

The Ras Baalbek semi-desert: Lebanon's aridland area and its birds

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Lebanon is a mountainous country with two parallel mountain ranges, Mount Lebanon and the Anti-Lebanon, running north to south, with the Bekaa valley between. There is high precipitation along the coast and on the west facing slopes of the Mount Lebanon range and peaks, but much less in the interior. This rain shadow effect results in a considerable difference in vegetative cover between the coast and the drier landscape of the interior. The climate is generally Mediterranean, with rainfall in the winter but dry summers.

Lebanon's lush, green, Mediterranean coastal areas receive an average annual precipitation of between 700 mm in the south and 830 mm in the north, and the Mount Lebanon range has precipitation from 1500–2000 mm per year, this falling as snow in winter in areas higher than c1500 m asl.

However, average annual precipitation in the northern Bekaa region, near Hermel, is only 250 mm, a relatively small area that receives the lowest rainfall of any region of Lebanon (Brooks & Mehmet 2000). As a result, the area, the Ras Baalbek semi-desert (Plate 1), has a range of biome-restricted species not found elsewhere in the country and therefore is well worth including on the itinerary of visiting birdwatchers.

The vegetation of the Ras Baalbek semi-desert consists of scattered, low-growing shrubs, interspersed with a thin cover of annual ephemeral herbs and perennials (Plates 2 & 3), all of which are adapted to growing in habitats with low and irregular availability of water. Most obvious is the spiny low shrub Thorny Burnet

Sarcopoterium spinosum, which also occurs elsewhere in the country. There are also several *Bellevialia* and *Ornithogalum* species, particularly on hilly slopes at the sides of wadis.

As recently as 1997, a number of the species now known to inhabit the area were either not on the Lebanon list, or of uncertain/vagrant status (Ramadan-Jaradi & Ramadan-Jaradi 1999). Their amended status, as detailed in the more recent *Revised checklist of the birds of Lebanon* (Ramadan-Jaradi *et al* 2008) is largely (but not solely) thanks to the work of A



Plate 1. Semi-desert habitat 5km north of Ras Baalbek village, Lebanon, looking west to the Mount Lebanon range, December 2005. © Richard Prior



Plate 2. Arum growing at Mrah Rafi in Ras Baalbek semi-desert, May 2006. © Karen Hughes



Plate 3. Low-growing irises in Ras Baalbek semi-desert, May 2006. © Karen Hughes



Plate 4. Bedou and sheep at Mrah Rafi in Ras Baalbek semi-desert, April 2006. © Richard Prior



Plate 5. Dry wadi in Ras Baalbek semi-desert leading eastwards up into the Anti-Lebanon range, May 2006. © Richard Prior

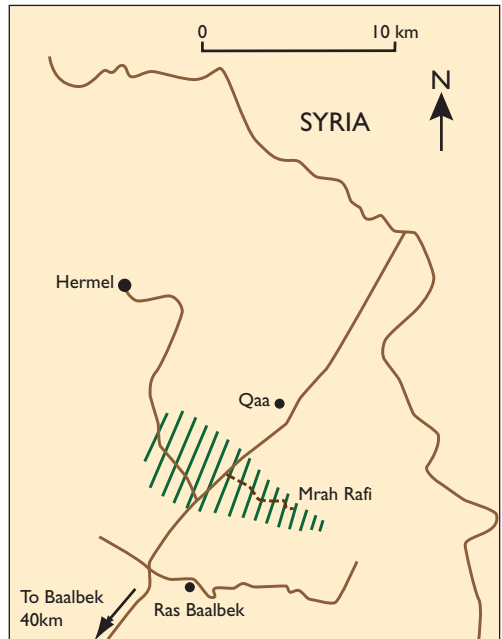


Figure 1. North-eastern Lebanon showing roads and settlements mentioned in the text. The area surveyed in the Ras Baalbek semi-desert is hatched.

Rocha Lebanon staff and volunteers who visited the area frequently between 2000 and 2003 and then carried out more detailed ornithological surveys there between 2004 and 2007, as part of a search for potential IBAs (Important Bird Areas) in the Lebanon. Resident and visiting birdwatchers had only infrequently come to this part of the country, so previous records were sparse. The ‘discoveries’ made in the last few years, therefore, do not necessarily reflect a movement of species to the area, but rather a ‘filling in of the gaps’ in the knowledge of Lebanon’s avifauna. As participants in the A Rocha surveys, the authors cannot deny the thrill of having made these findings, even if the birds may well have always been there.

TO FIND THE AREA

Taking the northbound highway from the historical town of Baalbek, the landscape gradually changes from fertile agricultural land to a stony, mostly treeless environment. The village of Ras Baalbek, about 40 km after leaving Baalbek, is on the southern ‘boundary’ of the semi-desert zone. From here the semi-desert habitat extends north past Qaa to the Syrian border, up into the Anti-Lebanon range straddling the Lebanese border with Syria to the east, and west to the perennial north-flowing Aassi river. The area surveyed is about



Plate 6. Cream-coloured Coursers *Cursorius cursor*, Ras Baalbek semi-desert, May 2006. © Richard Prior

5 km north of Ras Baalbek village, on both sides of the highway just north of the junction (34° 17' 56" N, 36° 25' 32" E) where the Hermel road joins it (see Figure 1). The western part of the survey area, split by the Hermel road, is fairly flat semi-desert, whereas the eastern part comprises rising ground which leads up into a wadi at Mrah Rafi (Plate 4), which descends from the Anti-Lebanon. A sturdy 4WD vehicle is recommended for exploring the many tracks that crisscross the area (Plate 5).

TYPICAL SPECIES IN THE AREA

Observations referred to below were made by staff, volunteers and friends of A Rocha Lebanon between 2000 and 2008. Species with amended status are considered first and then other species typical of the area.

Revised-status species:

Cream-coloured Courser *Cursorius cursor*

The first proved breeding of this species in Lebanon was here in 2000 (Ramadan-Jaradi & Ramadan-Jaradi 2002) and A Rocha observations have found the species (Plate 6) to be a breeding summer visitor, arriving in March.

Bar-tailed Lark *Ammomanes cinctura*

There were no records for this species in Lebanon until April 2000, when around 30 singing males were found in the flatter part of what became the survey area. Breeding was proved in June 2005, when a pair was seen feeding a chick, and the species' rather haunting song is a background to spring visits. In 2008, four individuals were found above Mrah Rafi on the slopes of the Anti-Lebanon range.

Desert Lark *Ammomanes deserti*

Previously considered accidental in Lebanon (Ramadan-Jaradi & Ramadan-Jaradi 1999), the first modern records date from 2003 when two were seen in the Anti-Lebanon range

(Ramadan-Jaradi *et al* 2004). One was found in the survey area in March 2006 and two weeks later a pair was collecting nesting material, indicating breeding. The species has been seen regularly there since (eg 6 in early summer 2008). Also in 2008, Desert Lark was reported as one of the commoner species around Qaa and the Syrian border (A Kullberg message to BirdtalkLebanon@yahooogroups.com).

Temminck's Lark *Eremophila bilopha*

This species was considered a vagrant as recently as 1997 (Ramadan-Jaradi & Ramadan-Jaradi 1999) based on one sighting in 1958 and a specimen in the American University of Beirut collection. In 2000 'about 15' were found breeding 'at Ras Baalbek' (Ramadan Jaradi & Ramadan Jaradi 2002). Observations between 2000 and the present show that this species (Plate 7) can now be considered a common resident in the area, numerous and obvious both in the flatter semi-desert area and up into the wadis to the east of the Qaa highway (see Ramadan-Jaradi *et al* 2008).

Scrub Warbler *Scotocerca inquieta*

Apart from a 1969 sighting high in the Mount Lebanon range (Ramadan-Jaradi *et al* 2004), this species was unrecorded in Lebanon until two were seen in the Ras Baalbek semi-desert area in August 2001 (Bara 2002). There were three there in December 2005 (Plate 8) and the following spring breeding was confirmed when a pair with three just-fledged young were discovered. In spring 2008, Scrub Warbler was found in increased numbers, with approximately 20 individuals present in the wadi at Mrah Rafi.

Mourning Wheatear *Oenanthe lugens*

Of 'uncertain' status as recently as 1999 (Ramadan-Jaradi & Ramadan-Jaradi 1997), the Mourning Wheatear has now correctly been reclassified as a resident breeder (Ramadan-Jaradi *et al* 2008). We found it (Plate 9) to be less numerous in winter when it shares the habitat with wintering Finsch's Wheatears *Oenanthe finschii*. Occasional



Plate 7. Temminck's Lark *Eremophila bilopha*, Ras Baalbek semi-desert, March 2006. © Steve Hughes



Plate 8. Scrub Warbler *Scotocerca inquieta*, Ras Baalbek semi-desert, December 2005. © Richard Prior



Plate 9. Juvenile Mourning Wheatear *Oenanthe lugens*, Ras Baalbek semi-desert, July 2005. © Richard Prior

aggressive interaction between the two species proves instructive watching for those wishing to test their identification skills.

Other species of the area:

Long-legged Buzzard *Buteo rufinus*

Resident, more often seen around the crags overlooking the wadi at Mrah Rafi.

Short-toed Snake Eagle *Circaetus gallicus*

Summer visitor, arriving in March and seen into October.

Little Owl *Athene noctua*

Particularly obvious, often perched on ruins and rock piles beside the many tracks.

Greater Short-toed Lark *Calandrella brachydactyla*

A breeding summer visitor and common passage migrant. Numbers of breeding pairs of this and the following species fluctuate from year to year, perhaps linked to rainfall variations in neighbouring countries of the region.

Lesser Short-toed Lark *Calandrella rufescens*

A breeding summer visitor, which we found to be more numerous than Greater Short-toed Lark in most years (Plate 10).

Spectacled Warbler *Sylvia conspicillata*

A breeding resident that obligingly perches on top of spiny bushes to sing (Plate 11).

Isabelline Wheatear *Oenanthe isabellina*

Common and widespread breeding summer visitor. Unlike the other wheatears mentioned, Isabelline often perches on telegraph wires beside the highways.

Finsch's Wheatear *Oenanthe finschii*

Winters, usually keeping to the rockier sloping terrain also preferred by the Mourning Wheatear (Plate 12).

Pale Rock Finch *Carpospiza brachydactyla*

An irruptive species, arriving in late spring in numbers in some years but absent in others (Plate 13).



Plate 10. Lesser Short-toed Lark *Calandrella rufescens*, Ras Baalbek semi-desert, March 2006. © Steve Hughes



Plate 11. Spectacled Warbler *Sylvia conspicillata*, Ras Baalbek semi-desert, April 2006. © Richard Prior



Plate 12. Finsch's Wheatear *Oenanthe finschii*, Aana, west Beqaa valley, c100 km to the south of Ras Baalbek, November 2005. © Richard Prior

Rock Sparrow *Petronia petronia*

A common resident on the higher ground and mountain sides, often in flocks of 30–50 birds outside the breeding season.

Long-billed Pipit *Anthus similis*

A resident breeder, best looked for during the spring display-flight time, its discreet habits making it difficult to observe outside this period.

Trumpeter Finch *Bucanetes githagineus*

A few pairs breed on the slopes above the wadis, more winter visits are required to ascertain whether it remains in the area year-round.

Lebanon's position on a major migration route is well-documented, so overflying raptors and other soaring birds are seen in spring and autumn as anywhere else in the country. Similarly, passerine migrants not known as desert dwellers can also turn up at the appropriate times, particularly around irrigated crops increasingly grown beside the Qaa highway.

The data submitted by A Rocha Lebanon and SPNL (Society for the Protection of Nature in Lebanon) led to Ras Baalbek semi-desert being designated an IBA in 2007 by Birdlife International due to the presence of several Sahara-Sindian biome-restricted species (Conroy & Khairallah in prep). The Ras Baalbek semi-desert requires further exploration and may produce other surprises, *eg* there is a record of Dunn's Lark *Eremalauda dunni* from 2002 (Ramadan-Jaradi *et al* 2008).

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Plate 13. Pale Rock Finch *Carpospiza brachydactyla*, Aana, west Beqaa valley, c100 km to the south of Ras Baalbek, May 2006. © Richard Prior