# WILDLIFE TRAVEL



#	DATE	LOCATIONS AND NOTES
1	11th March	Evening arrival in Agadir transfer to Atlas Kashah
1	11 <sup>th</sup> March	Evening arrival in Agadir, transfer to Atlas Kasbah.
2	12 <sup>th</sup> March	Cap Rhir, Oued Tamri and Tighanimine El Baz.
3	13 <sup>th</sup> March	Souss-Massa National Park and Oued Souss.
4	14 <sup>th</sup> March	Oued Massa, transfer to Oulad Berhil.
5	15 <sup>th</sup> March	Aoulouz Gorge, Taliouine, Amerzgane area, transfer to Ouarzazate.
6	16 <sup>th</sup> March	Ouarzazate Reservoir, transfer to Boumalne Dades, Tagdilt Track.
7	17 <sup>th</sup> March	Dadès Gorge, Tagdilt Track.
8	18 <sup>th</sup> March	Imiter area, Erfoud area, transfer to Merzouga.
9	19 <sup>th</sup> March	Merzouga area.
10	20 <sup>th</sup> March	Merzouga area.
11	21 <sup>st</sup> March	Anti-Atlas, Mezguita, transfer to Ouarzazate.
12	22 <sup>nd</sup> March	High Atlas, Tizi n'Tichka, transfer to Oukaïmeden.
13	23 <sup>rd</sup> March	Oukaïmeden, transfer to Marrakech for evening flight back to UK.

## Leaders

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A gallery of photos from the trip is at https://www.flickr.com/photos/wildlifetravel/albums/72177720306967595

#### Day One: 11<sup>th</sup> March. Evening arrival in Agadir, transfer to Atlas Kasbah.

Our afternoon flight took us south from London Gatwick, across the Bay of Biscay, crossing Spain and Portugal, before meeting the Moroccan coast. Passing over the High Atlas, we descended over the agricultural plains around Agadir; a city of almost a million. Bags retrieved, we met up with our driver who whisked us through the Moroccan dusk and the outskirts of Agadir, to the foothills of the High Atlas for our first views of the Atlas Kasbah, home for the first few nights of our trip. After finding our rooms we had a dinner of goat tagine, followed by *briwats* (little pastries filled with almonds and honey), before settling in for our first night in Morocco.

#### Day Two: 12th March. Cap Rhir, Oued Tamri and Tighanimine El Baz.

With sunrise fairly late, there was just time to enjoy the Common Bulbul chorus on the terrace with the insect-like song of Cirl Bunting drifting up from below, before we made our way for our first Moroccan breakfast: a selection of fresh bread, *jben* (fresh cheese), pumpkin and orange jams, *amlou* (made from ground almonds, honey and argan oil), eggs and *dchicha* (cracked barley soup), washed down with coffee (spiced or otherwise) and mint tea.

Following an introduction to the holiday, which would take us east to Merzouga, some 400 miles away, with time in the High Atlas, Anti-Atlas, and the stony and sandy deserts of the Sahara, we set off into the sunny morning. Today was an opportunity to explore Morocco's Atlantic coast, but our first stop came whilst we were still in sight of the Atlas Kasbah, as we spotted a Barbary Ground Squirrel stood guard on a rock: these charismatic mammals would follow us on our journey, appearing in arid, rocky areas we passed. Jangled notes drew our attention into the Argan forest, where a bright yellow male Serin was singing, a chaotic song destined to become a familiar part of the soundtrack of our trip.

Continuing on around Agadir where swarms of Pallid Swifts swooped obligingly low, we struck north along the coast, with a shroud of fog obscuring views out to the Atlantic. We made our first stop close to Cap Rhir where low-growing coastal steppe vegetation grew alongside succulent *Euphorbia* scrub, giving rise to interesting plant communities that are unique to the south-west Morocco coastline, down into coastal Mauritania, and across to the Canary Islands (where closely-related species make up a very similar flora). These communities 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.

The towering spikes of *Cistanche phelypaea*, a yellow-flowered parasitic plant were particularly striking, as were the succulent *Euphorbias*, which formed a prominent part of the vegetation: the umbrella-forming, lime-green *Euphorbia regis-jubae* (found here and in the Canary Islands) and *Euphorbia officinarum* (found in southern Morocco and down to Mauritania) trying its best to convince us it was really a cactus. As we explored we found the succulent groundsel *Kleinia anteuphorbium* (endemic to Morocco), along with yellow-flowered daisies including the endemic *Asteriscus imbricatus*, *Andryala pinnatifida*, and *Anvillea garcinii* with its fragrant leaves.

There were plenty of Thekla's Larks singing, with Western Subalpine Warbler, Sardinian Warbler and Blackcap keeping us on our toes as they fidgeted between pockets of shrubs. A couple of male

Moussier's Redstarts finally obliged us with good views as they perched on *Euphorbias* to sing their squeaky song. These are one of the area's 'star birds', an endemic breeder in north-western Africa found high up in to the mountains.

Butterflies included the ubiquitous Greenish Black-tip, False Baton Blue with its chequered wing edges, and False Mallow Skipper, whose modest size and frenetic flight made it frustatingly tricky to follow. Some patient rock-turning finally yielded a yellow *Buthus* sp. scorpion, and among some concrete tunnels two Moorish Geckos were basking, decidedly less energetic than the heavily-spotted Margarita's Fringe-toed Lizard we had earlier spotted dashing between patches of vegetation.

Continuing north under an increasingly blue and sunny sky, we arrived at Oued Tamri. Walking up amongst the dunes we found a crowd of gulls on the beach, with Lesser Black-backed Gulls and Yellow-legged Gulls joined by a group of elegant Audouin's Gulls, some of which were sporting colourrings. Walking along the beach, past tufts of Sea Spurge and with Margarita's Fringe-toed Lizards scuttling ahead of us, we reached the shallow estuary. A group of Little Ringed Plovers busied themselves around the edge as a Black-winged Stilt stood motionless in the shallows. Single Common Sandpiper and Green Sandpiper flew over the water, whilst a Marsh Harrier watched on from the distant reeds. Along a small channel a pair of industrious Moroccan Wagtails were busy bringing in nesting material to a pile of woody debris. These are the local *subpersonata* sub-species of White Wagtail, which have a distinctive facial pattern and a considerable amount of black on the head.

Our attention was drawn to a group of large black birds circling above the hillside beyond: Northern Bald Ibis! Once widespread across southern Europe, North Africa and part of the Middle East, they were lost from most of their range as a result of poisoning from pesticides, hunting, disturbance at nesting sites, and more recently, loss of their foraging habitats to coastal development. Northern Bald Ibis reached a low of only around 100 birds by the 1990s, with the last remaining Middle Eastern birds, a tiny colony near Palmyra in Syria, who migrated down via the Yemen to Somalia and Eritrea for the winter. These birds are almost certainly extinct: doomed by the various conflict zones that make up their territory. There is positive news from the Moroccan population, with at least 708 individuals at a recent count, and 170 chicks fledged in 2019. An introduced population in southern Spain now numbers around 80 birds, with further small, managed colonies introduced to Germany and Austria. The Northern Bald Ibis was down-listed to Endangered in November 2018, after more than three decades categorised as Critically Endangered.

We counted up to 21 of these 'ugly birds' probing the ground and amongst shrubs for tasty morsels, before retracing our steps, stopping to watch a trio of Kentish Plovers dashing among the swash, with Gannets diving into the depths beyond. A short drive up the coast gave us the chance to enjoy the Northern Bald Ibis in better light, before we made our way back to the Atlas Kasbah, with time for a wander down the local goat track.

The birds were relatively quiet, although Serin and African Chaffinch were still singing enthusiastically, whilst Maghreb Magpies croaked and rattled deeper in the Argan forest. The Argan trees growing here are at the heart of much of the local cuture and economy, being used for culinary and health purposes, washing, feeding animals, fuel, and in much of the traditional architecture. Argan is

endemic to south-western Morocco and south-western Algeria, with the area of Argan forest decreasing by around half over the last century due to changing land-use, agricultural intensification and subsequent dessertification. It now covers around 828,000ha, and the Argan forest, and its surrounding area were declared a UNESCO Biosphere Reserve in 1998, as a means of promoting the protection and sustainable development of this area.

The chaffinches here, much paler than in the UK, were formerly considered to be the North African sub-species, but the International Ornithological Committee announced in February 2023 that the African Chaffinch will be one of five separate species split from Chaffinch on the next World Bird List published.

New butterflies spotted along the goat track included Scarce Green-striped White and the impressive Cleopatra, along with both Crimson Speckled and Pale Shoulder moths. Over dinner that evening another new bird made its appearance, as two House Buntings were spotted hopping around the terrace, a species that would become familiar for its readiness to cohabit with us!

The Atlas Kasbah was built with the objective of promoting responsible travel, both in terms of sustainable use of resources and environmental protection, and in showcasing Berber (Amazigh) culture and supporting local communities. After dinner there was time to visit the phyto-purification pools used to treat 'grey water' from the hotel and irrigate the the gardens, where a handsome Berber Toad had joned the North African Water Frogs, whilst Red-necked Nightjars could be heard calling faintly from somewhere in the Argan forest beyond.



Above: Moroccan Hairstreak (RSC).



Top to bottom: *Euphorbia officinarum*; Moorish Gecko; Barbary Nut *Moraea sisyrinchium*; *Cistanche phelypaea*.

#### Day Three: 13<sup>th</sup> March. Souss-Massa National Park and Oued Souss.

Following breakfast, we were met by a fleet of four-wheel drive vehicles, setting off south for our first visit to Souss-Massa National Park. 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 as a result of competition with domestic livestock (primarily goats and camels), and over-hunting, with increasing numbers of high-powered weapons freely available across large swathes of their former range (which includes 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, and four important members of this megafauna have been 're-wilded' in Souss-Massa National Park.

Little Swift, Hoopoe and Stone Curlew were all seen on the approach to the Park's visitor centre, where we were again met by the jangling song of Serins. A small pool was proving popular for bathing and drinking, with Greenfinch and African Chaffinch joining the diminutive Serins at the water's edge, whilst a Woodchat Shrike lurked in cover behind. Moorish Terrapins were strewn among the piles of rocks in the water, and Painted Ladies traversed the flowery grassland nearby, with a slender Coneheaded Grasshopper found sheltering in the shade of a bush, alongside the delicate Brown Bluebell.

It was then time to visit the first of the Park's enclosures, which forms part of the captive-breeding programme here: the 2,000ha Rokein reserve. Moussier's Redstart song joined the chorus, with both Wryneck and Black-eared Wheatear spotted by at least one of the groups, as small groups of Linnets upped the finch tally.

Our first 'megafauna' encounter was not with a mammal, but a bird: the Red-necked Ostrich, the North African sub-species of the Common Ostrich, and the largest living species of bird. The Red-necked Ostrich is noticeably more colourful than sub-Saharan birds and the males were sporting the sunburn-pink of the breeding season as they attempted to impress the more-muted females with their insistent displays.

We soon spotted our first Addax, a large and ghostly-pale antelope with long, twisted horns topped with a 'toupée' of brown hair. Addax are native to arid stony and sandy desert out in the Sahara proper, where they graze on a range of vegetation. At one time Addax would have been abundant across North Africa, however they are now Critically Endangered in the wild, with some last individuals possibly clinging on in Mauritania, Chad and Niger: a survey in 2016 of prime habitat identified just three wild Addax. Captive populations, including these in Morocco, mean the Addax still persists as a species, with reintroductions underway into the Sahara of Tunisia and Algeria, but its future in the wild is far from secure.

Passing one of the fenced corrals used for managing the animals, from where a pair of Little Owls glared, we reached a viewpoint with a surprise in store. Within a newly-erected aviary was a group of beautifully dark and cream-streaked Double-spurred Francolin. Related to partridges, the francolin have their main stronghold in West Africa, with a smaller, threatened population in Morocco

recognised as a distinct sub-species. Over the last few years the National Agency for Water and Forests in Morocco (ANEF) has been reintroducing Double-spurred Francolin to their former range, and the release of 120 birds to Souss-Massa National Park in December 2022 was the third of these releases.

Leaving the Rokein enclosure the impact of the increased grazing pressure brought about by the frequently passing herds of sheep, goats and camels was evident, before we entered the 1,200ha Arrouais reserve.

Almost immediately we spotted the largest of the three antelopes within the National Park: Scimitar-horned Oryx, a handsome beast with its ginger neck, tear-shaped face markings and swept-back horns. 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.

We also found large groups of the smaller and shyer Dorcas Gazelle with their lyre-shape horns and intrically marked faces and ears. These antelope of steppe and desert are found across North Africa however are considered Vulnerable, with the Moroccan sub-species showing a marked decline in recent decades.

There were plenty of migrating birds in evidence, including Wood Warbler, Western Subalpine Warbler and Tawny Pipit, with a scattering of Woodchat Shrikes and Southern Grey Shrikes (the north-west African sub-species of Great Grey Shrike) among the bushes. As we were watching the oryx a Bonelli's Eagle swept overhead, giving magnificent views, with Kestrels busily mating nearby, in preparation for a busy spring.

Following lunch with views over sand dunes out to the Atlantic, and accompanied by the song of Thekla's Lark, it was time to leave the National Park, spotting Bee-eaters flying alongside us and Cattle Egrets stalking amongst sheep as we drove.

Our final stop was the Oued Souss estuary where low numbers of Greenshank, Redshank and Common Sandpiper were joined by a large group of Sandwich Terns, with Common Terns and Mediterranean Gulls mingling among them. Sardinian Warblers scolded and dived within the coastal scrub, and a closeby Maghreb Magpie gave us the opportunity to appreciate its electric blue eye patch before we turned our attentions to the comical 'zit' display of an exuberant Zitting Cisticola.

#### Day Four: 14<sup>th</sup> March. Oued Massa, transfer to Oulad Berhil.

Back in the bus today, and back to Souss-Massa National Park, this time headed for Oued Massa at its southern end. As the built up area of Agadir receded into agricultural land and coastal steppe we spotted a ragged group of birds feeding close to the road. Our luck was in as we stopped to watch 21 Northern Bald Ibis relaxed and feeding, moving to within ten metres of us, before finally continuing on their way. After spotting a Booted Eagle flying over, it was then time for us to continue on to the beach at Plage Sidi R'bat to start our walk.

A Little Owl scowled from behind the bars of its favoured window-ledge haunt and we watched a Stonechat and Moussier's Redstart vying for ownership of a perch, as Laughing Doves chuckled from a nearby tree, before we began our walk down to the beach. The large expanse of sand before us was empty aside from a large group of Yellow-legged Gulls, Lesser Black-backed Gulls and Sandwich Terns. We flushed a pair of Barbary Partridge as we walked, which retreated noisily into the dune vegetation, before spotting a Blue Rock Thrush perched vigilantly on top of a digger bucket.

The dunes fringing the beach were rich in plants including more of the *Cistanche phelypaea* we had seen at Cap Rhir, along with the large and beautiful cream and maroon daisies of *Ismelia carinata*, and the creeping *Zygophyllum creticum*, its violet flowers beginning to close in the sun. A Beewolf carried off a hapless Honey Bee as we passed, bound for her nest in the sandy ground, and a gruesome end.

Reaching the estuary of Oued Massa, tantalising wisps of a fluting song finally led us to good, albeit brief, views of another North African speciality, the Black-crowned Tchagra, as a pair moved furtively through the vegetation. Along the river mouth were Moroccan Cormorants, Ruddy Shelduck and a small group of Spoonbill sweeping the water for food. The scrub below us reverberated with the song of Serin, Linnet and Goldfinch, and the Moussier's Redstarts were already busy with the business of nest-building, with a female spotted secreting material into a tree.

Alongside the 'usual' assortment of small blue butterflies, which generally included one or more of Lang's Short-tailed Blue, False Baton Blue, African Grass Blue and Long-tailed Blue, a Swallowtail was spotted egg-laying. Looking down on the river, we found a cluster of Flamingos and Glossy Ibis, with a nearby Osprey busy doing nothing on the shore. The bushes were bustling with birds, and in addition to the Sardinian Warblers and Western Subalpine Warblers, we found Western Bonelli's Warbler, as well as adding Chiffchaff to the list.

After lunch we started our journey east, passing the town of Taroudant, whose impressive mudplastered ramparts date back to the 16<sup>th</sup> Century, before reaching our base for the night in Oulad Berhil.

After settling into our rooms there was time for an exploration of the lanes around the hotel before dinner. Nighingale song drifted across the fields as a pair of Zitting Cisticolas tried to out-zit each other before returning to their respective hedgelines. A small puddle in the track was attracting a mixture of House Sparrows and Spanish Sparrows, and as we watched a surprise Brambling came down to join them for a drink. A quick check of the hotel garden after dinner found Berber Toads on the move, along with an African Green Toad.

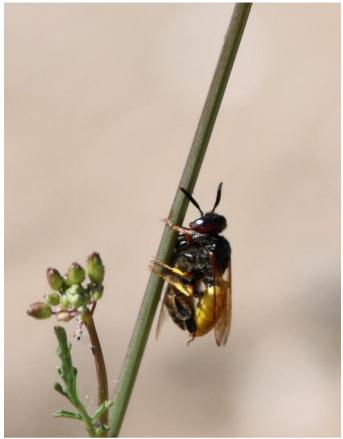






Top to bottom: Southern Grey Shrike; Tawny Pipit (RSC); young Addax.









Top to bottom: Northern Bald Ibis; Beewolf; Ismelia carinata; Moussier's Redstart (RSC).

# Day Five: 15<sup>th</sup> March. Aoulouz Gorge, Taliouine, Amerzgane area, transfer to Ouarzazate.

Today saw us continuing east, bound for Ouarzazate 'the door of the desert', watching the High Atlas and Anti-Atlas gradually draw closer on either side. We spotted both Little Swift and Pallid Swift as we drove, with fleeting views of a Black-shouldered Kite, quickly followed by a Marsh Harrier on the move.

Our first stop in the growing heat was Aoulouz Gorge, for a walk among the rocky slopes with views down to the Oued Souss below, the water levels low as a result of the Aoulouz dam nearby upriver. A Woodchat Shrike watched us from a tree, whilst House Buntings were singing overhead and at the top of the gorge a pair of Blue Rock Thrush surveyed the landscape.

The familiar Moroccan Orange-tips were joined by Desert Orange-tips with their black-bordered wings, and the brighter orange *aegeria* sub-species of Speckled Wood. Down below us two Nightingales sparred noisily with a Cetti's Warbler jumping in occasionally to compete for decibels.

On the distant cliffs we spotted a Lanner having an extended disagreement with a Booted Eagle. Scores settled, the Booted Eagle came closer overhead and was joined by a second bird, offering an excellent opportunity to see both the dark and pale morphs together. Making our way back to the bus Mohamed beckoned us over to the bridge, where he had spotted a Squacco Heron preening on the edge of the water.

We continued on our way, stopping for a tasty, saffron-infused lunch in Taliouine in the heart of Morocco's important saffron-growing region. Further on, there was time to explore the rocky steppe around Amerzgane with colourful Bibron's Agamas basking on flat-topped rocks, whilst Barbary Ground-squirrels bounded around, and a brief sighting of a Desert Grizzled Skipper.

As the landscape became increasingly arid and stony, Desert Wheatears started appearing along the roadside, soon joined by smart-looking White-crowned Wheatears, before an increasing number of Cattle Egrets and White Storks heralded our arrival to Ouarzazate and a well-earned rest.

## Day Six: 16<sup>th</sup> March. Ouarzazate Reservoir, transfer to Boumaine Dades, Tagdilt Track.

Back on the road again we started our morning exploring a scrubby area on the outskirts of Ouarzazate where Common Whitethroat and Sardinian Warbler hopped among the vegetation as House Buntings took their rightful place on the corners of nearby buildings. Several White-crowned Wheatears were perched on impossibly thin stems, with a juvenile bird doing its best to persuade us it was a Black Wheatear: the pair can be told apart by the predominantly white tail of the White-crowned, which lacks the broad, black terminal band.

Jubilant calls drew our eyes upwards, where a group of Blue-cheeked Bee-eaters shared airspace with Pallid Swift, Little Swift, Swallow, Red-rumped Swallow and House Martin. Vagrant Emperors surged around the vegetation and Moroccan Spiny-footed Lizards darted ahead of us as we walked.

Travelling a little further, we reached Ouarzazate Reservoir, where a handful of Great Crested Grebes bobbed on the water as cormorants dried off onshore. On the far side, an Osprey contemplated life,

and a solitary Mallard quacked from deep in cover. A trio of wheatears popped up as we made our way back to the bus: a pair of Desert Wheatears, accompanied by a Western Black-eared Wheatear.

Our journey led us along the 'route of 1,000 kasbahs' through the stunning Dadès Valley, economically significant for its production of thousands of tonnes of Damask Rose each year, before bringing us to Boulmalne Dades in time for lunch in its bustling centre.

After finding our hotel, there was time for a visit to the famous (or infamous) Tagdilt Track, which crosses a rubbish-strewn expanse of stony desert, the haunt of many a lark, sandgrouse and wheatear. Things were quiet on the bird-front, but we enjoyed some great views of a pair of prehistoric-looking Moroccan Spiny-tailed Lizards. Moving to another area, a now-familiar Desert Wheatear was joined by Crested Lark, Teminck's Lark and the striking Hoopoe Lark.

# Day Seven: 17<sup>th</sup> March. Dadès Gorge, Tagdilt Track.

We took a short drive north this morning to traverse the hairpin bends of Dadès Gorge, whose walls reach almost 500m in places. The sandstone and limestone here give rise to rich-red soils and fascinating geological formations such as the 'monkey's fingers' we passed, eroded into the side of the gorge.

A Rock Bunting swiftly disappeared at our first stop, but carrying on up the gorge we found a more promising area, with a Chiffchaff mooching among low scrub. We soon spotted an African Blue Tit, much brighter than its European cousins, before a small *Sylvia* warbler flitting between bushes revealed itself to be a Tristram's Warbler: a species of north-western Africa that breeds on scrubby mountain slopes and in desert wadis.

In the gorge below, a Grey Wagtail sang, as things heated up between the local Blue Rock Thrushes, with two males engaged in a prolonged chase as they disputed which rocky promontory belonged in which of their territories.

After a slightly breezy, but welcome hot drink on a terrace overlooking the gorge we had one more scan for Rock Buntings, picking up more Barbary Ground-squirrels in the process. Along the gorge sides some 'proper' Rock Doves stood out with their neat white rumps, their pale-grey plumage bright in the sunlight. Less easy to determine were the handful of grey-brown hirundines that whipped through, perhaps the local sub-species of Crag Martin, perhaps the elusive Rock Martin.

We turned back for lunch, as a light scatter of rain fell, before a second trip to the stony desert of Tagdilt Track, starting at some temporary pools, with no water to be seen. After a slow start we found a pair of Desert Wheatears, quickly followed by a pair of Trumpeter Finch investigating a small gully, before we enjoyed good views of several Temminck's Larks as they shuffled over the stony ground.

Continuing to the area surrounding a rubbish dump, we found a couple of Fat Sand-rats busy provisioning their burrows with vegetation, before a bird hopping around various piles of partially-sorted waste caught our attention: a Red-rumped Wheatear. We found two pairs of these large and rusty-rumped wheatears close together, with one of the females carrying feathers to line an unseen nest in a hollow.





Top to bottom: Booted Eagle (RSC); Desert Orange-tip (RSC); Barbary Ground-squirrel.



Top to bottom: White-crowned Wheatear; *Teucrium malenconianum*; Temminck's Lark (RSC); Redrumped Wheatear (RSC).

# Day Eight: 18<sup>th</sup> March. Imiter area, Erfoud area, transfer to Merzouga.

Today was a travel day to bring us to the village of Merzouga where the stony desert meets the windswept sand dunes of Erg Chebbi. We stopped at a quarry near the village of Imiter to check the rockface for Pharoah Eagle Owl. Whilst we weren't in luck with any owls, we did spot a Long-legged Buzzard watching us diligently from its dishevelled nest. A Black Wheatear sang above us, with Trumpeter Finches calling, similarly out of reach. As we waited in an open area surrounded by rock walls, a Maghreb Wheatear hopped onto a nearby rock and began to gently warble to himself, before a female flew in nearby, and the two embaked on an extended and energetic chase.

Further along on our journey we stopped near to Erfoud to check an area of scrub. Both Bar-tailed Lark and Desert Lark were seen scuttling over the stony ground, along with a handsome male Redstart and a Northern Wheatear. We passed patches of the impressive cushion-like shrub *Anabasis aretioides*, with the curled leaves of *Drimea noctiflora* emerging from a sandy seam, and a single spike of *Cistanche violaceae*, the purple-flowered relative of the desert hyacinth seen earlier in our trip.

As dusk approached we finally reached Merzouga and the sand dunes that had lifted the horizon for some time. After dinner amid the dunes, we retreated to a hotel close to the village's oasis.

## Day Nine: 19th March. Merzouga area.

We set off today in four-wheel drive vehicles on the look-out for larks, wheatears and whatever else we could find amongst the sand dunes and stony desert, punctuated by acacia, tamarisk and the straggly Apple of Sodom *Calotropis procera*.

We found Hoopoe Lark, Bar-tailed Lark and Desert Lark before large stones on the ground transformed before our eyes into a group of Spotted Sandgrouse with Crowned Sandgrouse also found nearby. As the wind picked up, the swirling sand was mesmerising. We stopped in an area of low dunes and scrub, with a Fennec Fox retreating quickly out of sight. The whipped up sand made our search among the dunes tricky, but before long an African Desert Warbler was seen sitting low in the vegetation, giving us plenty of time to admire its desert-ready look through the haze.

Desert Wheatear, Northern Wheatear and Short-toed Lark were added to the tally, along with several Brown-necked Ravens flying powerfully by and a Marsh Harrier sheltering in the shadow of a bush, looking decidedly unhappy about the strength of the wind.

With the help of a local woman we visited a patch of stony ground where two Egyptian Nightjars were roosting, their excellent camouflage disrupted only by the wind ruffling their feathers. After several fleeting glimpses earlier in the day, our trip ended with good views of a Desert Sparrow amongst the branches of a tree before it flew onto a nearby building.

# Day Ten: 20<sup>th</sup> March. Merzouga area.

Within the tamarisk at the front of the hotel, an olivaceous warbler and a Western Orphean Warbler busied themselves as we set out for a short wander to the local oasis, with broad beans, onions, carrots, alfalfa and barley growing under the shade of almond and date palms. Laughing Doves and Collared Doves competed from the trees, and there were Hoopoes aplenty calling and strutting along the paths as we wandered. Subalpine Warblers gently ticked from the cover of bushes and a single

Isabelline Wheatear was found alongside several Northern Wheatears dotted around the oasis, bumping our wheatear tally up to seven.

Returning to our hotel, where a Black Wheatear and Redstart had a brief skirmish before returning to their respective corners, whilst a House Bunting sang nearby. After lunch, we visited some local Gnawa musicians. Gnawa are an ethnic group whose origins are in the west African Ghana Empire (now Senegal, Burkina Faso, Gambia, Mauritania and Mali), and whose ancestors were brought to Morocco as slaves. Their music, which combines heavy *qraqab* castanets, a *sinter* lute and large *tbel* drums with chanting and dance, is now rightly celebrated.

We next visited a dry lake. With the sun heating up it was fairly quiet, with a single Willow Warber and Subapine Warbler hopping among the tamarisk, and the calls of Brown-necked Raven carrying through the air. After trying one more site (without luck) for Pharoah Eagle Owl, we returned to the hotel for another delicious meal, before it was time to pack again for our longest journey of the trip.

#### Day Eleven: 21<sup>st</sup> March. Anti-Atlas, Mezguita, transfer to Ouarzazate.

A check of the hotel garden before breakfast brought the 'usual' Redstart, olivaceous warbler and Western Subalpine Warbler. We were soon packed and on the road, with Black Kites and Brownnecked Ravens flying by as we made our way into the Anti-Atlas: 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 2,500m and 2,700m.

Stopping for lunch in the small village of Mezguita gave us the opportunity to explore the old kasbah, built in the 16<sup>th</sup> Century in what was an important location on trading routes that passed through the Draa Valley here. There was a final stop at a viewpoint over the fascinating Anti-Atlas landscape, before we descended back in to Ouarzazate.

#### Day Twelve: 22<sup>nd</sup> March. High Atlas, Tizi n'Tichka, transfer to Oukaïmeden.

The location of our hotel alongside water gave a good opportunity for a pre-breakfast wander with two species of bee-eaters passing over and a Green Sandpiper among the sightings, before the ever-present House Buntings joined us for breakfast.

Today we were travelling into the High Atlas, Morocco's highest mountain range and the final stage of our trip. With the change of habitat came the chance for adding some new, and often familiar birds, kicked off with Goldfinch flying overhead as we stopped for coffee. As we climbed higher both Chough and Alpine Chough swirled around the slopes, and an elusive pair of Rock Buntings were spotted when we stopped for a leg stretch.

Passing over the Col du Tichka at 2,260m we wound our way towards Oukaïmeden for our final night in Morocco. Reaching our hotel we enjoyed a mint tea with a Crossbill calling from high above in the trees, before taking a walk through the nearby woodland, where we found Firecrest, Short-toed Treecreeper, Robin and Wren in song, along with Chaffinch and Cirl Bunting. In open sunny glades patches of flowers included the violet flowers of *Viola subatlantica* and the endemic narcissus *Narcissus jeanmonodii*.

# Day Thirteen: 23<sup>rd</sup> March. Oukaïmeden, transfer to Marrakech for evening flight back to UK.

We took the short drive this morning to the mountain village and ski resort at Oukaïmeden, greeted by large groups of chattering choughs on our arrival. Accompanied only by goats and sheep, we wandered up towards the viewpoint at 2,743m, with views over towards Toubbkal, which at 4,167m is the highest peak in North Africa.

Around the viewpoint a Moussier's Redstart, Black Redstart and Redstart hopped among the rocks, with a Mistle Thrush briefly rattling from the top of a pylon. Small patches of the purple-flushed bulb *Romulea bulbocodium* were beginning to emerge in the grassland with banks of snow still retreating as we climbed.

On the slopes above us a Northern Wheatear briefly raised our hopes, before we spotted a trio of Atlas Horned Larks, larger and with a brighter yellow head pattern compared to the Teminck's Larks seen in the desert. Finally, we checked the area around the ski-lifts, a known haunt of Crimson-winged Finches, but despite some initial excitement, occupied today only by Rock Sparrows.

There was time this afternoon to revisit the woods near the hotel or just explore the grounds, where there were plenty of birds, butterflies and plants to be found, and peaceful corners to relax with a book. A patch of scrub outside our rooms had attracted Nightingale, Cetti's Warbler and Reed Warbler, with Black-eyed Blue, Southern Brown Argus, Large Tortoiseshell and the spectacular Spanish Festoon joining the butterfly list.

As we gathered for our last checklist in the sun on the terrace, a pair of Bonelli's Eagles drifted overhead, before it was time to begin our journey to Marrakech, spotting Crag Martins as we drove, before our flights back to the UK.

Thank you to all the travellers for joining us in experiencing some of the wonderful variety of Morocco.

Laurie Jackson and Mike Russell, Wildlife Travel. April 2023.







Top to bottom: Oukaïmeden; Maghreb Wheatear; Cistanche violacea.







Top to bottom: Spotted Sandgrouse; Hoopoe Lark (RSC); Desert Sparrow (RSC).



Top to bottom: House Bunting (RSC); Atlas Horned Lark (RSC); Romulea bulbocodium; Spanish Festoon.

# SOUTHERN MOROCCO 2023: some highlights

D: dead, E: endemic, H: heard only, I: introduced, P: planted

ENGLISH NAME	SCIENTIFIC NAME	1	2	3	4	5	6	7	8	9	10	11	12	1
BIRDS														
	he taxonomy published in the I							nati	ona	HIII	ustr	ate	t	
	of the World, as updated by ww			-			org							
=	hose used in the <b>Collins Bird G</b>	uide i	(3'"	ear	tion	).								
Family Struthionidae ( Red-necked Ostrich	Struthio camelus camelus			•								•		
	s, Geese & Waterfowl)			Ť								Ť		
Ruddy Shelduck	Tadorna ferruginea				•	•								
Common Shelduck	Tadorna tadorna			•	Ť	<u> </u>								
Shoveler	Spatula clypeata			•										-
Mallard	Anas platyrhnchos						•						•	ŀ
Teal	Anas crecca				•		Ţ							H
	neasants, Grouse and allies)													
Barbary Partridge	Alectoris Barbara				<b>*</b>	<b>*</b>	<b>♦</b>							
Double-spurred	Pternistis bicalcaratus			•			·							H
Francolin	r terristis bicarcaratas													
Family Phoenicopterid	ae (Flamingoes)													
Greater Flamingo	Phoenicopterus roseus				<b>*</b>									Ī
Family Podicipedidae (	•													
Little Grebe	Tachybaptus ruficollis				<b>♦</b>									Ī
Great Crested Grebe	Podiceps cristatus						•							t
Family Columbidae (Pi	•													İ
Rock Dove	Columba livia	<b>*</b>	<b>♦</b>	•	<b>♦</b>	<b>♦</b>	•	Ī						
Woodpigeon	Columba palumbus			•	•	•	•						•	t
Collared Dove	Streptopelia decaocto		•	•	•	•	•	•	•	•	•	•	•	t
Laughing Dove	Spilopelia senegalensis				•	•					•	•	•	T
Family Pteroclididae (S														ı
Spotted Sandgrouse	Pterocles senegallus									•				Ī
Crowned Sandgrouse	Pterocles coronatus									•				İ
Family Caprimulgidae	(Nightjars and allies)													I
Red-necked Nightjar	Caprimulgus ruficollis		Н	Н	Н									Ī
European Nightjar	Caprimulgus europaeus		Н											Ī
Egyptian Nightjar	Caprimulgus aegyptius									•				Ī
Family Apodidae (Swif	ts)													
Common Swift	Apus apus			•	•				<b>*</b>				•	ſ
Pallid Swift	Apus pallidus		•	•	•	•	•						•	
Little Swift	Apus affinis			•	•	•	•		•					T

ENGLISH NAME	SCIENTIFIC NAME	1	2	3	4	5	6	7	8	9	10	11	12
Family Rallidae (Rails, G	allinules and Coots)												
Moorhen	Gallinula chloropus					•							
Coot	Fulica atra				•								
Family Burhinidae (Thic	k-knees)												
Stone Curlew	Burhinus oedicnemus			•									
Family Recurvirostridae	(Stilts and Avocets)												
Black-winged Stilt	Himantopus himantopus		<b>*</b>	<b>*</b>	<b>*</b>								
Family Haematopidae (	Oystercatchers)												
Oystercatcher	Haematopus ostralegus			•									
Family Charadriidae (Pl	overs and Lapwings)												
Little Ringed Plover	Charadrius dubius		<b>*</b>										
Ringed Plover	Charadrius hiaticula				•								
Kentish Plover	Charadrius alexandrinus		<b>*</b>		<b>*</b>								
Grey Plover	Pluvialis squatarola			<b>*</b>									
Family Scolopacidae (Sa	indpipers and allies)												
Curlew	Numenius arquata			•									
Whimbrel	Numenius phaeopus				<b>*</b>								
Bar-tailed Godwit	Limosa lapponica			<b>*</b>									
Turnstone	Arenaria interpres			•									
Sanderling	Calidris alba				•								
Dunlin	Calidris alpina				•								
Common Sandpiper	Actitis hypoleucos		•	•		•							
Green Sandpiper	Tringa ochropus		•		•								•
Greenshank	Tringa nebularia			•	<b>♦</b>								
Redshank	Tringa tetanus			•	•								
Family Glareolidae (Pra	tincoles and Coursers)												
Cream-coloured Course	er Cursorius cursor									•			
Family Laridae (Gulls, T	erns and Skimmers)												
Black-headed Gull	Chroicocephalus ridibundus			•									
Mediterranean Gull	Ichthyaetus melanocephalus			•									
Audouin's Gull	Ichthyaetus audouinii		<b>♦</b>										
Yellow-legged Gull	Larus michahellis		•	•	•								
Lesser Black-backed Gu	II Larus fuscus		•	•	<b>*</b>								
Common Tern	Sterna hirundo			•									
Sandwich Tern	Thalasseus sandvicensis		•	•	•								
Family Ciconiidae (Stor	(s)												
White Stork	Ciconia ciconia			•		•	•	<b>*</b>	•			•	•
Family Sulidae (Boobies	and Gannets)												
Gannet	Morus bassanus		<b>♦</b>										
Family Phalacrocoracid	ae (Cormorants and Shags)												
Great Cormorant	Phalacrocorax carbo		•	•									ł

ENGLISH NAME	SCIENTIFIC NAME	1	2	3	4	5	6	7	8	9	10	11	12
Moroccan Cormorant	Ph. c. maroccanus				•		•						
	ns, Egrets and Bitterns)												
Grey Heron	Ardea cinerea		•		•	•	<b>*</b>						<b>♦</b>
Little Egret	Egretta garzetta			•	•	•	•						
Cattle Egret	Bubulcus ibis		•	•		•	•		•			•	•
Squacco Heron	Ardeola alloides					•							
- I	ae (Ibises and Spoonbills)												
Glossy Ibis	Plegadis falcinellus				•								
Northern Bald Ibis	Geronticus eremita		•		•								
Spoonbill	Platalea leucorodia				•								
Family Pandionidae (O:	spreys)												
Osprey	Pandion haliaetus				•		<b>*</b>						
Family Accipitridae (Ha	wks, Eagles and Kites)												
Black-winged Kite	Elanus caeruleus					•							
Booted Eagle	Hieraaetus pennatus				•	•			•			•	
Bonelli's Eagle	Aquila fasciata			•		•							
Marsh Harrier	Circus aeruginosus		•	•	•	•			•	•	•		
Sparrowhawk	Accipiter nisus		•		•								
Black Kite	Milvus migrans					•			•		•	•	•
Common Buzzard	Buteo buteo					•							
Long-legged Buzzard	Buteo rufinus cirtensis								•				
Family Strigidae (Owls)													
Pharaoh Eagle Owl	Bubo ascalaphus						Н						
Little Owl	Athene noctua			•	•		Н						
Maghreb Tawny Owl	Strix mauritanica												
Family Upupidae (Hoo	poes)												
Ноорое	Upupa epops			•		•	•		•	•	•	•	<b>♦</b>
Family Meropidae (Bee	e-eaters)												
European Bee-eater	Merops apiaster			•					•			•	•
Blue-cheeked Bee-eate	er Merops persicus						•						•
Family Coraciidae (Roll	ers)												
Roller	Coracias garrulus								•				
Family Picidae (Woodp	eckers)												
Wryneck	Jynx torquilla			•									
Great Sp. Woodpecker	Dendrocopos major												
Levaillant's Woodpeck	er Picus vaillantii												
Family Falconidae (Falc	cons and Caracaras)												
Kestrel	Falco tinnunculus	<b>•</b>	•	•	•	•	•	•	•	•	•	<b>♦</b>	•
Lanner Falcon	Falco biarmicus erlangeri					<b>•</b>						<b>•</b>	
Peregrine	Falco peregrinus			<b>♦</b>									

ENGLISH NAME	SCIENTIFIC NAME	1	2	3	4	5	6	7	8	9	10	11	12	
Black-crowned Tchagra	Tchagra senegalus			Н	•	Н								t
Family Laniidae (Shrikes)														Ė
Southern Grey Shrike	Lanius excubitor algeriensis			<b>♦</b>		<b>♦</b>	<b>♦</b>		<b>♦</b>	<b>♦</b>			<b>♦</b>	Ī
Woodchat Shrike	Lanius senator			•	•	<b>*</b>	<b>•</b>		•	•	•	•	•	1
Family Corvidae (Crows,														
Maghreb Magpie	Pica mauritanica		<b>♦</b>	<b>♦</b>	<b>♦</b>	<b>♦</b>								١
Red-billed Chough	Pyrrhocorax pyrrhocorax												•	
Alpine Chough	Pyrrhocorax graculus												•	-
Jackdaw	Corvus monedula													-
Brown-necked Raven	Corvus ruficollis									•	•	•		-
Family Paridae (Tits)	,													
African Blue Tit	Cyanistes teneriffae							<b>♦</b>					<b>♦</b>	
Great Tit	Parus major		•	•	•								•	-
Coal Tit	Periparus ater												•	-
Family Certhiidae (Treec	reepers)													I
Short-toed Treecreeper													<b>*</b>	
Family Alaudidae (Larks)	, ,													I
Hoopoe Lark	Alaemon alaudipes						<b>♦</b>	<b>*</b>	<b>♦</b>	<b>*</b>				
Bar-tailed Lark	Ammomanes cinctura								•	•				
Desert Lark	Ammomanes deserti								•					-
Atlas Horned Lark	Eremophila (alpestris) atlas													
Temminck's Lark	Eremophila bilopha						<b>•</b>	•						
Short-toed Lark	Calandrella brachydactyla									•				-
Thekla Lark	Galerida theklae ruficolor		•	•	•	•	<b>•</b>	•					•	
Crested Lark	Galerida cristata riggenbachi						<b>•</b>	•	•		•			
Family Cisticolidae (Cisti	colas and allies)													I
Zitting Cisticola	Cisticola juncidis			<b>*</b>	•	<b>♦</b>								
Family Acrocephalidae (I	Reed Warblers and allies)													I
Saharan Olivaceous	Iduna pallida reiseri/ Iduna										•	•	<b>*</b>	
Warbler/Isabelline	opaca													
(Western Olivaceous														
Warbler)														
African Reed Warbler	Acrocephalus scirpaceus													
	ambiguus													
Family Hirundinidae (Sw	allows)													
Sand Martin	Riparia riparia						<b>*</b>							
Crag Martin	Ptyonoprogne rupestris													
Rock Martin	Ptyonoprogne fuligula							<b>*</b>						
Swallow	Hirundo rustica		<b>•</b>	<b>•</b>	<b>♦</b>	<b>•</b>	•	•	<b>*</b>	<b>*</b>	<b>*</b>	<b>♦</b>	•	
Red-rumped Swallow	Cecropis daurica					•	•		<b>*</b>	•			•	
House Martin	Delichon urbica			<b>*</b>			•	<b>♦</b>	<b>♦</b>			<b>♦</b>	<b>♦</b>	Ţ

ENGLISH NAME	SCIENTIFIC NAME	1	2	3	4	5	6	7	8	9	10	11	12	
Family Pycnonotidae (Bu	ılbuls)													
Common Bulbul	Pycnonotus barbatus		<b>*</b>	<b>*</b>	<b>*</b>	<b>*</b>	<b>*</b>			•		•	•	Ī
Family Phylloscopidae (L	eaf Warblers)													
Western Bonelli's Warb	er Phylloscopus bonelli				<b>*</b>									Ī
Wood Warbler				•										Ī
Willow Warbler	Phylloscopus trochilus										•			Ī
Common Chiffchaff	Phylloscopus collybita				•			•	•		•			Ī
Family Scotoceridae (Bu	sh Warblers and allies)													
Cetti's Warbler	Cettia cetti					•								Ī
Family Sylviidae (Sylviid	Warblers and allies)													
Blackcap	Sylvia atricapilla		•					•				•	•	Ī
Western Orphean Warb	ler Curruca hortensis									•	•			
African Desert Warbler	Curruca deserti									<b>•</b>				
Tristram's Warbler	Curruca deserticola							•		•				
Sardinian Warbler	Curruca melanocephala		•	<b>*</b>	•	•	<b>*</b>	<b>*</b>	<b>*</b>		•	•		
Western Subalpine War	oler Curruca iberiae		<b>*</b>	<b>*</b>	•		<b>*</b>		<b>*</b>	•	<b>*</b>	<b>*</b>	•	
Whitethroat	Curruca communis						<b>*</b>				<b>*</b>			
Family Leiotrichidae (La	ughingthrushes and allies)													
Fulvous Babbler	Turdoides fulva									•				
Family Regulidae (Kingle	ts)													
Firecrest	Regulus ignicapillus												•	
Family Troglodytidae (W	rens)													
Wren	Troglodytes troglodytes												•	
Family Sturnidae (Starlin	gs)													
Spotless Starling	Sturnus unicolor		•	•	•	•	<b>*</b>	•	<b>*</b>			•	•	
Family Turdidae (Thrush	es and allies)													
Mistle Thrush	Turdus viscivorus deichleri													
Blackbird	Turdus merula mauritanicus		•	•	•	•	•	•	•	•	•	•	<b>*</b>	
Family Muscicapidae (O	d World Flycatchers)													
Robin	Erithacus rubecula												•	
Nightingale	Luscinia megarhynchos				Н	•								
Common Redstart	Phoenicurus phoenicurus			•					•	•	•	•	•	
Moussier's Redstart	Phoenicurus moussieri		•	•	•	•								
Black Redstart	Phoenicurus ochruros													
Rock Thrush	Monticola saxatilis								•					
Blue Rock Thrush	Monticola solitarius				•	•		•						
Stonechat	Saxicola torquata				•									
Northern Wheatear	Oenanthe oenanthe			•				•	<b>•</b>	•	•	<b>*</b>	<b>*</b>	
Isabelline Wheatear	Oenanthe isabellina										•			]
Desert Wheatear	Oenanthe deserti					<b>*</b>	<b>•</b>	<b>•</b>	•	<b>•</b>	<b>•</b>	<b>•</b>		]
Western Black-eared W	neatear Oenanthe hispanica			<b>♦</b>			<b>♦</b>							Î

ENGLISH NAME	SCIENTIFIC NAME	1	2	3	4	5	6	7	8	9	10	11	12
Red-rumped Wheatear	Oenanthe moesta							<b>*</b>					
Black Wheatear	Oenanthe leucura		•	•		•	•	•	•	•	•	•	•
White-crowned Wheater	ar Oenanthe leucopyga					•	•	•	•	•	•	•	•
Maghreb Wheatear	Oenanthe (lugens) halophila								•				
Family Passeridae (Old V													
House Sparrow	Passer domesticus		•	•	•	•	•	•	•	•	•	•	•
Spanish Sparrow	Passer hispaniolensis				•	•							
Desert Sparrow	Passer simplex									•			
Rock Sparrow	Petronia petronia												<b>♦</b>
Family Motacillidae (Wa													
Grey Wagtail	Motacilla cinerea							•					•
White Wagtail	Motacilla alba alba			•	•	•	•	•	•	•	•		•
Moroccan Wagtail	Motacilla (alba) subpersonata		•										
Tawny Pipit	Anthus campestris			•									
Meadow Pipit	Anthus pratensis				Н								
Family Fringillidae (Finch	es and allies)												
North African Chaffinch	Fringilla spodiogenys		Н	•	<b>*</b>	•							•
Brambling	Fringilla montifringilla				•								
Trumpeter Finch	Bucanetes githagineus					•		•	•			•	
Greenfinch	Chloris chloris			•	•	•							
Linnet	Linaria cannabina		<b>*</b>	•	•	•							
Crossbill	Loxia curvirostra poliogyna												•
Goldfinch	Carduelis carduelis												•
Serin	Serinus serinus		•	<b>*</b>	<b>*</b>	•	•	•	•		•		•
Family Emberizidae (Bun	tings)												
Rock Bunting	Emberiza cia							•					•
Cirl Bunting	Emberiza cirlus		Н	<b>*</b>	•	<b>*</b>							•
House Bunting	Emberiza sahari		•	<b>*</b>	<b>*</b>	<b>*</b>	•	•	•	•	•	<b>♦</b>	•
ENGLISH NAME	SCIENTIFIC NAME	1	2	3	4	5	6	7	8	9	10	11	12
MAMMALS													
Dorcas Gazelle	Gazella dorcas			•									
Addax	Addax nasomaculatus			•									
Scimitar-horned Oryx	Oryx dammah			•									
Barbary Ground Squirrel	Atalantoxerus getulus		•			•		•				•	
Fat Sand Rat	Psammomys obesus						•	•					
Fennec Fox	Vulpes zerda									•			
Common Bent-wing Bat	Miniopterus schreibersii		•										
European Free-tailed Bat	Tadarida teniotis							•					

ENGLISH NAME	SCIENTIFIC NAME	1	2	3	4	5	6	7	8	9	10	11	1
REPTILES AND AMPHIBI	ANS												
This checklist follows the	e taxonomy published in <b>Amphi</b>	bia	ns a	nd	Rep	tile	of I	Mor	осс	<b>:0,</b> a	sup	odat	te
www.moroccoherps.com	n	1											
African Green Toad	Bufo boulengeri				<b>♦</b>								
Berber Toad	Sclerophrys mauretanica		•		<b>♦</b>								
N. African Water Frog	Pelophylax saharica		•	•	•						•		
Moorish Terrapin	Mauremys leprosa			•	•	•							
Moorish Gecko	Tarentola mauritanica		•		<b>♦</b>								
Margarita's	Acanthodactylus		•	•	•								
Fringe-toed Lizard	margaritae												
Spiny-footed Lizard	Acanthodactylus erythrurus						•						
Bibron's Agama	Agama bibronii		•			•						•	
Moroccan Spiny-tailed	Uromastyx nigriventris						•						T
Lizard													
Moroccan Rock Lizard	Scekarcis perspicillata												
ENGLISH NAME	SCIENTIFIC NAME	1	2	3	4	5	6	7	8	9		11	
LEPIDOPTERA: butterflie													
Family Hesperiidae (Skip Large Grizzled Skipper	Pyrgus alveus												
Desert Grizzled Skipper						•							
False Mallow Skipper	Carcharodus tripolinus		•			•							
Family Papilionidae (Sw			·										
Swallowtail	Papilio machaon				<b>*</b>								
Southern Scarce	Iphiclides feisthamelii						•						4
Swallowtail	ipmendes jerstridmeni												
Spanish Festoon	Zerynthia rumina africana												
Family Pieridae (Whites	, ·												
Large White	Pieris brassicae							<b>*</b>					•
Small White	Pieris rapae		•			<b>*</b>							4
Bath White	Pontia daplidice						•				•	•	
Scarce Green-striped	Euchloe falloui		•	•	•								
White													
Greenish Black-tip	Euchloe charlonia		•	•	•	•						•	4
Moroccan Orange-tip	Anthocharis belia		•			•				1			
Desert Orange-tip	Colitis evagore					•				1			
Clouded Yellow	Colias croceus			•	•	•							4
Cleopatra	Gonepteryx cleopatra		•			<b>♦</b>				1			
•	Coppers and Hairstreaks)												

ENGLIGH NAME	COLENITIES NAME	1	1	3	_	5	_	7	8		10	11	12	12
ENGLISH NAME	SCIENTIFIC NAME	1	2	3	4	5	6	′	ð	9	10	11	12	13
Small Copper	Lycaena phlaeas		•	•	•	•								
Long-tailed Blue	Lampides boeticus				•									
Lang's Short-tailed Blue	Leptotes pirithous			•	•									
African Grass Blue	Zizeeria knysna			<b>*</b>										
Black-eyed Blue	Glaucopsyche melanops													<b>♦</b>
False Baton Blue	Pseudophilotes abencerragus		•	•	•									
Southern Brown Argus	Aricia cramera													•
Family Nymphalidae (Ad	mirals and Fritillaries)													
Large Tortoiseshell	Nymphalis polychloros													<b>*</b>
Painted Lady	Vanessa cardui		•	•	•									
Speckled Wood	Pararge aegeria aegeria					•							•	•
Large Wall Brown	Lasiommata maera													•
LEPIDOPTERA: moths														
Lesser Wax Moth	Achroia grisella				•									
Striped Hawk-moth	Hyles livornica								•					
Crimson Speckled	Utetheisa pulchella		•											
Pale Shoulder	Acontia lucida		•											
Bordered Straw	Heliothis peltigera			•										
Pale Mottled Willow	Caradrina clavipalpis												•	
ENGLISH NAME	SCIENTIFIC NAME	1	2	3	4	5	6	7	8	9	10	11	12	13
OTHER INVERTEBRATES COLEOPTERA: beetles														
a flower chafer	Oxythyrea cf funesta										•			
HYMENOPTERA: ants, be	ees, sawflies, wasps													
Beewolf	Philanthus triangulum				•									
Violet Carpenter Bee	Xylocopa violacea				•									
ODONATA: damselflies,	dragonflies													
Emperor	Anax imperator					•								
Copper Demoiselle	Calopteryx haemorrhoidalis					•								
Vagrant Emperor	Hemianax ephippiger						•				•			
Red-veined Darter	Sympetrum fonscolombii					•								
ORTHOPTERA: crickets, §	grasshoppers													
Cone-headed	Acrida ungarica			•										
Grasshopper														
a scorpion	Buthus sp.		•											
a scorpion	Hottentotta sp.								•					1

## **Selected Plant Species**

For families and species, the list follows the (up to date as much as possible) Plant List (Kew) and INPI classification (although for orchids, popular names are sometimes also given).

	SCIENTIFIC NAME	NOTES	FIRST
	SCIENTIFIC NAME CONIFERS	NOTES	SEEN
	CUNIFERS  Cupressaceae (cypress fam	ilv)	
Р	Cupressus sempervirens	Mediterranean Cypress in the Atlas Kasbah garden	12 <sup>th</sup>
<u> </u>	Juniperus oxycedrus	Prickly Juniper with variegated leaves, Oukaïmeden	22 <sup>nd</sup>
	Tetraclinis articulata	Thuya of the Berbers the conifer growing in the High Atlas	22 <sup>nd</sup>
	Ephedraceae (joint pine far		
	Ephedra fragilis	Joint Pine slender, scrambling shrub seen in the lane near Atlas Kasbah	12 <sup>th</sup>
	Pinaceae (pine family)		
Р	Pinus halepensis	Aleppo Pine on upper slopes of High Atlas	22 <sup>nd</sup>
	Pinus pinaster ssp. escarena	Maritime Pine on upper slopes of High Atlas	22 <sup>nd</sup>
	Pinus pinea	Umbrella Pine in Agadir area	13 <sup>th</sup>
	DICOTYLEDONS		
	Aizoaceae (fig marigold fam Mesembryanthemum crystallinum	Common Ice Plant with broad, red leaves, covered with glistening bladder cells	12 <sup>th</sup>
	Amaranthaceae (amaranth		
	Soda (=Salsola) oppositifolia	<b>Pink Saltbush</b> succulent thorny shrub with hook-tipped leaves at Cap Rhir	12 <sup>th</sup>
	Suaeda vera	Shrubby Sea-blite fleshy shrub at Oued Tamri and Oued Souss	12 <sup>th</sup>
	Anacardiaceae		
	Pistacia atlantica	Atlas Mastic evergreen shrub	22 <sup>nd</sup>
	Pistacia lentiscus	Mastic evergreen shrub in the High Atlas	22 <sup>nd</sup>
	Apiaceae		
Р	Coriandrum sativum	Coriander in oasis garden	20 <sup>th</sup>
Е	Deverra juncea	Erfoud	18 <sup>th</sup>
	Ferula communis	Giant Fennel Souss-Massa	13 <sup>th</sup>
	Foeniculum vulgare	Fennel in oasis garden at Et-Taous	20 <sup>th</sup>
Ε	Sclerosciadium nodiflorum	The small umbellifer growing in sandy soils	13 <sup>th</sup>
	Apocyanaceae (dogbane fa		11-
	Apteranthes europaea	Fleshy succulent with maroon and cream flowers and	12 <sup>th</sup>
		long seed pods growing in semi-shade under shrubs	4 C+h
	Calotropis procera	Apple of Sodom Milkweed the large, Saharan shrub	18 <sup>th</sup>
	Nerium oleander	Oleander widespread often in dry river beds	12 <sup>th</sup>

			FIRST
	SCIENTIFIC NAME	NOTES	SEEN
	Periploca angustifolia	African Wolfbane thorny shrub just beginning to	12 <sup>th</sup>
		flower (the 'octopus flowers')	
	Asteraceae (daisy family)		
	Andryala pinnatifida	The yellow daisy with 'furry balls' at Cap Rhir	12 <sup>th</sup>
	Anvillea garcinii	Yellow daisy with minty-lemon scented leaves at Cap Rhir	12 <sup>th</sup>
Е	Asteriscus (=Nauplius)	Bushy yellow daisy with fragrant leaves around Cap	12 <sup>th</sup>
	imbricatus	Rhir	
	Calendula arvensis	Field Marigold one of the common 'yellow asters'	12 <sup>th</sup>
	Calendula stellata	Orange flowered plant in oasis garden at Et-Taous	20 <sup>th</sup>
Е	Carthamus fruticosus	Spiky yellow flowered plant growing by Dades Gorge	17 <sup>th</sup>
	Catananche arenaria	Cream daisy with a maroon centre, first seen on the goat track	12 <sup>th</sup>
	Centaurea gentilii (=aspera ssp. gentilii)	Knapweed at Souss-Massa	13 <sup>th</sup>
	Centaurea maroccana	The star thistle at Souss-Massa	13 <sup>th</sup>
	Chamaemelum fuscatum	A chamomile	13 <sup>th</sup>
	Cladanthus arabicus	Large yellow daisy with aromatic feathery leaves	12 <sup>th</sup>
	Glebionis coronaria	Crown Daisy in Souss Massa	12 <sup>th</sup>
	(=Chrysanthemum	,	
	coronarium)		
М	Hertia maroccana	Yellow flowered shrub, Dadès Gorge	17 <sup>th</sup>
	Ismelia carinata	The white daisy with yellow and maroon centre	13 <sup>th</sup>
Е	Kleinia anteuphorbium	Succulent shrubby 'groundsel' at Cap Rhir	12 <sup>th</sup>
	Launaea arborescens	Chicken wire bush	12 <sup>th</sup>
	Pallenis hierochuntica		21 <sup>st</sup>
	Pallenis spinosa	Spiny Golden Star with spiny bracts	12 <sup>th</sup>
	Senecio glaucus ssp. coronopifolius	The fleshy-looking ragwort at Oued Massa	14 <sup>th</sup>
	Volutaria crupinoides	The purple and yellow 'knapweed'	15 <sup>th</sup>
	Volutaria lippii	The purple 'knapweed'	12 <sup>th</sup>
	Boraginaceae (borage famil		
	Cerinthe major ssp. major	The honeywort growing in the garden at Aurocher	23 <sup>rd</sup>
	(=gymnandra)	The week burgless	12 <sup>th</sup>
г	Echium horridum	The red bugloss	
E	Echium modestum	Blue bugloss at Souss-Massa	13 <sup>th</sup>
	Echium velutinum ssp.		
	Heliotropium crispum	The white heliotrope seen at Cap Rhir	12 <sup>th</sup>
	Mairetis microsperma	The small borage with pale blue flowers at Cap Rhir	12 <sup>th</sup>
	Nonea calycina	The hairy plant growing in the garden at Aurocher	23 <sup>rd</sup>

SCIENTIFIC NAME	NOTES	FIRST SEEN
Pardoglossum cheirifolium	The hound's tongue growing in the garden at	23 <sup>rd</sup>
ssp. heterocarpum	Aurocher	23
Brassicaceae (cabbage fami		
Cakile maritima	Sea Rocket the white flowered brassica at Cap Rhir	12 <sup>th</sup>
Capsella bursa-pastoris	Shepherd's Purse in Anti-Atlas	21 <sup>st</sup>
Diplotaxis siifolia	Pale yellow crucifer, Oued Massa	14 <sup>th</sup>
· · · · · · · · · · · · · · · · · · ·		23 <sup>rd</sup>
Draba hispanica	Small yellow flowered plant, Oukaïmeden	25 21 <sup>st</sup>
Farsetia aegyptia	Glaucous leaves and lilac flowers, Anti-Atlas	16 <sup>th</sup>
Foleyola billotii	Spiny purple-flowered shrub widely seen in desert areas	10
Hormathophylla spinosa		21 <sup>st</sup>
Marcus-kochia (=Malcolmia) littorea	The large purple stock at Cap Rhir	12 <sup>th</sup>
Matthiola maroccana	The purple stock with crinkly petals	18 <sup>th</sup>
Morettia canescens	Sprawling white-flowered crucifer	21 <sup>st</sup>
Moricandia suffruticosa	1 0	15 <sup>th</sup>
Psychine stylosa	White flowers with dark veins on coast at Cap Rhir	12 <sup>th</sup>
Sisymbrium erysimoides	Yellow crucifer	18 <sup>th</sup>
Sisymbrium irio	Yellow crucifer	20 <sup>th</sup>
Zilla spinosa	A spiny purple bush widely seen in second week on	18 <sup>th</sup>
	arid ground	
Caryophyllaceae (pink fami		
Arenaria pungens	The white flowered cushions in the High Atlas	22 <sup>nd</sup>
Paronychia argentea	Algerian Tea with papery white bracts	12 <sup>th</sup>
Polycarpaea nivea	Grey-green shrub at Cap Rhir and Oued Tamri	12 <sup>th</sup>
Silene rubella	The small pink campion in the palmery	20 <sup>th</sup>
Spergularia fimbriata	The purple-flowered sea-spurrey at Oued Massa	14 <sup>th</sup>
Cistaceae (rock rose family)		
Helianthemum canariense		12 <sup>th</sup>
Helianthemum confertum	Souss-Massa	13 <sup>th</sup>
Helianthemum lippii	Cap Rhir	12 <sup>th</sup>
Convolvulaceae (bindweed		
Convolvulus arvensis	Field Bindweed	20 <sup>th</sup>
Convolvulus cantabrica	Cantabrian Bindweed	22 <sup>nd</sup>
Convolvulus trabutianus	Blue Rock Bindweed thorny bush with white flowers	21 <sup>st</sup>
Cuscuta sp.	<b>Dodder</b> the white-flowered parasitic plant seen at	12 <sup>th</sup>
	Cap Rhir	
Cynomoriaceae (desert thu		
Cynomorium coccineum	<b>Desert Thumb</b> the parasitic plant emerging from the	13 <sup>th</sup>
,	sand at Oued Souss	
Euphorbiaceae (spurge fam	IIIV <i>)</i>	

	COLENITIES NAME	NOTES	FIRST
	SCIENTIFIC NAME	NOTES	SEEN
	Euphorbia helioscopia	Sun Spurge	21 <sup>st</sup> 12 <sup>th</sup>
	Euphorbia officinarum	Succulent with the cactus-like growth form at Cap Rhir	
	Euphorbia paralias	Sea Spurge on the beach at Oued Tamri	12 <sup>th</sup>
	Euphorbia regis-jubae	Succulent with the lime-green tree-like growth form	12 <sup>th</sup>
	Euphorbia squamigera	The spurge in the High Atlas	22 <sup>nd</sup>
	Fabaceae (pea family)		
I	Acacia saligna	Golden Wattle Australian species planted at Souss- Massa National Park	
	Ceratonia siliqua	Carob	12 <sup>th</sup>
Е	Hesperolaburnum	The yellow-flowered broom in the Anti-Atlas	20 <sup>th</sup>
	platycarpum		
	Lotus arenarius		12 <sup>th</sup>
	Lotus creticus	<b>Southern Bird's-foot Trefoil</b> with glaucous leaves at Cap Rhir	12 <sup>th</sup>
	Medicago polymorpha	Toothed Medick	22 <sup>nd</sup>
	Medicago sativa	Alfalfa widely cultivated	20 <sup>th</sup>
	Melilotus sulcatus	Furrowed Melilot	22 <sup>nd</sup>
	Ononis natrix	The bushy restharrow with smelly, sticky leaves and yellow flowers	12 <sup>th</sup>
	Retama monosperma	White Broom Souss-Massa	13 <sup>th</sup>
E	Vachellia (=Acacia)	Umbrella Thorn Acacia	14 <sup>th</sup>
_	gummifera		
	Vachellia (=Acacia) tortilis	Umbrella Thorn Acacia	
	Vicia benghalensis	Purple vetch in the High Atlas	22 <sup>nd</sup>
	Fagaceae (beech family)		
	Quercus coccifera	Kermes Oak High Atlas	22 <sup>nd</sup>
	Quercus ilex	Holm Oak High Atlas	22 <sup>nd</sup>
	Frankeniaceae (sea heath f		
	Frankenia corymbosa	Sea Heath purple flowers	12 <sup>th</sup>
E	Frankenia laevis ssp	Sea Heath pink flowers at Cap Rhir	12 <sup>th</sup>
	velutina		
	Geraniaceae (geranium fan	nily)	
	Erodium cicutarium	Common Stork's-bill	15 <sup>th</sup>
	Erodium hesperium	The stork's-bill at Souss-Massa	13 <sup>th</sup>
	Erodium neuradifolium		14 <sup>th</sup>
	Lamiaceae (mint family)		
	Ajuga chamaeptys	Yellow Bugle along the goat track	12 <sup>th</sup>
	Lamium amplexicaule	Henbit Dead-nettle High Atlas	22 <sup>nd</sup>
	Lavandula dentata	Velvety grey leaves with toothed edges	12 <sup>th</sup>
Е	Lavandula maroccana	Pinnate leaves	12 <sup>th</sup>
	Lavandula multifida	Pinnate leaves, medium-large flowers	12 <sup>th</sup>

	CCIENTIFIC NAME	NOTES	FIRST
	SCIENTIFIC NAME	NOTES  The small sage along the goet track	SEEN 12 <sup>th</sup>
E	Salvia aegyptiaca Teucrium malenconianum	The small sage along the goat track	17 <sup>th</sup>
E		The germander growing on the Dadès Gorge  Can Phir the small thums	12 <sup>th</sup>
	Thymus broussonetii ssp.	Cap Rhir the small thyme	12
	Myrtaceae (myrtle family)		
Р	Eucalyptus cf. globulus	Planted in Souss-Massa National Park	13 <sup>th</sup>
Г	Oleaceae (olive family)	Fidilited III 30033-IVId33d National Falk	13
	Olea europaea	Olive Atlas Kasbah garden	12 <sup>th</sup>
	Orobanchaceae (broomrap		12
	Cistanche phelypaea	Desert Hyacinth the large yellow-flowered stems emerging from the sand	12 <sup>th</sup>
	Cistanche violacea	the violet-flowered stems emerging from the sand at	18 <sup>th</sup>
	1.1.2.2.1	the Erfoud stop	
	Papaveraceae (poppy famil		
	Fumaria officinalis	Common Fumitory	22 <sup>nd</sup>
	Glaucium (=Papaver)	Red-horned Poppy	20 <sup>th</sup>
	corniculatum		
	Papaver dubium	Long-headed Poppy	22 <sup>nd</sup>
	Papaver rhoeas	Common Poppy	20 <sup>th</sup>
	Plantaginaceae (plantain fa	mily)	
	Linaria bipartita	The purple toadflax first seen on the goat track	12 <sup>th</sup>
Ε	Linaria maroccana	Moroccan Toadflax purple flowers in hotel garden,	22 <sup>nd</sup>
		Oukaïmeden	
	Misopates calycinum	Pale Weasel's Snout Cap Rhir	12 <sup>th</sup>
	Plumbaginaceae (leadwort		
E	Limonium mucronatum	The sea lavender with pink flowers at Cap Rhir	12 <sup>th</sup>
	Limonium sinuatum	The sea lavender with blue and white flowers at Cap Rhir	12 <sup>th</sup>
	Polygonaceae (knotweed fa	mily)	
	Rumex bipinnatus	Fleshy-leaved dock	13 <sup>th</sup>
	Rumex vesicarius	<b>Bladder Dock</b> the dock with inflated pink calyx at Cap Rhir	12 <sup>th</sup>
	Primulaceae (primrose fam	I	
	Anagallis monelli ssp.	Blue Pimpernel	12 <sup>th</sup>
	monellin		
	Rhamnaceae (buckthorn fa		±1.
	Ziziphus lotus	Jujube very spiny hedge bush	12 <sup>th</sup>
	Rosaceae (rose family)		
	Prunus amygdalus (=dulcis)	Almond flowering in the High Atlas	22 <sup>nd</sup>
	Prunus mahaleb	Mahaleb Cherry	22 <sup>nd</sup>
	Sapotaceae (sapota family)		

	COLEMETER	NOTES	FIRST
	SCIENTIFIC NAME	NOTES	SEEN
	Sideroxylon (=Argania)	Argan	12 <sup>th</sup>
	spinosa	mile)	
	Solanaceae (nightshade fai	Small, purple tubular flowers at Cap Rhir	12 <sup>th</sup>
_	Lycium intricatum	South American invasive with yellow flowers	12 <sup>th</sup>
1	Nicotiana glaucum		21 <sup>st</sup>
	Withania adpressa	Near the hotel in Tarmigt  Winter Cherry the shrub with yellow bell flowers	12 <sup>th</sup>
	Withania frutescens	Ashwagandha the shrub in Aoulouz Gorge	15 <sup>th</sup>
	Withania somnifera Tamaricaceae (tamarisk fa		12
	Tamarix africana	African Tamarisk	13 <sup>th</sup>
	Tamarix aphylla	Athel Tamarisk	20 <sup>th</sup>
	• •	French Tamarisk	12 <sup>th</sup>
	Tamarix gallica Urticaceae (nettle family)	French famalisk	12
		Roman Nettle	22 <sup>nd</sup>
	Urtica pilulifera Violaceae (violet family)	Roman Nettle	22
	Viola subatlantica	The violet near hotel, Oukaïmeden	22 <sup>nd</sup>
		The violet near hotel, Oukaïmeden	22
	Zygophyllaceae (caltrop fai		12 <sup>th</sup>
	Zygophyllum creticum (=Fagonia cretica)	Virgin's Mantle the creeping violet flower that closes in the sun	12
	Zygophyllum gaetulum	White-flowered succulent in the stony desert	21 <sup>st</sup>
	(=Tetraena gaetula)	Willie-nowered succulent in the story desert	21
	Zygophyllum glutinosum	Near the hotel in Tarmigt	21 <sup>st</sup>
	(=Fagonia glutinosa)	Near the noter in rainingt	21
	MONOCOTYLEDONS		
	Amaryllidaceae (amaryllis	family)	
Ε	Narcissus jacquemoudii	Narcissus on slopes at ski resort, Oukaïmeden	
E	Narcissus jeanmonodii	Narcissus near hotel, Oukaïmeden	
	Aracaceae (palm family)	Nate 13343 fiedi fiotel, Oakaimeden	
	Chamaerops humilis	<b>Dwarf Fan Palm</b> seen in the High Atlas	20 <sup>th</sup>
	Phoenix dactylifera	Date Palm	12 <sup>th</sup>
	Asparagaceae (asparagus		ız
	Agave americana	Century Plant cactus-like plant in Merzouga	21 <sup>st</sup>
	Albuca amoena	The star-of-Bethlehem growing in the desert	19 <sup>th</sup>
	(=Ornithogalum	The star of Bethlement Browning in the desert	
	amoenum)		
	Dipcadi serotinum	Brown Bluebell seen at Souss-Massa	13 <sup>th</sup>
	Drimia maritima	Sea Squill (not flowering)	12 <sup>th</sup>
	Drimia noctiflora	The spiral leaves in Erfoud	18 <sup>th</sup>
	Scilla peruviana	Portuguese Squill purple-flowered bulb in Oued	14 <sup>th</sup>
	,	Massa	
	Asphodelaceae (asphodel		
	Asphodelus fistulosus	Hollow-stemmed Asphodel a fine-leaved asphodel	12 <sup>th</sup>

		FIRST
SCIENTIFIC NAME	NOTES	SEEN
Asphodelus ramosus	Branched Asphodel a broad-leaved asphodel	22 <sup>nd</sup>
Asphodelus tenuifolius	Onionweed a fine-leaved asphodel	15 <sup>th</sup>
Cyperaceae (sedge family)		
Cyperus capitatus	The large sedge at Souss-Massa National Park	12 <sup>th</sup>
Iridaceae (iris family)		
Moraea sisyrinchium	Barbary Nut the iris growing along the goat track	12 <sup>th</sup>
Romulea bulbocodium	The bulb at Oukaïmeden	23 <sup>rd</sup>
Poaceae (grass family)		
Arundo donax	Giant Reed widespread	12 <sup>th</sup>
Potamogetonaceae (pondv	veed family)	
Potamogeton nodosus	Long-leaved Pondweed in the river near Aoulouz	15 <sup>th</sup>
	Gorge	