

WILDLIFE TRAVEL

Morocco 2018



Morocco species list and trip report, 20th to 27th December 2018

#	DATE	LOCATIONS AND NOTES
1	20 th December	Departure from the UK, transfer to Atlas Kasbah.
2	21 st December	Atlas Kasbah. Tighanimine El Baz (Valley of the Eagle).
3	22 nd December	Palais Salam. Taroudant. Tioute Palmery.
4	23 rd December	Souss Massa National Park. Oued Souss.
5	24 th December	Atlantic coast. Oued Tamri. Cap Rhir. Agadir Oufella.
6	25 th December	Anti-Atlas. Ait Baha. Laatik.
7	26 th December	High Atlas. Cascades du Imouzzet.
8	27 th December	Return to the UK.



Above - Dromedaries at Oued Tamri. Front - the Anti-Atlas.

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Day One: 20th December. Departure from the UK, transfer to Atlas Kasbah.

With our early departure from London Gatwick we were looking forward to reaching Morocco in time for lunch. Upon arriving at the airport however, it became apparent that all was not right, with no flights landing or departing since the previous evening; the airport was in lockdown, as a result of drones spotted flying over the runway.

After some hours waiting for news, we were finally on our way, taken to London Luton to board an outbound 'rescue flight'. Whilst it wasn't the start to our holiday we had planned, we were very fortunate to be headed to our destination, during a day which had seen hundreds of flights cancelled and over 100,000 people affected. And so it was that we were welcomed to the Atlas Kasbah in the early hours of the next morning; exploration of our home for the week could wait until the morning!

Day Two: 21st December. Atlas Kasbah. Tighanimine El Baz (Valley of the Eagle).

We had a relaxed start to the day, with bleary eyes brightening as we took in the surroundings of our hotel, nestled in the foothills of the High Atlas, east of Agadir. The Atlas Kasbah was built with the objective of promoting responsible travel, both in terms of sustainable use of resources and environmental protection, but also in showcasing Berber culture, and supporting the local communities.

Following our first breakfast, discovering the tasty delights under the many tajines that graced the table, we were taken on a tour of the hotel by Rachida, under a sunny and blue Moroccan sky. There was then time to enjoy a stroll through the gardens of the hotel, and our first sightings of the Common Bulbuls, whose sight and simple, cheerful song would become very familiar over the next week.

We looked first at an Argan *Argania spinosa* growing in the garden. This tree, belonging to the primarily tropical family the Sapotaceae, is endemic to southwestern Morocco, and is a relic from the time when this area had a tropical climate. Argan is probably the single most important plant of this region; at the heart of much of the local culture and economy, being used for culinary and health purposes, washing, feeding animals, fuel, and in much of the local traditional architecture. The area of Argan forest has decreased by around half over the last century due to agricultural intensification. It now covers about 828,000ha, and the Argan forest and surrounding area was declared a UNESCO Biosphere Reserve in 1998, as a means of promoting the protection and sustainable development of this area. Understandably, Argan would feature highly during our week, not just in our wildlife watching, but also in our meals and beauty regimes too!

Walking through the garden, we passed the filtration system for the 'grey water' from the hotel, which is used for irrigation of the many herbs, vegetables and fruit trees that would be putting an appearance in our meals over the coming days. A tangle of Sweet Potato *Ipomoea batatas* grew alongside the pools, and a couple of North African Water Frogs gazed at us blankly from the water. We spotted Speckled Wood and Greenish Black Tip butterflies, along with the first of an outrageous number of Painted Ladys we would see during the week, as Sardinian Warblers tutted and scolded in the scrub.

Setting off along the small neighbouring road, we spotted the first of the many spiny plants we would be finding; a useful adaptation in a heavily grazed landscape. These were the 'chicken-wire bush' *Launaea arborescens* with its small yellow flowers, and *Ziziphus lotus*, used as dead hedges around fields. Walking along a goat track through the Argan orchards, which were busy with chattering House Sparrows, we could also pick out the chaotic jumble of Serin song, with some fleeting views of this lovely streaked, yellow finch.

Along the track we found the leaves of Branched Asphodel *Asphodelus ramosus* with patches of fragrant, feathery-leaved Egyptian Lavender *Lavandula multifida*, the fine leaves of *Cladanthus arabicus* and the violet flowers of *Fagonia cretica*. Along the edges of the track we found both Nettle-leaved Figwort *Scrophularia peregrina* and Spring Garlic *Allium subvillosum* in flower, along with the large White-flowered Broom *Retama monosperma*, which was proving popular with the bees. As we were turning to retrace our steps, we spotted our first Moussier's Redstart; a male with the broad white head stripe and rich orange-red underparts. This beautifully-marked bird is an endemic resident breeder found in dry and rocky areas

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of northwest Africa (Morocco, eastwards to Tunisia). Then it was time for a delicious lunch of vegetable tajine on the terrace.

This afternoon, we took a walk to the local village Tighanimine El Baz (Valley of the Eagle), accompanied by local resident Ahmed. On the edge of the village we found a bank adorned with *Androcymbium gramineum*, a beautiful low-growing bulb in the Colchicum family. Here we also found the leaves of Sea Squill *Drimea maritima* and the endemic *Narcissus broussonetii*, with one or two still in flower, along with the unassuming *Dipcadi serotinum*. Passing along the south of the village we spotted the North African subspecies of Chaffinch feeding on the ground with Greenfinch and House Bunting, and Blue Rock Thrush and Southern Grey Shrike perched on houses and bushes. A Booted Eagle soared through the sky, as we headed for the now dry riverbed, full of Oleander *Nerium oleander*. After a short climb up a rocky track we reached a viewpoint over the village, with the fluty song of Black-crowned Tchagra drifting up from the valley below. Try as we might, we couldn't spot the skulking bush shrike but we did enjoy some good views of Crested Lark and Black Wheatear. Completing our loop of the village we spotted more butterflies for our day's list, which included False Mallow Skipper, Green-striped White and African Babul Blue, as we returned to the hotel for the evening.

After dinner we were treated to a traditional Berber tea ceremony, during which Hassan explained the significance of tea in Berber culture and hospitality, while he prepared mint and absinthe teas for us to try.

Day Three: 22nd December. Palais Salam. Taroudant. Tioute Palmery.

This morning we set out east to the town of Taroudant, passing through the important agricultural area of the Souss valley, with crops including oranges, bananas and salad crops spotted in fields and under polythene, ready for export to northern Europe.

Taroudant is often described as a mini-Marrakech with its mud-plastered ramparts dating back to the 16th Century, an imposing and impressive sight on arrival. Our trip started with a visit to the peaceful Hotel Palais Salam tucked away from the hustle and bustle, inside the town walls. Once a Saadi palace on the major caravan route between the north and the Sahara, the hotel's courtyards embody elements of traditional Islamic gardens as places of rest and reflection alongside running water and, importantly, a reminder of the promised paradise.

Following a stop for mint tea and orange juice, we looked at some of the interior rooms filled with Berber tile mosaics and Arabic wall designs. We explored the series of courtyards with their mixture of exotic plants, succulents and native trees, including a massive Rubber Plant *Ficus elastica*, pink-flowered Pink Ball Tree *Dombeya cayeuxii*, and flowering banana *Musa* sp. and Loquat *Eriobotrya japonica* before emerging back to the busy streets of Taroudant.

We took a short walk to the city walls, spotting Cattle Egrets and waves of Little Swifts whipping through the skies, their white rumps visible as they zoomed by, before heading to the centre of town. Our first stop was a small argan cooperative, where the hand extraction of oil from roasted 'nuts' using a grinding mill was demonstrated, before we had a run through of the products for sale, and the various ails they could treat. Next, we headed to the Berber Souk, exploring stalls heaving with dried fruits, preserved lemons, bunches of herbs, mountains of spices, biscuits and more. Leaving Taroudant, we continued south-east towards the edge of the Anti-Atlas, and the village of Tioute.

We had lunch at the palmery here, home to an amazing structure of metal and cables supporting huge twisted wisterias, with a pair of White Storks picking around in the sidelines. After lunch we set off on a walk through the palmery; the Date Palms *Phoenix dactylifera* growing here require a constant source of water, and a network of irrigation channels cross the site to supply their demands. The dates produced by this palm are harvested from September and stored for later sale (in season at Christmas in the UK) or used as a source of food for local communities. Along the channels we found Maidenhair Fern *Adiantum capillus-veneris* and Brookweed *Samolus valerandi* growing, with several North African Water Frogs hanging in the flowing water, and occasional flybys from Epaulet Skimmer dragonflies. Walking among the trees and cultivated fields we found Andalusian Birthwort *Aristolochia baetica* and Wild Asparagus

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Asparagus acutifolius, while Bath White and African Grass Blue butterflies were spotted in fields, across which we were occasionally brayed at by indignant donkeys. We spotted a Laughing Dove feeding on the ground with Chaffinch, and a pair of vocal falcons looked good for wintering Lesser Kestrel as they whizzed through in bright sunlight. Dinner this evening contained an extra course of birthday cake and a quadrilingual rendition of 'happy birthday'!



Top - Atlas Kasbah. Middle - *Androcymbium gramineum*; Andalusian Birthwort *Aristolochia baetica*; *Narcissus broussonetii*. Bottom - Common Bulbul; North African Water Frog.

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Day Four: 23rd December. Souss Massa National Park. Oued Souss.

Following breakfast, we were met by Mohammed and a supporting cast of 4-wheel drive vehicles ready for our visit to Souss Massa National Park, south of Agadir. The National Park was established in 1991, and covers an area of almost 34,000 hectares of sand dunes, steppe, wetlands and argan forest. Souss Massa has particular significance for its colonies of Northern Bald Ibis, as well as being an important site for many other breeding and wintering birds. We were of course also here for the mammals! The 'Sahelo-Saharan megafauna' is one of the most endangered assemblages of large animals in the world, threatened by a combination of lack of grazing through competition with domestic livestock (primarily goats and camels), and over-hunting, with increasing numbers of high powered weapons now freely available across large swathes of their former range (such as Libya, Tunisia, Mali and Chad). Once widespread across the arid regions of North Africa, almost all the large mammals of the Sahara are now extremely rare in the wild - four important members of this megafauna have been 're-wilded' here in the Souss Massa National Park.

We drove through two large enclosures that form part of the captive-breeding programme here. In the 2,000ha Rokein reserve we found the handsome Addax, a large and ghostly pale antelope with long twisted horns. Addax are native to arid stony and sandy areas out in the Sahara proper, where they graze on a range of vegetation. In the wild they are critically endangered, with some last individuals possibly clinging on in Mauritania, Chad and Niger; a survey in 2016 of key habitat identified just three wild Addax. Fortunately captive populations including these in Morocco, mean the Addax still persists as a species, but its future in the wild at present is far from secure. Sharing the enclosure, were the much smaller and shier Dorcas Gazelle, with their beautiful lyre-shaped horns and intricately marked faces. These antelope too have declined across their North African range; however they are still doing reasonably well in the wild. Joining the antelope was the Red-necked Ostrich; this North African subspecies is the largest of the ostriches, making it the largest bird in the world. It is noticeably more colourful than the sub-Saharan birds, and we encountered several heavily pink-flushed males beginning to display; clearly spring was on the way!

Entering the next enclosure we met the third of our antelopes, and the largest, the beautiful Scimitar-horned Oryx with their ginger neck, tear-shaped face marking and swept back scimitar horns, in the nearby 1,200ha reserve of Arrouais. Like the Addax, the Scimitar-horned Oryx has not fared well, and was declared extinct in the wild in 2000. The population here at Souss Massa is now the largest single herd left on the planet. Scimitar-horned Oryx once grazed extensively across North Africa, migrating seasonally with the rains. There are now ambitious plans from Chad to re-establish this species in the wild, at its former stronghold in Ouadi Rimé-Ouadi Achim Game Reserve. In late summer 2016, the first individuals were released into the wild, with a calf born in September 2016 considered the first 'wild born' Scimitar-horned Oryx for over 30 years. The project aims to have a self-sustaining population of 500 animals within five years.

Alongside the megafauna, we spotted several Spur-thighed Tortoises enthusiastically seeking out shade, along with plentiful Crested Larks dashing along the ground or perching on rocks and posts. Recent rains had encouraged many plants to flower, in particular Field Marigold *Calendula arvensis* and *Heliotropium crispum*, with abundant leaves of Giant Fennel *Ferula communis* and Branched Asphodel, flowering this time, along with a small patch of the unusual *Nonea calycina*.

As we approached the coast with views to the dunes and the Atlantic Ocean, a large flock of Northern Bald Ibis was spotted circling and coming in to land. We headed out of the enclosure to nearby Tifnit Beach where the flock had settled along the shoreline. After carefully relocating behind the group of some 80 birds to avoid the glare of the sun, we were able to get an appreciation of these 'ugly birds' with the greens and purples in their plumage showing magnificently. Along the shore a Little Egret waded in the shallows and a White-breasted Cormorant flew by, but all attention was, understandably, on the ibis. Once widespread across southern Europe, North Africa and parts of the Middle East, the Northern Bald Ibis is now critically endangered; its decline due to various factors including pesticide poisoning, hunting, disturbance at their nest sites, and more recently; loss of their foraging habitat to coastal development. They reached a low of only around 100 birds by the 1990s. The last remaining Middle Eastern birds were a tiny colony near Palmyra in Syria, who migrated down via the Yemen to Somalia and Eritrea for the winter.

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These birds were doomed by the various conflict zones that make up their territory and are now almost certainly extinct. Thankfully, the Moroccan population has been a conservation success story with the population now over 600 individuals, split between two nesting areas; one to the north in Tamri, and here in the Souss Massa National Park.

Lunch was at a local coffee shop, which had the dual attraction of providing a wealth of ceramics, woodcraft, shoes, rugs and more, and we started our journey back north towards Agadir with some additional Moroccan wares! Our final stop of the day was the estuary at Oued Souss, spotting circling White Storks with a Black Stork in their midst as we drove. Approaching the water, a Peregrine was spotted perched on a log, contemplating its next move. Spread out through the water large groups of waders graded into one another; Greater Flamingo, Black-winged Stilt, Curlew and Ruff, with Common Sandpiper and Dunlin weaving around muddy edges. Moving a bit further along we found a large group of Avocets, joined by Grey Plover, along with an Osprey preening and bathing in the shallows, and a group of Glossy Ibis flying by, before it was time to head back to the Kasbah.



Top - Addax; Dorcas Gazelle; Scimitar-horned Oryx. Bottom - Northern Bald Ibis; *Nonea calycina*.

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Day Five: 24th December. Atlantic coast. Oued Tamri. Cap Rhir. Agadir Oufella.

We set off north this morning, towards Agadir, and along the Atlantic coast. The vegetation quickly began to change, with low-growing coastal steppe vegetation mixed with areas of succulent *Euphorbia* scrub. We were headed for the mouth of the Oued Tamri to check out bird activity before we turned our sights on the interesting plant communities in this area.

Disembarking at a windy estuary as a Zitting Cisticola darted overhead, we found a beach full of gulls; Yellow-legged, Lesser Black-backed, and good numbers of the smaller and more delicate-looking Audouin's. Using the telescope we were able to read a ring on one of the Audouin's Gulls, which had been ringed as part of a research project in Doñana National Park in Spain.

Making our way along the sandy beach towards the lagoon, we spotted an Osprey sitting on the sandbar. Whether it was the presence of a bird of prey or the wind, the lagoon was very quiet, with just the odd snoozing Ruddy Shelduck, Grey Heron and Cormorant, along with a couple of dark-capped Moroccan Wagtails picking along the beach. We spotted a couple of new plants growing in the sand here including Sea Spurge *Euphorbia paralias* and the sprawling yellow Cretan Bird's-foot-trefoil *Lotus creticus*, before a large herd of Dromedaries was driven down to the water and past us along the beach.

Heading back south we stopped just beyond Cap Rhir to explore the *Euphorbia*-dominated communities we had passed earlier. This plant community here is unique to the south-west Morocco coastline, down into coastal Mauritania and across to the Canary Islands. They are a botanical link between this part of Morocco and the flora of the North Atlantic Islands, collectively termed the Macaronesian flora. In the geological past this flora would have been more widespread on the mainland; becoming confined to these climatically favourable areas during recent cycles of glaciation.

Vegetation here was dominated by a mixture of three succulent species - the umbrella-forming lime-green shrubby *Euphorbia regis-jubae* (found here and in the Canary Islands), the cactus-like *Euphorbia officinarum* (found in southern Morocco and down to Mauretania), and the succulent groundsel *Kleinia anteuphorbium* (endemic to Morocco). Among these succulents were a number of other interesting plants including the yellow-flowered *Astericus imbricatus* (another Moroccan endemic), the saltwort *Salsola oppositifolia*, the almost translucent flowers of *Paronychia argentea*, a small patch of the purple-flowered sea-lavender *Limonium mucronatum* and the sticky-leaved Yellow Restharrow *Ononis natrix*. We also found a couple of spikes of the parasitic *Cynomorium coccineum* emerging out of the sand. A couple of intrepid volunteers established that the rotting flesh smell it uses to attract pollinating flies was not yet fully mature, and it was currently akin to a mild stinkhorn fungus!

A tiny Moroccan Lizard-toed Gecko and several yellow *Buthus* sp. scorpions were found sheltering under rocks, and as we sat down to lunch, the wonderfully marked Busack's Fringe-toed Lizard was spotted scuttling through the vegetation. We were also treated to several small groups of Northern Bald Ibis flying over as we explored; much shorter and thicker necked, and without the projecting toes of their cousins the Glossy Ibis.

Making our way back, we had a final stop at the ruined Agadir Oufella, much of which was destroyed in the earthquake that struck the city in 1960. This promontory provided views over the fishing port, the city itself, and on to Souss Massa National Park, the High Atlas and Anti-Atlas. It was then time to retreat to the Atlas Kasbah ahead of a very special evening...

We were met at seven by Hassan and Fadna who gave us some bread fresh from the outdoor oven, along with a delicious cucumber and yoghurt drink, before we were led into a dining room transformed into a Berber salon. There was an opportunity to immerse ourselves in the culture of our hosts and learn about everything from health and beauty, to the beautiful Arabic script, all to a backdrop of traditional music provided by local musicians, as we enjoyed a festive evening with a Berber twist.

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Day Six: 25th December. Anti-Atlas. Ait Baha. Laatik.

Heading south-east, this morning we took the road to Ait Baha, one of the larger towns in the western Anti-Atlas to explore the plants and landscapes of this region. The Anti-Atlas contains some of the oldest rocks in the world; an ancient mountain range that started to form 300 million years ago, and once rivalled the Himalayas in height. Today, they are much eroded, the highest peaks reaching between 2,500 and 2,700m. A major feature of the Anti-Atlas is the highly folded rock strata, numerous valleys and rounded peaks, with many villages still living their traditional lifestyles.

As we approached across the river valley of the Souss, we made our first stop to explore a field filled with Apple of Sodom *Calotropis procera*, a tall plant with greyish leaves. This highly poisonous plant is the larval foodplant of the Plain Tiger, a butterfly related to the well-known Monarch. The caterpillars are able to tolerate and sequester the plant's steroidal heart poison, and we managed to spot two of these resilient larvae as they chomped away.

We stopped in Ait Baha for a coffee or two, leaving with an impressive ratio of new shoes to travellers, following a visit to its cobblers' market, before continuing our climb into the High-Atlas. Soon, we were spotting Barbary Ground-squirrels scuttling among the rocks, along with Bibron's Agama basking in the burgeoning sun. We were headed for the village of Laatik to visit an ancient *agadir*, a fortified grain store dating from the time when the local Berber tribes still fought each other (this particular *agadir* is some 770 years old). These buildings are typical of the Anti-Atlas and other could be spotted during the day, in various states of repair, perched on high ground with commanding views.

We were shown inside by the local trusted custodian to see the structure of the *agadir* with its storage rooms accessed by stepping stones, some doors still bearing the black cross to fend off the advances of the beautiful but dangerous *Aisha Kandicha* of Moroccan folklore. A number of Spur-thighed Tortoises roamed around the *agadir*, daubed with red or green paint to highlight their presence; it is one of the beliefs here that tortoises will protect your homes from scorpions. House Buntings were also busy drinking, feeding and bathing around the small well. Outside the *agadir* we found the hairy purple-flowered *Echium horridum* and a number of large grain threshes. These are still in use; every April a team of six donkeys thresh the barley harvest, a proportion of which is always donated to those in need.

Starting our journey back there was time for a stop to explore an area of rocky hillside to soak up the landscape of Argan and the beautifully tight cushions of the *echinarum* form of *Euphorbia officinarum* (considered by some to be a distinct subspecies). The Branched Asphodel was joined here by the smaller and finer leaved Hollow-stemmed Asphodel *Asphodelus fistulosus*, along with more *Androcymbium gramineum*, French Lavender *Lavandula dentata* and White Mignonette *Reseda alba*. Continuing our journey home we spotted the endemic yellow-flowered *Hesperolaburnum platycarpum*, whose stems are used to make Berber baskets, before another chance for coffee (or *nous nous*) in Ait Baha.



Above - House Bunting; Plain Tiger; Branched Asphodel *Asphodelus ramosus*.

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Day Seven: 26th December. High Atlas. Cascades du Imouzzzer.

Driving north on the coast road, our route cut inland to explore the foothills of the western High Atlas. Our first stop was within a narrow river gorge at around 200m, the vegetation still very much dominated by Argan trees, with *Euphorbia officinarum* on the dry slopes, alongside Wild Olive *Olea oleaster* and the interesting African Wolfbane *Periploca angustifolia*. Again, we heard the song of the Black-crowned Tchagra drifting through the air, as it skulked among the vegetation, before we spotted a Small Copper basking on the rocks, and both Moussier's and Black Redstart hopping among the vegetation.

Moving a little further we stopped next to explore the open woodland of the Thuja *Tetraclinis articulata*. This conifer is primarily found in Morocco and Algeria, with two small relict populations in Malta and Andalucia. Morocco holds 600,000ha of the 1Mha world population of the tree. Well-known for its unusual grain and rich colour, tetraclinis wood is handcrafted to produce ornaments and kitchen utensils; its large burrs a result of 'self-coppicing', a way of coping with wildfires and overgrazing, are much prized by wood-carvers. The resin, sandarac gum, is used to make a liquor taken as a remedy for cramps, insomnia and difficult childbirths. The name refers to the cones, which are split into four, and its finely divided foliage. We also found the interesting purple-flowered *Globularia alypum* flowering here.

Carrying on our way, we reached the palmery at the start of Paradise Valley, spotting a Kingfisher perched on the rocks, its colours showing fantastically in the light, with a Grey Wagtail calling as it flew by. A little further still along the winding roads, through valleys full of blossoming Almond *Prunus dulcis*, and we spotted two raptors soaring on the thermals; Bonelli's Eagles, an adult with the clean white body streaked with black, and a younger buff-coloured bird. We continued on to our lunch stop below the Cascades du Imouzzzer, which were not cascading!

Turning for home we made a stop to check out a white-flower spotted on the hillside above us; a display of several *Narcissus cantabricus*. We also had the chance to enjoy the shrubby milkwort *Polygala balensae* here, in full flower with its rich purple and yellow flowers adorning the road verges, alongside the bright yellow broom *Genista tricuspidata*. We drove along a valley at about 1,300m where the south-facing side was dominated by the glaucous fans of the Dwarf Fan Palm *Chamaerops humilis* var. *cerasifera*, whilst on the cooler north facing side, different vegetation was present, including stunted looking Kermes Oaks *Quercus coccifera*. This is a species of the Mediterranean but can be found this far south only in the cooler and more amenable climate found at altitude in the High Atlas. We spotted several large and bright Cleopatra butterflies here, along with Thekla Lark, but despite plenty of promising-looking scrub could only track down Sardinian Warbler and Blackbird.

One final stop was at a viewpoint over the High Atlas at around 1,550m, where we found a steppe-like dwarf shrub vegetation growing on what was almost limestone pavement. Yet more *Polygala balensae* was present, along with *Narcissus cantabricus* at ground-level and the unassuming flowers of *Phagnalon saxatile*. We also spotted several Moroccan Day Geckos basking on the rocks here, before we made our way back out of the mountains. Following our final dinner, there was time to appreciate the stars from the roof terrace before retiring for the night.

Day Eight: 27th December. Return to the UK.

This morning there was time for a leisurely breakfast, and to enjoy the gardens of the Atlas Kasbah, before one final tea on the terrace, and an opportunity to thank Mohammed for his driving during the week, and Hassan and Hélène, along with M'Bark, Hussein, Rachida, Fadna and the rest of the staff for their warm welcome during our stay. Thankfully no drones were encountered during our return journey...

Thank you to all the travellers for joining us in Morocco - I hope it was the breath of fresh air you were seeking this festive season!

Laurie Jackson
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Top - goat in Argan. Middle - *Narcissus catabricus*; *Polygala balensae*; Moroccan Day Gecko; *Globularia alypum*.
Bottom - view across the High Atlas.

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Morocco December 2018: some highlights

E - endemic species; P - planted; H - heard not seen

	SCIENTIFIC NAME	ENGLISH NAME	NOTES
FERNS			
Pteridaceae (Maidenhair Fern Family)			
	<i>Adiantum capillus-veneris</i>	Maidenhair Fern	Along the water channels at Tioute palmery
ANGIOSPERMS: DICOTYLEDONS			
Aizoaceae (Ice Plant Family)			
P	<i>Carpobrotus acinaciformis</i>	Hottentot Fig	Atlas Kasbah garden, roadsides
Amaranthaceae (Amaranth Family)			
	<i>Chenopodium murale</i>	Nettle-leaved Goosefoot	Atlas Kasbah garden
	<i>Salsola oppositifolia</i>	a saltwort	shrub with pink papery disc flowers at Cap Rhir
Anacardiaceae (Sumac Family)			
	<i>Pistacia lentiscus</i>	Mastic	Cap Rhir, higher up in the High Atlas
Apiaceae (Carrot Family)			
	<i>Ferula communis</i>	Giant Fennel	Souss Massa National Park, Anti-Atlas
Apocynaceae (Dogbane Family)			
	<i>Calotropis procera</i>	Apple of Sodom	The large Saharan shrub, food plant of the Plain Tiger
	<i>Nerium oleander</i>	Oleander	Tighanimine El Baz, dry river beds
	<i>Periploca angustifolia</i>	African Wolfbane	Clambering vine/bush
Aracaceae (Arum Family)			
	<i>Arisarum simorhinum</i>	a friar's cowl	Leaves at the High Atlas viewpoint
Aristolochiaceae (Birthwort Family)			
	<i>Aristolochia baetica</i>	Andalusian Dutchman's Pipe	Tioute Palmery, food plant of the Spanish Festoon
Asteraceae (Daisy Family)			
E	<i>Asteriscus (Nauplius) imbricatus</i>		Fragrant leaves, bush around Cap Rhir
	<i>Calendula arvensis</i>	Field Marigold	Various locations
	<i>Catananche arenaria</i>		Tighanimine El Baz
	<i>Cladanthus arabicus</i>		Feathery aromatic leaves along the goat track
E	<i>Kleinia anteuphorbium</i>		The succulent shrubby 'groundsel' around Cap Rhir
	<i>Launaea arborescens</i>		The 'chicken wire bush' with yellow flowers
	<i>Phagnalon saxatile</i>		The High Atlas viewpoint
Bignoniaceae (Bignonia Family)			
P	<i>Tecoma stans</i>	Yellow Trumpetbush	Atlas Kasbah garden
Boraginaceae (Borage Family)			
	<i>Echium horridum</i>		The hairy purple-flowered bugloss at Laatik
E	<i>Echium velutinum</i>		The blue-flowered bugloss at Cap Rhir
	<i>Heliotropium crispum</i>		Souss Massa National Park, Laatik
	<i>Nonea calycina</i>		Souss Massa National Park
Brassicaceae (Cabbage Family)			
	<i>Sinapis arvensis</i>	Charlock	Various locations
Cactaceae (Cactus Family)			
P	<i>Austrocylindropuntia subulata</i>		The cylindrical cactus, introduced from Peru
P	<i>Opuntia ficus-indica</i>	Fig of the Berbers/Prickly Pear	An invasive domesticated cactus originating in Mexico and common around villages
Capparaceae (Caper Family)			
P	<i>Capparis spinosa</i>	Caper Bush	Tioute Palmery
Caryophyllaceae (Pink Family)			
	<i>Paronychia argentea</i>		Cap Rhir
	<i>Spergularia fimbriata</i>	a sandspurrey	Sandspurrey along the goat track

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	Cistaceae (Rock Rose Family)		
	<i>Helianthemum lippii</i>	a rock rose	Anti-Atlas
	Convolvulaceae (Bindweed Family)		
P	<i>Ipomoea batatas</i>	Sweet Potato	Atlas Kasbah garden
	Crassulaceae (Stonewort Family)		
	<i>Umbelicus rupestris</i>	Navelwort	The High Atlas viewpoint
	Cucurbitaceae (Gourd Family)		
	<i>Bryonia dioica</i>	White Bryony	Tioute Palmery
	Cynomoriaceae (Desert Thumb Family)		
	<i>Cynomorium coccineum</i>		The parasitic plant in sandy soil at Cap Rhir
	Euphorbiaceae (Spurge Family)		
	<i>Euphorbia officinarum</i>	a spurge	The 'cactus'-like succulent around Cap Rhir (var <i>officinarum</i> , growing tall, columnar, endemic to Morocco_ and in the Anti Atlas (var <i>echium</i> , growing in dense cushions, also found in Mauretania)
	<i>Euphorbia paralias</i>	Sea Spurge	Oued Tamri
	<i>Euphorbia regis-jubae</i>	a spurge	Lime green, shrub-forming Euphorbia around Cap Rhir, endemic to Morocco and the Canary Islands
	<i>Mercurialis annua</i>	Annual Mercury	Tioute Palmery
	<i>Ricinus communis</i>	Castor Bean	Roadsides
	Fabaceae (Pea Family)		
	<i>Acacia ehrenbergiana</i>	Desert Acacia	The spiny bush around the edges of Souss Massa National Park
	<i>Ceratonia siliqua</i>	Carob	Atlas Kasbah garden, Tioute Palmery
	<i>Genista tricuspidata</i>		The yellow 'broom' all over the High Atlas hillsides
E	<i>Hesperolaburnum platycarpum</i>		The common 'gorse' in the Anti-Atlas - stems used for basket weaving
	<i>Lotus creticus</i>	Cretan Bird's-foot-trefoil	Oued Tamri
	<i>Lupinus cosentinii</i>	Sandplain Lupin	Leaves in the Apple of Sodom field
	<i>Ononis natrix</i>	Yellow Restharrow	Smelly, sticky leaves, various locations
	<i>Retama monosperma</i>	White-flowered Broom	Various locations, popular with bees
	Fagaceae (Beech Family)		
	<i>Quercus coccifera</i>	Kermes Oak	The spiky-leaved shrubby oak in the High Atlas
	<i>Quercus ilex</i>	Holm Oak	High Atlas
	Geraniaceae (Geranium Family)		
	<i>Erodium cf touchyanum</i>		Laatik
	Lamiaceae (Mint Family)		
	<i>Lavandula dentata</i>	French Lavender	The 'standard' variety in the High Atlas
	<i>Lavandula dentata</i> var. <i>candicans</i>	Grey French Lavender	Velvety grey leaves, around Cap Rhir
	<i>Lavandula multifida</i>	Egyptian Lavender	Pinnate leaves, medium-large flowers, the goat track, Tioute Palmery
	<i>Vitex agnus-castus</i>	Chaste Bush	Along the river bank in Paradise Valley, used to make a tea to control the urges of monks
	Lythraceae (Loosestrife Family)		
P	<i>Punica granatum</i>	Pomegranate	Various locations
	Malvaceae (Mallow Family)		
P	<i>Dombeya cayeuxii</i>	Pink Ball Tree	Pink-flowered tree in Palais Salalm
P	<i>Hibiscus rosa-sinensis</i>	Chinese Hibiscus	Atlas Kasbah garden
	Moraceae (Fig Family)		
	<i>Ficus carica</i>	Common Fig	Palais Salalm, Tioute Palmery, Imouzzar

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P	<i>Ficus elastica</i>	Rubber Plant	Palais Salalm
P	<i>Ficus lyrata</i>	Fiddle-leaf Fig	Palais Salalm
Musaceae (Banana Family)			
	<i>Musa</i> sp	banana	Palais Salalm
Nyctaginaceae (Four O'Clock Family)			
P	<i>Bougainvillea</i> spp.		Various locations
Oleaceae (Olive Family)			
	<i>Olea europaea</i>	Common Olive	Atlas Kasbah garden
	<i>Olea oleaster</i>	Wild Olive	High Atlas
Plantaginaceae (Plantain Family)			
	<i>Globularia alypum</i>		High Atlas
E	<i>Linaria bipartita</i>	Cloven-flowered Toadflax	Purple toadflax along the goat track
Plumbaginaceae (Leadwort Family)			
E	<i>Limonium mucronatum</i>	a sea-lavender	Cap Rhir
Polygalaceae (Milkwort Family)			
	<i>Polygala balansae</i>		The shrubby milkwort in the High Atlas, near-endemic with one other population near Granada in Spain
Primulaceae (Primrose Family)			
	<i>Samolus valerandi</i>	Brookweed	Along the water channels at Tioute palmery
Resedaceae (Mignonette Family)			
	<i>Reseda alba</i>	White Mignonette	Anti-Atlas
Rhamnaceae (Buckthorn Family)			
	<i>Ziziphus lotus</i>		Very spiny hedging bush, food plant of the Common Tiger Blue
Rosaceae (Rose Family)			
	<i>Eriobotrya japonica</i>	Loquat	Palais Salalm
	<i>Prunus dulcis</i>	Almond	Blossoming in the High Atlas
Salicaceae (Willow Family)			
	<i>Populus alba</i>	White Poplar	Tioute Palmery
Sapotaceae (Milkwood Family)			
E	<i>Argania spinosa</i>	Argan	Various locations
Scrophulariaceae (Figwort Family)			
P	<i>Myoporum laetum</i>	Mousehole Tree	The white-flowered plant planted as a hedge around the hotel garden, introduced from New Zealand
	<i>Scrophularia peregrina</i>	Nettle-leaved Figwort	Flowering along the goat track
Solanaceae (Nightshade Family)			
	<i>Lycium inbricatum</i>		Cap Rhir
	<i>Nicotiana glauca</i>	Tree Tobacco	
	<i>Solanum nigrum</i>	Black Nightshade	Laatik
Urticaceae (Nettle Family)			
	<i>Urtica pilulifera</i>	Roman Nettle	Roadsides
Zygophyllaceae (Caltrop Family)			
	<i>Fagonia cretica</i>		Violet flowers, various locations
ANGIOSPERMS: MONOCOTYLEDONS			
Amaryllidaceae (Amaryllis Family)			
	<i>Allium subvillosum</i>	Spring Garlic	The allium along the goat track
E	<i>Narcissus broussonetii</i>		Tighanimine El Baz
	<i>Narcissus cantabricus</i>		High Atlas
Arecaceae (Palm Family)			
	<i>Chamaerops humilis</i> var. <i>cerifera</i>	Dwarf Fan Palm	The glaucous form in the High Atlas
	<i>Phoenix dactylifera</i>	Date Palm	A common roadside tree, some wonderful old trees in the palmery at Tioute

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Asparagaceae (Asparagus Family)			
	<i>Asparagus acutifolius</i>	Wild Asparagus	Tioute Palmery
	<i>Dipcadi serotinum</i>		Tighanimine El Baz
Asphodelaceae (Asphodel Family)			
	<i>Asphodelus fistulosus</i>	Hollow-stemmed Asphodel	Anti-Atlas
	<i>Asphodelus ramosus</i>	Branched Asphodel	Various locations
	<i>Drimia (Urginea) maritima</i>	Sea Squill	Various locations - tulip-like leaves, not flowering
Colchicaceae (Colchicum Family)			
	<i>Androcymbium gramineum</i>		Various locations
Poaceae (Grass Family)			
	<i>Arundo donax</i>	Giant Reed	Various locations
GYMNOSPERMS: CONIFERS			
Cupressaceae (Cypress Family)			
P	<i>Cupressus sempervirens</i>	Mediterranean Cypress	Atlas Kasbah garden
	<i>Juniperus phoenicea</i>	Phoenicean Juniper	High Atlas
	<i>Tetraclinis articulata</i>	Thuja	Common higher up in the High Atlas
Pinaceae (Cypress Family)			
P	<i>Pinus halepensis</i>	Aleppo Pine	Planted around Immouzer

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BIRDS										
Family Ratidae (Ratites)										
	Red-necked Ostrich	<i>Struthio camelus camelus</i>				◆				
	This sub-species is now Critically Endangered : once widespread across northern Africa, they now survive in the wild just in Cameroon, Chad and Central African Republic, as well as in a couple of National Parks in Tunisia where, like here, they have been reintroduced. This subspecies has also been introduced to a national park in Saudi Arabia and to Israel, within the range of the now-extinct <i>syriacus</i> subspecies.									
Family Anatidae (Ducks, Geese, Swans)										
	Ruddy Shelduck	<i>Tadorna ferruginea</i>					◆			
Family Phasianidae (Pheasants, Partridges)										
	Barbary Partridge	<i>Alectoris barbara</i>							◆	◆
Family Phalacrocoracidae (Cormorants)										
	Great Cormorant	<i>Phalacrocorax (carbo) carbo/sinensis</i>				◆	◆			
	White-breasted Cormorant	<i>Phalacrocorax (carbo) maroccanus</i>				◆	◆			
Family Ciconiidae (Storks)										
	White Stork	<i>Ciconia ciconia</i>			◆	◆				
	Black Stork	<i>Ciconia nigra</i>				◆				
Family Threskiornithidae (Ibises, Spoonbills)										
	Glossy Ibis	<i>Plegadis falcinellus</i>				◆				
	Northern Bald Ibis	<i>Geronticus eremita</i>				◆	◆			
	Currently categorised as Critically Endangered , during the 2015 breeding season a record count of 116 nesting pairs was made, and by the end of 2015 the total wild population in Morocco was over 600 individuals, up from 433 at the end of 2013. Outside Morocco, around 100 birds live in semi-captivity at Birecik in Turkey. By 2015 just a single bird survived at the recently discovered but seemingly doomed colony near Palmyra in Syria, from where there has been no news since the civil war. A recently reintroduced population in southern Spain now numbers around 80 released birds, and the first breeding took place in 2008.									
Family Phoenicopteridae (Flamingoes)										
	Greater Flamingo	<i>Phoenicopterus roseus</i>				◆				

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	Family Pandionidae (Ospreys)									
	Osprey	<i>Pandion halietus</i>				◆	◆		◆	
	Family Accipitridae (Hawks, Eagles, Vultures)									
	Bonelli's Eagle	<i>Aquila fasciata</i>							◆	
	Booted Eagle	<i>Aquila pennata</i>		◆						
	Sparrowhawk	<i>Accipiter nisus</i>					◆			
	Family Falconidae (Falcons)									
	Peregrine	<i>Falco peregrinus</i>		◆		◆				
	Kestrel	<i>Falco tinnunculus</i>		◆	◆	◆	◆	◆	◆	◆
	Lesser Kestrel	<i>Falco naumanni</i>			◆			◆		
	Family Recurvirostridae (Avocets, Stilts)									
	Avocet	<i>Recurvirostra avosetta</i>				◆				
	Black-winged Stilt	<i>Himantopus himantopus</i>				◆				
	Family Scolopacidae (Sandpipers)									
	Dunlin	<i>Calidris alpina</i>				◆				
	Ruff	<i>Philomachus pugnax</i>				◆				
	Curlew	<i>Numenius arquata</i>				◆				
	Green Sandpiper	<i>Tringa ochropus</i>			◆					
	Common Sandpiper	<i>Actitis hypoleucos</i>				◆				
	Family Charadriidae (Plovers)									
	Grey Plover	<i>Pluvialis squatarola</i>				◆				
	Family Laridae (Gulls)									
	Black-headed Gull	<i>Chroicocephalus ridibundus</i>				◆				
	Audouin's Gull	<i>Ichthyaeetus audouinii</i>					◆			
	Yellow-legged Gull	<i>Larus michahellis</i>		◆	◆	◆	◆	◆	◆	◆
	Lesser Black-backed Gull	<i>Larus fuscus</i>					◆			
	Family Columbidae (Pigeons, Doves)									
	Rock Dove/Feral Pigeon	<i>Columba livia</i>		◆	◆	◆	◆	◆	◆	◆
	Woodpigeon	<i>Columba palumbus</i>				◆			◆	
	Collared Dove	<i>Streptopelia decaocto</i>		◆	◆	◆	◆	◆	◆	◆
	Laughing Dove	<i>Streptopelia senegalensis</i>			◆					
	Family Apodidae (Swifts)									
	Little Swift	<i>Apus affinis</i>			◆					
	Family Upupidae (Hoopoes)									
	Hoopoe	<i>Upupa epops</i>						◆		
	Family Alcedinidae (Kingfishers)									
	Kingfisher	<i>Alcedo atthis</i>							◆	
	Family Alaudidae (Larks)									
	Crested Lark	<i>Galerida cristata</i>		◆	◆	◆	◆	◆	◆	
	Thekla Lark	<i>Galerida theklae</i>						◆	◆	
	Family Hirundinidae (Swallows , Martins)									
	Barn Swallow	<i>Hirundo rustica</i>		◆			◆	◆	◆	◆
	Family Motacillidae (Pipits, Wagtails)									
	Grey Wagtail	<i>Motacilla cinerea</i>							◆	
	White Wagtail	<i>Motacilla (a.) alba</i>		◆	◆	◆	◆	◆	◆	◆
	Moroccan Wagtail	<i>Motacilla (a.) subpersonata</i>					◆	◆		
	The very-distinctive <i>subpersonata</i> form is endemic to Morocco, and is split by some authorities from the White Wagtail as <i>Motacilla subpersonata</i>									
	Family Muscicapidae (Flycatchers, Chats)									
	Black Redstart	<i>Phoenicurus ochruros</i>					◆		◆	
	Moussier's Redstart	<i>Phoenicurus moussieri</i>		◆			◆	◆	◆	◆
	Black Wheatear	<i>Oenanthe leucura</i>		◆	◆	◆	◆	◆		◆
	Blue Rock Thrush	<i>Monticola solitarius</i>		◆					◆	

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	Stonechat	<i>Saxicola torquata</i>				◆	◆	◆	◆	◆
	Family Turdidae (Thrushes)									
	Blackbird	<i>Turdus merula</i>		◆	◆	◆	◆	◆	◆	◆
	Family Sylviidae (Sylviid Warblers)									
	Blackcap	<i>Sylvia atricapilla</i>		◆	◆		◆			
	Sardinian Warbler	<i>Sylvia melanocephala</i>		◆	◆	◆	◆	◆	◆	◆
	Family Phylloscopidae (Leaf Warblers)									
	Common/Iberian Chiffchaff	<i>Phylloscopus collybita/ibericus</i>		H	◆	◆	◆		◆	
	Family Cisticolidae (Cisticolas)									
	Zitting Cisticola	<i>Cisticola juncidis</i>					◆			
	Family Paridae (Tits)									
	Great Tit	<i>Parus major</i>		◆			◆			◆
	Family Laniidae (Shrikes)									
	Southern Grey Shrike	<i>Lanius meridionalis</i>		◆	◆	◆	◆	◆	◆	◆
	Family Malaconotidae (Tchagras)									
	Black-crowned Tchagra	<i>Tchagra senegalus</i>		H					H	
	Family Pycnonotidae (Bulbuls)									
	Common Bulbul	<i>Pycnonotus barbatus</i>		◆	◆	◆	◆	◆	◆	◆
	Family Corvidae (Crows)									
	Maghreb Magpie	<i>Pica (pica) mauritanica</i>		◆	◆	◆	◆	◆	◆	◆
	The distinctive <i>mauritanica</i> form from North Africa has bare blue skin around the eye, smaller white shoulder patches, a matt black (rather than oily glossy black) tail and seems smaller bodied and longer tailed than the Eurasian Magpie, from which it is split by some authorities as <i>Pica mauritanica</i> .									
	Family Sturnidae (Starlings)									
	Spotless Starling	<i>Sturnus unicolor</i>			◆	◆	◆	◆	◆	◆
	Family Passeridae (Sparrows)									
	House Sparrow	<i>Passer domesticus</i>		◆	◆	◆	◆	◆	◆	◆
	Family Fringillidae (Finches)									
	North African Chaffinch	<i>Fringilla coelebs africana</i>		◆	◆	◆		◆		
	Greenfinch	<i>Carduelis chloris</i>		◆	◆	◆		◆	◆	◆
	Linnet	<i>Carduelis cannabina</i>					◆	◆	◆	
	Serin	<i>Serinus serinus</i>		◆		◆		◆	◆	
	Family Emberizidae (Buntings)									
	House Bunting	<i>Emberiza sahari</i>		◆	◆			◆	◆	
	Cirl Bunting	<i>Emberiza cirlus</i>		H			◆	◆		

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AMPHIBIANS										
	North African Water Frog	<i>Pelophylax saharica</i>		◆	◆					
REPTILES										
	Spur-thighed Tortoise	<i>Testudo graeca soussensis</i>		◆		◆		◆		
	Moorish Terrapin	<i>Mauremys leprosa saharica</i>			◆					
	Moorish Gecko	<i>Tarentola mauretanica</i>							◆	
E	Moroccan Lizard-toed Gecko	<i>Saurodactylus brosseti</i>					◆	◆		
E	Moroccan Day Gecko	<i>Quedenfeldtia trachyblepharus</i>							◆	
	Bibron's Agama	<i>Agama impalearis</i>						◆		
	Busack's Fringe-toed Lizard	<i>Acanthodactylus (pardalis) busacki</i>					◆	◆		
MAMMALS										
	Dromedary	<i>Camelus dromedarius</i>			◆	◆	◆	◆	◆	
	Dorcas Gazelle	<i>Gazella dorcas</i>				◆				
	Currently categorised as Vulnerable by the IUCN, suffering a decline of more than 30% in the last 20 years. Found throughout the Sahel and Sahara, from Morocco to Djibouti and extending up the Red Sea coast into southern Israel. Threatened by over-hunting and loss of habitat through over-grazing.									
	Addax	<i>Addax nasomaculatus</i>				◆				
	Currently categorised as Critically Endangered by the IUCN. Once found throughout the Sahel and Sahara, Addax have suffered from over-hunting and loss of habitat through over-grazing: the total wild population may now be as few as 3 individuals, in the deserts between northern Niger and Chad. 70 animals were introduced to the enclosure at Souss Massa NP in the mid-1990s, and the population here probably now numbers around 600 individuals. A second managed population is present in Bou Hedma NP in Tunisia. These two populations are now being used for a re-introduction programme in Tunisia, with others planned for Morocco and the Mali/Mauritanian border.									
	Scimitar-horned Oryx	<i>Oryx dammah</i>				◆				
	Currently categorised as Extinct in the Wild by the IUCN. Once found throughout the Sahara and Sahel, the last wild populations were lost from Chad and Niger during the late 1980s: the last wild animals were seen in 1988. There are managed populations in fenced enclosures in Senegal and Tunisia, but the largest population is in Souss Massa NP, where around 250 animals can be found in the Arrouais enclosure. A reintroduction project is currently underway for the 78,000 km ² Ouadi Rimé-Ouadi Achim Game Reserve in central Chad, where the first wild calf for at least 30 years was born in late 2016. In common with the other antelopes, threatened by over-hunting and loss of habitat through over-grazing.									
	Barbary Ground Squirrel	<i>Atlantoxerus getulus</i>			◆			◆	◆	

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LEPIDOPTERA - Butterflies										
Family Hesperidae (Skippers)										
	False Mallow Skipper	<i>Carcharodus tripolina</i>		◆						
Family Pieridae (Whites)										
	Large White	<i>Pieris brassicae</i>		◆					◆	
	Bath White	<i>Pontia daplidice</i>		◆	◆	◆				
	Western Dappled White	<i>Euchloe crameri</i>		◆						
	Green-striped White	<i>Euchloe belemia</i>		◆						
	Greenish Black-tip	<i>Euchloe charlonia</i>		◆	◆	◆	◆	◆		
	Clouded Yellow	<i>Colias croceus</i>		◆		◆	◆	◆		
	Brimstone	<i>Gonepteryx rhamni</i>		◆						
	Cleopatra	<i>Gonepteryx cleopatra</i>							◆	
Family Lycaenidae (Blues, Coppers, Hairstreaks)										
	Small Copper	<i>Lycaena phlaeas</i>		◆					◆	
	Common Tiger Blue	<i>Taucus theophrastus</i>		◆						
	African Babul Blue	<i>Azanus jesous</i>		◆						
	African Grass Blue	<i>Zizeeria knysna</i>		◆	◆					
	Common Blue	<i>Polyommatus icarus</i>		◆						
Family Nymphalidae (Nymphs, Fritillaries, Browns)										
	Plain Tiger	<i>Danaus chrysippus</i>						◆		
	Red Admiral	<i>Vanessa atalanta</i>		◆			◆		◆	
	Painted Lady	<i>Vanessa cardui</i>		◆	◆	◆	◆	◆	◆	◆
	Speckled Wood	<i>Pararge aegeria</i>		◆	◆					
	Wall	<i>Lasiommata megera</i>		◆			◆			
LEPIDOPTERA - Moths										
Family Erebidae (Tigers, Tussocks)										
	a tiger moth	<i>Amata mogadorensis</i>			◆					
MANTODEA - Mantids										
	cf Mediterranean Mantid	cf <i>Iris oratoria</i>					◆			
ODONATA - Damselflies, Dragonflies										
	Epaulet Skimmer	<i>Orthetrum chrysostigma</i>				◆				
ORTHOPTERA - Crickets, Grasshoppers										
	Splendid Cone-headed Grasshopper	<i>Truxalis nasuta</i>			◆					
COLEOPTERA - Beetles										
	Darkling Beetle	<i>Blaps</i> sp.				◆				
HEMIPTERA - True Bugs										
	Oleander Seedbug	<i>Caenocoris nerii</i>		◆						
SCORPIONES - Scorpions										
	the small yellow scorpion	<i>Buthus</i> sp					◆	◆		
	the large black scorpion	<i>Hottentotta gentili</i>						◆		