as a 'Centre of Excellence' for the study of soaring bird migration.

In the future, the project needs to be managed on a professional level and it cannot any more be led on a voluntary basis like this year. It is beyond the capacities of Hammana Municipality and SPNL to manage the project on their own; they need international support. Therefore, one strong international partner (or a group of international partners) is needed. This could be OSME or any other BirdLife Partner. To fund the projects, other partners should be involved, but the lead should be by one organisation only.

14 THANKS

All in all, we experienced a great time in Lebanon. We not only saw a lot of interesting birds, but we also met a lot of very friendly people, and we experienced fantastic hospitality with excellent food. This wouldn't have been possible without the help of numerous people who opened doors for us and made us feel at home. It's impossible to name all these people here. But first and foremost, we would like to thank the authorities and the people of Hammana and Ras el-Matn for all their support. Also, lots of thanks go to SPNL, OSME, BirdLife Sweden and BirdLife Switzerland for launching and supporting the project. And last but not least, we are thankful for any kind of support that we received from individuals, be it Lebanese or people from abroad. To all of them – thank you ever so much for making all this happen!

Special thanks go to people who donated binoculars and telescopes to Lebanese participants of the bird count: Martin Buchs gave away a telescope and Toni Zwyssig a tripod for it. Richard Porter gifted a pair of binoculars and I did the same with a telescope and a pair of binoculars. Thank you very much!

SPNL honoured the work of all the international volunteers as well as the mayor, Fadi Slaiby, the vice-mayor, Jihad Nasr, and the former mayor of Hammana, Bechir Farhat, for their commitment in this project. They all received a Homat Al Hima Certificate of Appreciation. In a special official ceremony Richard Porter received an oil painting of European Rollers (by SPNL scientist and artist Husein Zorkut) as a symbol of appreciation of all the work he has done for the birds in the Middle East.



Richard Porter (on the right) receiving the oil painting from Assad Serhal (centre) in the presence of Bechir Farhat. © SPNL



Martin Käch (centre) receiving the Certificate of Appreciation by Assad Serhal (left) in the presence of André Béchara and Fadi Slaiby (left to right). © SPNL

14.1 PHOTO CREDITS

Photographs used in this report are from the following people. Thank you very much.

AB	André Béchara
DR	Doug Radford
JV	Jérôme Vonarburg
MG	Martin Grienberger
MK	Martin Käch
RM	Rafic Makarem
SPNL	Society for the Protection of Nature in Lebanon
TB	Tony Abou Mitri
VM	Valentin Moser