

Honeyguide

WILDLIFE HOLIDAYS

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Morocco 14 – 21 March 2023

Marie Watt Val Pearce Lucy Spink Jenny Kirby

Participants

Tim & Phylida Wright
Philip & Jackie Jenkins
Judy Stolz
Jo Simons and Gill Cartwright

Ann Greenizan Will Warham Julie Durdin

Leaders

Richard Hobbs, Sally Ward and Chris Durdin. Report by Chris Durdin, flower list by Richard Hobbs.





Informal group photos. In the field (JS); hats can be borrowed from Atlas Kasbah.

Photos, all taken on the holiday, by Ann Greenizan, Judy Stolz, Tim Wright (see initials); other photos by Chris Durdin.

Cover, top: Moussier's redstart (TW) and *Cladanthus arabicus*. Bottom: Atlas Kasbah. We stayed at Atlas Kasbah Ecolodge http://atlaskasbah.com/en/. Below, sheep come past Atlas Kasbah's outside wall.



This holiday, as for every Honeyguide holiday, also puts something into conservation in our host country by way of a contribution to the wildlife that we enjoyed. The conservation contribution of £40 per person was supplemented by Gift Aid and we were able to give £760 to GREPOM/BirdLife Morocco — Groupe de Recherche pour la Protection des Oiseaux au Maroc. This is towards the cost of wardens to safeguard nesting bald ibises.

Dr Khadija Bourass, Directrice executive of GREPOM/BirdLife Maroc, says: "I would like to thank you for your interest in our cause and your continued support of our association." As at the end of March 2023, the total for all conservation contributions through Honeyguide since 1991 was £146,377.

DAILY DIARY

Tuesday 14 March - Agadir and Atlas Kasbah

The easyJet flight to Agadir passed routinely and we stepped out of the plane into Moroccan warmth, noting a spotless starling as we entered the terminal. Passport checks were OK if a little slow, no Covid track-and-trace form was needed despite the gov.uk advice, and bags collected. We were met by a driver with an Atlas Kasbah sign, and we were soon on the way for the half hour drive to Atlas Kasbah Hotel, looking impressive on a hilltop as we approached. Basil tea and an excellent lunch of salad and soup soon followed. Four redrumped swallows flew around outside as we ate. We had time to settle in and unpack.

For the afternoon, Richard led us through the rich gardens of Atlas Kasbah and out into the adjacent countryside, leaving behind the tame house bunting around the buildings. In the garden we found at least three Sahara marsh frogs by the stepped water filtration system. Bulbuls were calling and we found them in a tree.



Sahara marsh frog (AG); toadflax Linaria maroccana; Volutaria maroccana with a clouded yellow (TW).

Outside the Atlas Kasbah compound, it was good to see plenty of flowers – dry winters are getting all too frequent. Yellow *Cladanthus arabicus* and lilac-coloured *Volutaria maroccana* were two showy flowers by the roadside. We continued to find lots of flowers – you couldn't miss them – some of the prettiest of which were Moroccan toadflax *Linaria maroccana*, brown bells *Dipcadi* and Barbary nut irises. The singing Thekla lark eventually showed quite well and we heard a cirl bunting.

There were butterflies everywhere, generally moving too fast to see well, though Cleopatra, Moroccan orange-tip, painted lady and Bath white were all identified on the wing. A small brown butterfly settled and allowed a photograph, leading to an early write-in onto the checklists: Moroccan hairstreak. A darkling beetle was admired, as was a red-winged grasshopper each time it flew.



Moroccan hairstreak; a field of hollow-leaved asphodel.

A hoopoe flew through the argan trees on the return part of the circuit, and we passed a field covered in hollow-leaved asphodel.

The Gatwick contingent had already been joined by Judy, who arrived earlier from her part of France. During the evening the group became complete after Philip and Jackie arrived from Geneva and Will completed his epic journey from Ireland.

Wednesday 15 March - local walks

It was distinctly chilly and a little misty before breakfast, which started at 8am, but that didn't last. We set off, at a very gentle pace, at 9:30. We paused by the Sahara marsh frogs, partly for yesterday's late arrivals to see them, and also as a tree pipit was perching in an argan tree, a brilliant view of a resting migrant. A chiffchaff appeared briefly as did African chaffinches in Atlas Kasbah's garden, plus the 'usual' suspects' of common bulbuls and house bunting. We admired the complex web of a cage spider.

We went down the road to a new location for the women's cooperative shop and recapped on many of the wild flowers from yesterday. *Fagonia cretica* was now numerous, in flower, whereas yesterday afternoon their flowers were closed. We found a few *Catanche arenaria* by the roadside. A woodchat shrike appeared all too briefly on a wire. A man led several of the group into his garden, where he showed some his vegetables, including rocket and tomatoes, and explained about how argan fruits are used – with the kernel used for oils, cosmetics, face creams etc.



Catanche arenaria; Fagonia cretica; oleander seed-bugs (photographed on 17 March).

We walked back past Atlas Kasbah's entrance and towards the village, looping left along the side of a very large wadi. There were good views of Thekla lark, Moroccan orange-tip and Cleopatra butterflies, plus a choice of a scramble or telescope view for tassel hyacinth. The advance party found a very obliging Barbary ground squirrel on a rock, which stayed put for the tailenders who had been watching a Moussier's redstart. Later we saw several ground squirrels scampering around a more distant sandy bank. The sound of bee-eaters prompted us to look up and we found half a dozen against another unusual sighting – a cloud.

We continued a loop that brought us through the village which, Richard remarked, was looking cleaner and in better condition than on previous visits. Twice we found Spanish festoon butterflies. On oleander we stopped to look at oleander seed-bugs. Jo and Gill were alert to a black wheatear in the heart of the village. Here and along the road we exchanged waves and 'bonjours' with many children and adults before heading back to base for lunch. That lunch was another delicious salad with sage tea afterwards.



Barbary ground squirrel, subalpine warbler (TW).

Most of us took another walk this afternoon, along the same track as yesterday and going a little bit farther. We had very good views of a woodchat shrike, though that took a little patience as it moved from perch to perch. Ground-pine was a nice find, to add to yesterday's many flowers. At the far point that we reached, there was a group of helmeted guineafowls in one direction – no longer a wild bird in Morocco – and a cluster of small birds moving in and around a dead argan tree, though often dropping to feed on the ground. These included subalpine warblers, chiffchaffs, a blackcap and at least three tree pipits. Then we found a boldly marked Spanish sparrow perching on a treetop.

Back at Atlas Kasbah, Richard ran a tutorial on a selection of the wild flowers we'd seen. That was followed by Hélène introducing and Hassan demonstrating in their 'tea ceremony', as we sat, shoes off, in the salon. It's all about the bubbles – the tea is poured from a height, with some skill – in terms of flavour, though the ceremony, always done by a man, is a big part of tea-making and drinking. Curiously, it's only been an important part of Moroccan life since tea drinking was encouraged by our Queen Victoria to the then king of Morocco. They also told us a little of the Berber language and culture, which until recently were suppressed in favour of Arabic though now are accepted and encouraged.

At the end of dinner, as dusk fell, I heard a distant red-necked nightjar, and the occupants of two rooms said they'd heard the same sound last night. It fell silent as soon as people went outside. Jupiter was equally uncooperative, fading away behind a low bank of cloud, though Venus was bright in the night sky.

Thursday 16 March - Bald Ibises and Cap Rhir

A small flock of bee-eaters could be seen and heard from the terrace for a lucky few as we went into breakfast on another misty morning. After breakfast, from the swimming pool terrace, most of us had a great view of a perched male cirl bunting.

We had two buses to take our large group today – plus the enormous cool box full of picnics. First stop was at a very large supermarket, mostly to get Moroccan cash from ATMs and to buy wine, for which Atlas Kasbah doesn't have a licence but is happy to keep for guests.



The group at Cap Rhir; cactus-like Euphorbia officinarum.

It was quite a long drive around the edge of Agadir, past the port and north up the coast. The habitat almost everywhere was patchy, low coastal scrub dominated by spiny euphorbias, and we stopped to explore some of this by the lighthouse at Cap Rhir. Escorted by several local children, some requesting pens, Richard took us through the many unusual flowers here. These included a Duke-of Argylle's tea plant, a tiny *Convolvulus pentaploides*, *Warionia saharae* with large yellow flowers in which two flower chafers buried themselves, an allium, a prostrate echium, a sea-lavender and a large-flowered storksbill *Erodium jahandiezianum*. There was a chill in the breeze, though some shelter by a building by the shore. From here, scanning the sea, there was a steady procession of gannets moving past and a few auks, probably guillemots, on the sea. Despite the wind we found a butterfly that settled, so allowing us to be sure that it was a greenish black-tip. As we neared the lighthouse, suddenly several small birds appeared on a spiny bush. One was a migrant common redstart, another a subalpine warbler and the third a house sparrow.



Erodium jahandiezianum on the rocks at Cap Rhir.

After driving through Tamri and its many shops selling huge hands of bananas, we pulled off the road where the sign showed that this bit of the coast is part of the Souss-Massa National Park, and where bald ibises might be seen. However, the immediate priority was first to use some cover for a call of nature, then settle down to eat picnics. While we ate a smart black-eared wheatear appeared, perching in the open so enabling excellent telescope views for everyone.

A feature of this place today that struck Richard, Sally and me was how many people were here, considering it is the breeding site for one of the rarest birds in the Western Palearctic. There were various vehicles, an obvious parking area, and a scattering of people with surfing gear or just chilling. A warden from GREPOM appeared and ensured that we kept away from the nesting cliffs of the bald ibises, and we went up the hill to join four guys from Botswana who were also here hoping to see this iconic species. A thermal of about 50 white storks eased slowly north. We waited and, within a fairly short period of time, three or four bald ibises flew past us, heading off to feed no doubt, displaying an elegance in flight contrasting with their less than good looks on the ground, if we'd seen them there. A great grey shrike showed well on the return walk up the hill. As Phillip and I approached the group, we found an approachable spiny-footed lizard by a sand dune.



Part of the thermal of white storks over Tamri (TW).

On the return journey south, we stopped for a while in the busy seaside town of Taghazoute. Some paddled, others went for tea and/or ice cream. Those at the Panorama bar overlooked a rocky coast where a whimbrel was feeding with obvious success among the mussels.

Back at base, several group members took part in a short demonstration about calligraphy. Unsurprisingly, several bottles of wine bought earlier were uncorked and sampled either before or with tonight's dinner of eel and vegetables cooked in tajines.

Friday 17 March - Askoti Gorge

A very short drive took us to the start of this morning's walk into Askoti Gorge, accompanied by local guide Ahmed. Ahmed spoke only Berber and a little French, but that was enough for the arrangement to work. We started with an excellent view of Moussier's redstart, hoopoes on a tree quite a way up the slope and our first large bird of prey: a marsh harrier on passage. By the path was a fine mullein with large flowers, *Verbascum maroccana*. Richard introduced us to two species of sumach: *Rhus pentaphylla* and *Rhus trifoliata*, an attractively scented thyme *Thymus maroccana* and lots of toothed lavender. Oleander had big concentrations of the oleander seed bugs we'd seen the day before yesterday. Some of us had very brief views of a flying Barbary partridge, though mostly we just heard them.

The heart of the gorge had the type of rocks that really should have a blue rock thrush, and so it proved, though a distant view through the telescope. Kestrels were up there, too. We'd seen African chaffinches and fly-past greenfinches and to those we could now add the sound and fleeting glimpses of serins. An odd-looking butterfly settled on a dock, and it took a while to get all-round agreement that it was a Spanish festoon with an exceptionally dark yellow background coloration. Caper plants were growing from rock cracks and a stone water channel had large, greyish tadpoles and scores of small leeches.



Askoti Gorge; from the other side of the gorge's narrow point, looking for frogs.



Spanish festoon on Rumex vesicarius; Androcymbium gramineum; Verbascum maroccana.

We had time to go on a little farther, which took a little care alongside a drainage channel, leading to a large, concreted water body. Here we were entertained by calling and scuffling Sahara marsh frogs. Before then,

and coming from the same area, we'd heard what could pass as a quiet pneumatic drill and may well have been African green toad. It had seemed quite a long walk into the heart of the gorge yet, in the way of these things, not nearly as far on the way back, during which we saw the white blooms of *Androcymbium gramineum*, a low-growing Colchicum-type of flower. We drove a short distance to a shady spot for lunch.

The group split for the afternoon, with some coming back to base and others taking a long walk, guided by Ahmed, back to Atlas Kasbah. Flowers were mainly of arable fields, including uncountable Moroccan toadflaxes and hollow-leaved asphodels. By now Thekla larks and house buntings didn't need any comment, though happily some other birds did. One was the best kestrel on show so far. Another was a cooperative tawny pipit on the ground among some rocks and low vegetation. Ann found a great grey shrike – just a glimpse for me as it flew off. Perhaps best of all, back in the village below Atlas Kasbah, two little owls flew up and perched in full view, the nearer on a tree and the farther away bird on a wall of concrete blocks.

Many of the group gathered in and around the swimming pool. Once the pool was clear of us large mammals, we were entertained by swallows dipping into the water. Bee-eaters buzzed around while Richard was going through plant sightings on the terrace in the early evening sunshine.







Tawny pipit; little owl; great grey shrike (TW).

Saturday 18 March - Souss-Massa National Park

We had our usual leisurely breakfast and 9:30 departure before a surprisingly long drive, on account of road issues that our drivers had to avoid, before we arrived at Oued Massa, the river Massa in the Souss-Massa National Park. We parked in the shade and our morning consisted of a walk along the road that runs parallel to and overlooks the river. Almost immediately there was a little egret and a spoonbill, both feeding actively. We spent some time looking at a group of waders: black-winged stilts, two black-tailed godwits and several ruffs, the ruffs all in winter plumage. A greenshank joined them. The scrub had Sardinian warblers, we could hear bursts of Cetti's warbler from near the river and we found our first stonechat. There were chiffchaffs in several places and our first common sandpiper.



Spoonbill (AG); ice-plant Mesembryanthemum crystallinum; a confiding zitting cisticola (AG).

On the first roadside there were fine specimens of the ice-plant *Mesembryanthemum crystallinum*, tall yellow umbellifers that were *Ferula tingitana* and a flowering thorn-apple. We'd been getting used to a gentle purple haze on inland fields being Moroccan flax; here it was the lovely stock *Malcomia littorea*.

A little farther along there were two black-eared wheatears on drier ground. Then, by some alfalfa crops, a fantailed warbler (zitting cisticola) that twice perched on a fence very close to us. Moussier's redstarts, male and female, fed in the nearby field. A dark dove perched on a water pipe: our first laughing dove. Sadly, it didn't linger.

Richard had been searching among the shrubby sea-blite scrub for a peculiar parasitic plant, not helped by some of the vegetation having been cleared away to widen the road. Happily, there they were on the other side of the road, as we went back up the gentle hill towards the bus: desert thumbs *Cynomorium coccineum* (various other names are used, including the misleading Maltese fungus), with attendant flies, which pollinate it. The group then became a bit more spread out: those with me heard a quail calling from crops across the river, and a plain tiger (African monarch) butterfly dashed past.





Oued Massa; desert thumbs.

We had our picnics near the parked buses, during which a flock of about 25 bee-eaters came over. Here some of us were close enough to patrolling dragonflies to see they were blue emperors, and Lucy later showed us a photo she'd taken this morning of a red-veined darter.

We then headed towards the northern edge of the National Park – though that meant quite a drive – to reach the Souss estuary. Just before we arrived, there was a large flock of white storks in the sky, and they were again in the air later as we were leaving. We immediately found a tight group of avocets, the first of many wintering waders that would soon be heading towards northern Europe. Just one flamingo was here today, and this one had an injured wing, so presumably had been left behind from a bigger group. But at least it fed actively, so we could see it properly: so often their heads are tucked in. A family party of mallards, curlew, shelducks, redshanks and another greenshank were added to the tally. Oystercatchers flew to and fro on several occasions. Some grey plovers flew into the far water's edge and through the scope it was apparent that there were ringed plovers with them, then a single knot, too. By now we were level with the big flocks of gulls and terns, which would take to the air when disturbed – not by us – and then you could hear the raucous calls of the many Sandwich terns. The flock included our first black-headed gulls, itself a 'write-in' on the checklist, though I couldn't find any rarer gull species.

A helpfully tame Magreb magpie landed by some of us, and the blue patch behind its eye was obvious. While walking back to the buses we added two birds to our list: our first woodpigeon flew over, and a lark in this rather bare area was our first crested lark. Then it was a short journey home.

Some of us heard the red-necked nightjar again at dusk, though we failed again to see the International Space Station.





Greater flamingo, an injured bird; Magreb magpie (TW).

Sunday 19 March - Agadir souk and Paradise Valley

Unbeknown to any of us, including the man that prepared breakfast, there was a clock change this morning. Some smart phones realised, and we learned it was to do with Ramadan. So most of us had breakfast nearer 7am than 8am and there was time to potter around Atlas Kasbah before a slightly earlier start than usual, at 9:15. Hassan had advised that morning would be a quiet time to visit the souk at Agadir. We were dropped off at gate 6 (there are many gates) and had an enjoyable three-quarters of an hour perusing, photographing and buying various things, from figs to slippers to body cream.



In Agadir's souk.

It was an hour or so's drive to Paradise Valley, starting at a café where we had drinks and took it in turns to use the single loo. Paradise Valley is, essentially, a long valley with a road following the river, which had a reasonable amount of water in it this year. At our first stop we found terrapins and some saw a Bibron's agama. A lesser emperor was on patrol – meaning we had now seen all three emperor dragonflies. Common tiger blue butterfly was a first for the week and we also found a fritillary, later identified as knapweed fritillary. A carpenter bee with a yellow back buzzed some group members, later named as *Xylocopa pubescens*.



Paradise valley; St John's-wort Hypericum aegypticum.

Then, at last, a large bird of prey: a superb adult Bonelli's eagle. At the same time, about four red-rumped swallows joined the eagle in the sky. A range of interesting plants included an ebony *Ebenus pinnata* – the same genus as Cretan ebony – and a shrubby St John's-wort *Hypericum aegypticum*.

The valley was busy with families and others out for Sunday afternoon, though we were able to drive on a short way to find a roadside stop with some shade. We then walked another stretch of the valley during the afternoon. Red-veined darter and many desert bluets on some pondweed were two interesting species of odonata along the walk.

Hélène ran a well-attended session on Moroccan beauty treatments before dinner.

Monday 20 March - local walk

A few of us had already shared the news about a very cooperative little owl just outside the grounds of Atlas Kasbah, and now was the chance for all of us to see it. Actually, we started inside – it could be seen from the

roof terrace, and I had the telescope set up by the water purification ponds. Kenza from reception at Atlas Kasbah came to see it and the joy on her face was quite something. Outside the gate we were even closer to where the owl was perching on tumbledown building material – and the local great grey shrike perched on a near fence.

Just down the road, we were invited to see inside the small factory that is the hub of operations for the women's cooperative, mostly concentrating on argan products though other products were on sale, including spices, cous-cous and honey. We donned factory white coats. Elements are high-tech though the core of the work is women crushing argan kernels by hand. Remarkably, 500 women are involved with this across six local villages. Presumably it could be mechanised – though that at a stroke would take away the work and companionship within the project.

We walked to the village of Elmaasa, a short walk through more dry, open argan forest. In the village we found a pair of black wheatears, and many of the other local birds were around, including house bunting, spotless starling and Moussier's redstart. A large white henbane was in flower. We completed a circuit and returned to Atlas Kasbah for lunch.

It was then a free afternoon, spent by the pool, reading, going for a walk and that kind of activity. At 5pm, many in the group gathered in reception for a Moroccan cookery course. Two hours later, we were all seated to enjoy the fruits of their labours, namely pastry parcels as starters, chicken tajine and a tasty filo pastry dessert with a custard and crushed nut topping.

Tuesday 21 March - Agadir and home

We were ready in good time to leave shortly after nine o'clock – except Jackie and Philip, who had a later flight to Geneva – and the half-hour journey to the airport was straightforward. Bag drop proved very slow, though we had allowed plenty of time and it was a smooth return flight to Gatwick.

Holiday highlights, as nominated by group members

Tim Bonelli's eagle; little owl and Kenza's enjoyment at seeing it.

Phylida walk in Askoti Gorge; calligraphy; infusions (herbal teas) at Atlas Kasbah.

Philip 50 soaring storks.

Jackie migrating storks, donkey in village.

Judy bald ibis

Lucy frogs in the gorge and their sounds; breakfasts

at Atlas Kasbah.

Val our hosts at Atlas Kasbah.

Jenny Ahmed, the confident & quiet guide; balancing

on the path to the frog pool in the gorge;

lavender.

Marie Richard, Sally & Chris; the relaxing calmness

of Atlas Kasbah.

Gill Bonelli's eagle; Moussier's redstart;

abundance of flora on roadsides.

Jo bald ibis; Echium tuberculatum; black

wheatear.

Ann many invertebrates; hotel, staff and company.

Will little owl; ground squirrels; spoonbill.

Julie food and the company; little owls.

Chris exceptional views of fan-tailed warbler; purple haze of toadflax on local fields and stock by the coast; identifying three species of emperor

dragonfly in flight.

Sally staying at Atlas Kasbah; black-eared

wheatear.

Richard view of Bonelli's eagle; purple sheets of

Moroccan toadflax; desert thumbs.



Bonelli's eagle, a holiday highlight for some group members (TW).

WILDLIFE LISTS

BIRDS

For interest, these were the 'write-ins' on this year's list, not recorded in either 2016 or 2019: shelduck, quail, black-headed gull, tawny pipit, common redstart and Spanish sparrow.

Gannet	A steady movement at sea near Cap Rhir, 16/3
Cormorant	Seen on two days, though none fitted the <i>moroccanus</i> subspecies
Grey heron	1 at Oued Massa and 4 at Oued Souss, 18/3
Cattle egret	Seen with goats from the bus, 16/3
Little egret	1 at Oued Massa, 18/3
White stork	c.50 migrants in a thermal at Tamri, 16/3, and 100+ at Oued Souss, 18/3
Northern bald ibis	About 5 in flight near the nesting cliffs at Tamri, 16/1
Spoonbill	1 at Oued Massa, 18/3
Greater flamingo	1 at Oued Souss, 18/3, an injured bird
Shelduck	2 at Oued Souss, 18/3
Mallard	Family party, Oued Souss
Bonelli's eagle	Adult, Paradise Valley, 19/3
Kestrel	Seen on 4 days
Barbary partridge	Glimpses of birds in flight on 2 days, and heard
Quail	Heard at Oued Massa, 18/3
Helmeted guineafowl	Used to occur in Morocco, now only domestic. Group near Atlas Kasbah.
Moorhen	2 at Oued Massa
Coot	2 at Oued Massa 2 at Oued Massa
Oystercatcher Plack winged stilt	c.20 at Oued Souss
Black-winged stilt	Oued Massa and Oued Souss
Avocet	A tight flock at Oued Souss
Grey plover	Oued Souss
Ringed plover	Oued Souss
Ruff	About 7 at Oued Massa
Black-tailed godwit	2, Oued Massa
Whimbrel	1 Cap Rhir; on rocks at Taghazoute, 16/3
Curlew	Oued Souss
Redshank	Oued Souss
Greenshank	Oued Massa and Oued Souss
Common sandpiper	Oued Souss
Knot	1 with the grey & ringed plovers at Oued Souss
Black-headed gull	Lots at Oued Souss
Lesser black-backed gull	Seen 2 days, always coastal
Yellow-legged gull	Seen 3 days, coastal and inland
Sandwich tern	100+ at Oued Souss
Feral pigeon	Seen most days
Woodpigeon	Twice seen on the Souss/Massa NP day
Collared dove	Daily at Atlas Kasbah
Laughing dove	
	I 1 ()ued Massa Absent from the Atlas Kashah area this year
Red-necked nightian	1, Oued Massa. Absent from the Atlas Kasbah area this year. Heard most evenings at Atlas Kasbah; a glimpse as 1 flew past
Red-necked nightjar	Heard most evenings at Atlas Kasbah; a glimpse as 1 flew past.
Little owl	Heard most evenings at Atlas Kasbah; a glimpse as 1 flew past. Seen on the last 4 days near Atlas Kasbah
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Little owl Common swift Bee-eater Hoopoe Crested lark Thekla lark Sand martin Barn swallow Red-rumped swallow	Heard most evenings at Atlas Kasbah; a glimpse as 1 flew past. Seen on the last 4 days near Atlas Kasbah Most days, especially over Atlas Kasbah. Groups over and settling near Atlas Kasbah every day, and other areas. Heard or seen most days, including near Atlas Kasbah Oued Souss, 18/3, and Elmaasa village, 20/3 Daily at and around Atlas Kasbah Oued Massa Daily at Atlas Kasbah 4 Atlas Kasbah, 14/3; 4, Paradise valley, 19/3
Little owl Common swift Bee-eater Hoopoe Crested lark Thekla lark Sand martin Barn swallow Red-rumped swallow White wagtail	Heard most evenings at Atlas Kasbah; a glimpse as 1 flew past. Seen on the last 4 days near Atlas Kasbah Most days, especially over Atlas Kasbah. Groups over and settling near Atlas Kasbah every day, and other areas. Heard or seen most days, including near Atlas Kasbah Oued Souss, 18/3, and Elmaasa village, 20/3 Daily at and around Atlas Kasbah Oued Massa Daily at Atlas Kasbah 4 Atlas Kasbah, 14/3; 4, Paradise valley, 19/3 Seen on 3 days.
Little owl Common swift Bee-eater Hoopoe Crested lark Thekla lark Sand martin Barn swallow Red-rumped swallow White wagtail Tree pipit	Heard most evenings at Atlas Kasbah; a glimpse as 1 flew past. Seen on the last 4 days near Atlas Kasbah Most days, especially over Atlas Kasbah. Groups over and settling near Atlas Kasbah every day, and other areas. Heard or seen most days, including near Atlas Kasbah Oued Souss, 18/3, and Elmaasa village, 20/3 Daily at and around Atlas Kasbah Oued Massa Daily at Atlas Kasbah 4 Atlas Kasbah, 14/3; 4, Paradise valley, 19/3 Seen on 3 days. At Atlas Kasbah on 15/3 and 20/3.
Little owl Common swift Bee-eater Hoopoe Crested lark Thekla lark Sand martin Barn swallow Red-rumped swallow White wagtail Tree pipit Tawny pipit	Heard most evenings at Atlas Kasbah; a glimpse as 1 flew past. Seen on the last 4 days near Atlas Kasbah Most days, especially over Atlas Kasbah. Groups over and settling near Atlas Kasbah every day, and other areas. Heard or seen most days, including near Atlas Kasbah Oued Souss, 18/3, and Elmaasa village, 20/3 Daily at and around Atlas Kasbah Oued Massa Daily at Atlas Kasbah 4 Atlas Kasbah, 14/3; 4, Paradise valley, 19/3 Seen on 3 days. At Atlas Kasbah on 15/3 and 20/3. 1, 17/3, on the walk back to base from Askoti Gorge.
Little owl Common swift Bee-eater Hoopoe Crested lark Thekla lark Sand martin Barn swallow Red-rumped swallow White wagtail Tree pipit Tawny pipit Common bulbul	Heard most evenings at Atlas Kasbah; a glimpse as 1 flew past. Seen on the last 4 days near Atlas Kasbah Most days, especially over Atlas Kasbah. Groups over and settling near Atlas Kasbah every day, and other areas. Heard or seen most days, including near Atlas Kasbah Oued Souss, 18/3, and Elmaasa village, 20/3 Daily at and around Atlas Kasbah Oued Massa Daily at Atlas Kasbah 4 Atlas Kasbah, 14/3; 4, Paradise valley, 19/3 Seen on 3 days. At Atlas Kasbah on 15/3 and 20/3. 1, 17/3, on the walk back to base from Askoti Gorge. Common, daily at Atlas Kasbah
Little owl Common swift Bee-eater Hoopoe Crested lark Thekla lark Sand martin Barn swallow Red-rumped swallow White wagtail Tree pipit Tawny pipit Common bulbul Common redstart	Heard most evenings at Atlas Kasbah; a glimpse as 1 flew past. Seen on the last 4 days near Atlas Kasbah Most days, especially over Atlas Kasbah. Groups over and settling near Atlas Kasbah every day, and other areas. Heard or seen most days, including near Atlas Kasbah Oued Souss, 18/3, and Elmaasa village, 20/3 Daily at and around Atlas Kasbah Oued Massa Daily at Atlas Kasbah 4 Atlas Kasbah, 14/3; 4, Paradise valley, 19/3 Seen on 3 days. At Atlas Kasbah on 15/3 and 20/3. 1, 17/3, on the walk back to base from Askoti Gorge. Common, daily at Atlas Kasbah Passage bird at Cap Rhir, 16/3
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Little owl Common swift Bee-eater Hoopoe Crested lark Thekla lark Sand martin Barn swallow Red-rumped swallow White wagtail Tree pipit Tawny pipit Common bulbul Common redstart	Heard most evenings at Atlas Kasbah; a glimpse as 1 flew past. Seen on the last 4 days near Atlas Kasbah Most days, especially over Atlas Kasbah. Groups over and settling near Atlas Kasbah every day, and other areas. Heard or seen most days, including near Atlas Kasbah Oued Souss, 18/3, and Elmaasa village, 20/3 Daily at and around Atlas Kasbah Oued Massa Daily at Atlas Kasbah 4 Atlas Kasbah, 14/3; 4, Paradise valley, 19/3 Seen on 3 days. At Atlas Kasbah on 15/3 and 20/3. 1, 17/3, on the walk back to base from Askoti Gorge. Common, daily at Atlas Kasbah Passage bird at Cap Rhir, 16/3
Little owl Common swift Bee-eater Hoopoe Crested lark Thekla lark Sand martin Barn swallow Red-rumped swallow White wagtail Tree pipit Tawny pipit Common bulbul Common redstart Moussier's redstart	Heard most evenings at Atlas Kasbah; a glimpse as 1 flew past. Seen on the last 4 days near Atlas Kasbah Most days, especially over Atlas Kasbah. Groups over and settling near Atlas Kasbah every day, and other areas. Heard or seen most days, including near Atlas Kasbah Oued Souss, 18/3, and Elmaasa village, 20/3 Daily at and around Atlas Kasbah Oued Massa Daily at Atlas Kasbah 4 Atlas Kasbah, 14/3; 4, Paradise valley, 19/3 Seen on 3 days. At Atlas Kasbah on 15/3 and 20/3. 1, 17/3, on the walk back to base from Askoti Gorge. Common, daily at Atlas Kasbah Passage bird at Cap Rhir, 16/3 Seen on 4 days, mostly in or close to villages.
Little owl Common swift Bee-eater Hoopoe Crested lark Thekla lark Sand martin Barn swallow Red-rumped swallow White wagtail Tree pipit Tawny pipit Common bulbul Common redstart Moussier's redstart Black-eared wheatear	Heard most evenings at Atlas Kasbah; a glimpse as 1 flew past. Seen on the last 4 days near Atlas Kasbah Most days, especially over Atlas Kasbah. Groups over and settling near Atlas Kasbah every day, and other areas. Heard or seen most days, including near Atlas Kasbah Oued Souss, 18/3, and Elmaasa village, 20/3 Daily at and around Atlas Kasbah Oued Massa Daily at Atlas Kasbah 4 Atlas Kasbah, 14/3; 4, Paradise valley, 19/3 Seen on 3 days. At Atlas Kasbah on 15/3 and 20/3. 1, 17/3, on the walk back to base from Askoti Gorge. Common, daily at Atlas Kasbah Passage bird at Cap Rhir, 16/3 Seen on 4 days, mostly in or close to villages. Male at Tamri, 16/3; 2 at Oued Massa
Little owl Common swift Bee-eater Hoopoe Crested lark Thekla lark Sand martin Barn swallow Red-rumped swallow White wagtail Tree pipit Tawny pipit Common bulbul Common redstart Moussier's redstart Black-eared wheatear Black wheatear	Heard most evenings at Atlas Kasbah; a glimpse as 1 flew past. Seen on the last 4 days near Atlas Kasbah Most days, especially over Atlas Kasbah. Groups over and settling near Atlas Kasbah every day, and other areas. Heard or seen most days, including near Atlas Kasbah Oued Souss, 18/3, and Elmaasa village, 20/3 Daily at and around Atlas Kasbah Oued Massa Daily at Atlas Kasbah 4 Atlas Kasbah, 14/3; 4, Paradise valley, 19/3 Seen on 3 days. At Atlas Kasbah on 15/3 and 20/3. 1, 17/3, on the walk back to base from Askoti Gorge. Common, daily at Atlas Kasbah Passage bird at Cap Rhir, 16/3 Seen on 4 days, mostly in or close to villages. Male at Tamri, 16/3; 2 at Oued Massa Seen on 3 days, in villages and Askoti Gorge Askoti Gorge, 17/3
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Little owl Common swift Bee-eater Hoopoe Crested lark Thekla lark Sand martin Barn swallow Red-rumped swallow White wagtail Tree pipit Tawny pipit Common bulbul Common redstart Moussier's redstart Black-eared wheatear Black wheatear Blue rock thrush Blackbird	Heard most evenings at Atlas Kasbah; a glimpse as 1 flew past. Seen on the last 4 days near Atlas Kasbah Most days, especially over Atlas Kasbah. Groups over and settling near Atlas Kasbah every day, and other areas. Heard or seen most days, including near Atlas Kasbah Oued Souss, 18/3, and Elmaasa village, 20/3 Daily at and around Atlas Kasbah Oued Massa Daily at Atlas Kasbah 4 Atlas Kasbah, 14/3; 4, Paradise valley, 19/3 Seen on 3 days. At Atlas Kasbah on 15/3 and 20/3. 1, 17/3, on the walk back to base from Askoti Gorge. Common, daily at Atlas Kasbah Passage bird at Cap Rhir, 16/3 Seen on 4 days, mostly in or close to villages. Male at Tamri, 16/3; 2 at Oued Massa Seen on 3 days, in villages and Askoti Gorge Askoti Gorge, 17/3 Daily at Atlas Kasbah

Blackcap	Recorded on 3 days
Chiffchaff	Recorded on 5 days, often at Atlas Kasbah
Great tit	Almost daily at Atlas Kasbah
Great grey shrike	Seen on 4 days, especially close to Atlas Kasbah
Woodchat shrike	Seen on 3 days, especially close to Atlas Kasbah
Magreb magpie	Seen almost daily
Spotless starling	Almost daily, often in towns as we drove
House sparrow	Daily at Atlas Kasbah
Spanish sparrow	A well-marked male near livestock on a local walk, 15/3
African chaffinch	Now recognised as a species. 5 days, especially at Atlas Kasbah and surrounding farmland
Serin	Heard or seen 4 days, e.g. Paradise Valley
Greenfinch	3 days at Atlas Kasbah
Linnet	Heard on 18/3
Cirl bunting	Almost daily at Atlas Kasbah and surrounding farmland
House bunting	Daily at, on and inside Atlas Kasbah; in all villages and Agadir souk

MAMMAL, REPTILES AND AMPHIBIANS		
Barbary ground squirrel	African green toad, heard (we think)	Spiny-footed lizard
Sahara marsh frog	Sahara pond terrapin	Bibron's agama





Sahara pond terrapin (TW). Spiny-footed lizard, also known as fringe-toed or fringe-fingered lizard. On distribution and current taxonomy probably *Acanthodactylus erythrurus*, the same species as in the Iberian Peninsula.

BUTTERFLIES		
Spanish festoon	Clouded yellow	Common tiger blue
Large white	Cleopatra	Knapweed fritillary
Small white	Moroccan hairstreak	Plain tiger (African monarch)
Bath white	Small copper	Red admiral
Greenish black-tip	Lang's short-tailed blue	Painted lady
Moroccan orange-tip	African babul blue	









Small copper (AG); Moroccan orange-tip (TW); greenish black-tip (TW); African babul blue *Azanus jesuous* on its larval host plant *Acacia gummifera* (AG) – an addition to the list after checking photos.

OTHER INVERTEBRATES		
Striped hawk-moth Hyles livornica	Oleander seed-bug Caenocoris nerii	
Common plume-moth Emmelina monodactyla	Spotted flower-chafer Oxythrea funesta	
Pale shoulder moth Acontia lucida	Spanish fly Lytta vesicatoria (shiny green beetle)	
Desert bluet Enallagma deserti	Seven-spot ladybird Coccinella septempunctatum	
Blue emperor dragonfly Anax imperator	Darkling beetle Pimelia chrysomeloides	
Lesser emperor dragonfly Anax parthenope	Bee-fly sp.	
Vagrant emperor dragonfly Anax ephippiger	Carpenter bee (with yellow back) Xylocopa pubescens	
Red-veined darter Sympetrum fonscolombii	Mining bee sp	

Red-winged grasshopper Oedipoda sp.	Honey bee
Egyptian locust Anacridium aegyptiacum	Pond skater sp
A red-and-black seed bug Spilostethus pandurus	Cage-web spider Cyrtophora citricola





Desert bluet *Enallagma deserti* (AG), based on distribution in Dijistra & Lewington. In the field, this species is almost identical to common blue damselfly; some consider desert bluet to be a subspecies of this widespread species.

Darkling beetle *Pimelia chrysomeloides*.





Egyptian locust (TW); the stripes on the eyes are a good ID feature. Blue emperor (TW) in flight; the downward bend on the abdomen is distinctive.

PLANTS

AROUND HOTEL &	
GARDENS	
Ephedraceae	
Ephedra altissima	A joint-pine
Araucariaceae	
Araucaria heterophylla	The Norfolk Island pine
Casuarinaceae	
Casuarina equisetiforme	An Australian conifer
Amaryllidaceae	
Pancratium foetidum	A sand-daffodil, leaves only
Poaceae	-
Lamarckia aurea	Golden dog's-tail grass
Asparagaceae	
Asphodelus fistulosus	A small white asphodel
Iridaceae	
Moraea sisyrinchium	Barbary nut
Plumbaginaceae	
Limonium sinuatum	Statice, a sea-lavender
Caryophyllaceae	
Spergularia media	Greater sea-spurrey
Fabaceae	
Ononis viscosa	A sticky yellow restharrow
Acacia tortilis	A native acacia
Acacia longifolia	Long-leaved wattle
Albizia sp.	Albizia
Melilotis albus	White melilot
Rhamnaceae	
Zizyphus lotus	Zizyphus
Zygophyllaceae	

Fagonia cretica	Fagonia
Resedaceae	
Reseda luteola	Weld
R. alba	White mignonette
R. lutea	Mignonette
Brassicaceae	
Eruca sativa	Wild rocket
Punicaceae	
Punica granatum	Pomegranate
Oleaceae	
Olea europaea	Olive
Malvaceae	
Hibiscus rosa-sinensis	A red hibiscus
Sapotaceae	
Argania spinosa	Argan tree
Apocynaceae	
Periploca angustifolia	A twin-fruited silkweed
Boraginaceae	
Echium creticum	A soft red bugloss
Heliotropium europaeum	A cherry-pie
Solanaceae	
Nicotiana glauca	Tree tobacco
Withania frutescens	Shrubby nightshade
Plantaginaceae	
Myoporum laetum	Myoporum or Ngaio
Convolvulaceae	
Convolvulus althaeoides	A pretty pink bindweed
Ipomoea batatas	Sweet potato
Bignoniaceae	
Jacaranda mimosifolia	Jacaranda

Lamiaceae	
Lavendula dentata	A lavender
Asteraceae	
Cladanthus arabicus	A fine leaved golden daisy
Volutaria maroccana	A knapweed relative
Calendula maroccana	A local pot marigold
Pallenis spinosa	Pale yellow daisy with
•	spiny bracts
Pallenis maritima	A yellow daisy bush
Reichardia tingitana	A chocolate centred
3	orange daisy
Phagnalon bicolor	A phagnalon
Aiozaceae	
Carpobrotus	Hottentot fig
achinaciformis	
Aizoon hispanica	Cream aizoon
Papaveraceae	
Papaver rhoeas	Common poppy
Primulaceae	
Anagallis arvenis	Blue pimpernel
7 magamo ar vorno	Bide pimperner
Around Tighanimine el	
Baz	
Asparagaceae	
Asparagus acutifolius	A spiny asparagus
Typhaceae	7 toping asparagas
Typha domingensis	A reedmace (bulrush)
Juncaceae	7 (Toodinaso (Bairdon)
Juncus acutus	Sharp rush
Poaceae	Onarp rusii
Arundo donax	The largest grass in the
Alulido dollax	world
Aristolochiaceae	World
Aristolochia baetica	A birthwort
Polygonaceae	Abitiwort
Rumex bucephalorus	Horses head dock
Rumex sagitifolia	A sorrel
Emex spinosa Rumex vesicarius	A spiny dock Bladder dock
Malvaceae	Biaddei dock
	Creative allaw
Malva neglecta	Small mallow
Plantaginaceae	<u> </u>
Plantago afrum	Branched plantain
P. lagapus	Woolly plantain
Cucurbaceae	1.
Bryonia dioica	bryony
Lamiaceae	<u> </u>
Vitex agnus-castus	The chaste tree
Geraniaceae	
Erodium cicutarium	Common stork's bill
Euphorbiaceae	
Acylypha wilksiana	A bronze-leaved
	ornamental
Fabaceae	
Ceratonia siliqua	Carob
Rhamnaceae	
Ramnus lyciodas	A small-leaved buckthorn
Resedacaea	
Reseda alba	White mignonette
Apocynaceae	
Nerium oleander	Oleander
Boraginaceae	
Boraginaceae Echium tuberculatum	A red bualoss
Echium tuberculatum	A red bugloss
Echium tuberculatum Lamiaceae	
Echium tuberculatum	A red bugloss A lavender

[Lauraga
Asteraceae	Launaea
Volutaria maroccana	A knapwood rolativo
Catananche arenaria	A knapweed relative A white Cupid's-dart
Launaea arborescens	A yellow wire-netting bush
Xanthium spinosum	Spiny cocklebur
Verbesina encelloides	a large yellow daisy
Papaveraceae	a large yellow daisy
Fumaria capreolata	Ramping fumitory
T dinana capreolata	reamping furnitory
CAP RHIR AND TAMRI	
Frankeniaceae	
Frankenia thymifolia	A large-flowered sea-heath
Frankenia laevis	Sea-heath
Aiozaceae	
Mesembryanthemum	Crystalline Livingstone
crystallanum	daisy
M. nodiflorum	a Livingstone daisy
Aizoon hispanica	Yellow aizoon
A.canariensis	Canary aizoon
Plumbaginaceae	,
Limonium sinuatum	Statice
L. mucrinatum	a sea lavender
Caryophyllaceae	
Paronychia argentea	Silver bracts
Cistaceae	
Helianthemum halmifolium	a rock rose
Convolvulacea	
Convolvulus pentaploides	a small blue bindweed
Geraniaceae	
Erodium jahandiezianum	Large flowered storksbill
Euphorbiaceae	
Euphorbia officinarum	A spiny spurge
Euphorbia regis-jubae	A shrubby, much-branched
	spurge
Fabaceae	
Lotus cytisoides	A bird's foot trefoil
Retama raetum	a white broom relative
Brassicaceae	
Malcomia littorea	A stock relative
Solanaceae	
Lycium intricatum	A Duke of Argyll's tea plant
Orobanchaceae	
Cistanche phelypaea	A large yellow broomrape
A	relative
Apiaceae	A 11
Thapsia garganica	A yellow carrot relative
Asteraceae	A suppular the sure to "
Anacyclus radiata	A succulent-leaved yellow
Mainia antove bankia	chamomile
Kleinia anteuphorbia	A very succulent daisy A dark-centred dandelion
Reichardia tingitana	
J J	relative
Calendula maroccana	relative A small pot marigold
Calendula maroccana Waironia saharae	relative A small pot marigold A succulent shrub
Calendula maroccana	relative A small pot marigold
Calendula maroccana Waironia saharae Artemisia sp.	relative A small pot marigold A succulent shrub
Calendula maroccana Waironia saharae Artemisia sp. SOUSS- MASSA	relative A small pot marigold A succulent shrub
Calendula maroccana Waironia saharae Artemisia sp. SOUSS- MASSA NATIONAL PARK	relative A small pot marigold A succulent shrub
Calendula maroccana Waironia saharae Artemisia sp. SOUSS- MASSA NATIONAL PARK Poaceae	relative A small pot marigold A succulent shrub A wormwood (tea)
Calendula maroccana Waironia saharae Artemisia sp. SOUSS- MASSA NATIONAL PARK Poaceae Phragmites australis	relative A small pot marigold A succulent shrub
Calendula maroccana Waironia saharae Artemisia sp. SOUSS- MASSA NATIONAL PARK Poaceae Phragmites australis Anacardiaceae	relative A small pot marigold A succulent shrub A wormwood (tea) Common reed
Calendula maroccana Waironia saharae Artemisia sp. SOUSS- MASSA NATIONAL PARK Poaceae Phragmites australis Anacardiaceae Pistacia atlanticus	relative A small pot marigold A succulent shrub A wormwood (tea)
Calendula maroccana Waironia saharae Artemisia sp. SOUSS- MASSA NATIONAL PARK Poaceae Phragmites australis Anacardiaceae Pistacia atlanticus Urticaceae	relative A small pot marigold A succulent shrub A wormwood (tea) Common reed A pistachio nut relative
Calendula maroccana Waironia saharae Artemisia sp. SOUSS- MASSA NATIONAL PARK Poaceae Phragmites australis Anacardiaceae Pistacia atlanticus Urticaceae Forsskaolea tenacissima	relative A small pot marigold A succulent shrub A wormwood (tea) Common reed
Calendula maroccana Waironia saharae Artemisia sp. SOUSS- MASSA NATIONAL PARK Poaceae Phragmites australis Anacardiaceae Pistacia atlanticus Urticaceae	relative A small pot marigold A succulent shrub A wormwood (tea) Common reed A pistachio nut relative

Cura da ifficiancia	A blit-
Suaeda iffniensis	A sea-blite
Salsola oppositifolia	A saltwort
Arthrocnemum	A perennial
macrostachyum	samphire/glasswort
Aizoaceae	
Aizoon canariense	Aizoon
Mesembryanthemum	A wet and fleshy white-
crystallinum	flowered Livingstone-daisy
Mesembryanthemum	A small pale yellow
nodiflorum	Livingstone-daisy
Carpobrotus	Hottentot fig
achanaciformis	
Zygophyllaceae	
Fagonia cretica	a fagonia
F. harpago	a fagonia
Frankeniaceae	<u> </u>
Frankenia laevis	Sea-heath
Frankenia boisseri	A sea-heath
Tamaricaceae	A 3ca-licatii
	A tamorisk
Tamarix sp.	A tamarisk
Balanphoraceae	December 1997
Cynomorium coccineum	Desert thumb or red dog-
	turd – a phallic parasite
Nitrariaceae	
Nitraria retusa	A white-flowered shrub
Geraniaceae	
Erodium hesperium	A stork's bill
Plantaginaceae	
Kickxia sagittata	A fluellin
Rutaceae	
Haplophyllum	a rue relative
broussonetianum	a rao relative
Solaonaceae	
Solanum linnaeum	a prickly nightshade
Datura stramonium	Thorn apple
Lameaceae	
Lavendulan multifidus	A lavender
Resedaceae	
Sesamoides purpurascens	A mignonette relative
Asteraceae	
Pallenis spinosa	A spiny pale yellow daisy
Ismelia versicolor	A yellow daisy bush
Asteriscus sp.	A yellow daisy bush
Centaurea	A pink knapweed
sphaerocephala	·
Anacyclus radiatus	a white/pink daisy
Glebonis coronatus	Yellow daisy bush
Colchicacea	
Androcymbium	An androcymbium
gramineum	(in fruit)
	(III II GIL)
Asparagaceae	Brown bluebell
Dipcadi serotina	DIOMII DIUEDEII
Amaryllidaceae	
Allium subhirsutum	a creamy garlic
ASKOTI GORGE	
Asparagaceae	
Asphodelus fistulosus	Hollow-leaved asphodel
Asphodelus aestivum	A large white asphodel
	-
Smilacaceae	
	Smilax
Smilax aspera	Smilax
Smilax aspera Anacardiaceae	
Smilax aspera Anacardiaceae Searsia albida	A sumach
Smilax aspera Anacardiaceae	A sumach A sumach, with edible
Smilax aspera Anacardiaceae Searsia albida S.pentaphylla	A sumach A sumach, with edible fruits
Smilax aspera Anacardiaceae Searsia albida	A sumach A sumach, with edible

	1
Caparaceae	
Caparis spinosa	Caper
Arecaceae	
Phoenix dactylifera	Date palm
Caryophyllaceae	At
Herniaria hirsuta	A rupturewort
H. glabra	Smooth rupturewort
Fabaceae	NA
Acacia gummifera	Moroccan acacia
Coronilla viminalis	Pink/white crown vetch
Scorpiurus muricatus	A scorpion vetch
Medicago trunculata	A medick A medick
M. murex	
Hespero laburnum	Large yellow broom relative
platycarpum Plumbaginacea	Telative
Limonium sinuatum	Sea lavender
Tamarisaceae	Sea laveridei
Tamarisaceae Tamarix africanum	A tamarisk
Caryophulaceae	A tallialisk
Spergularia pentranda	A spurrey
Cactaceae	7. Spairey
Opuntia maxima	Prickly pear
Papaveracea	1 Holly pear
Glaucium corniculatum	Orange horned poppy
Lamiaceae	Crange nomed poppy
Thymus maroccana	A long-flowered thyme
Lavendula marocca	Moroccan lavender
L. dentata	A lavender
Geraniaceae	Alavelidei
Erodium moschatum	A storksbill
E. botrys	A storksbill
E. crassifolium	A storksbill
E. sicutarium	Common storksbill
	Musk storksbill
E. chium	MUSK STOLKSDIII
Boraginaceae Echium horridum	A red bugloss
E. tuberculatum	A bristly bugloss
E. plantagineum	Purple bugloss
Scrophulariaceae	1 diple bugioss
Verbascum sp.	A mullein
Verbascum sinuatum	A wavy-edged mullein
	A figwort
Scrophularia syriaca S. canina	A figwort
Plantaginaceae	/ ligwort
Plantaginaceae Plantago afra	A branched plantain
Kickxia sagittata	A fluellen
K. heterphylla	A filuellen
Oleacaea	7. HIGGIGH
Olea europeum	Olive
Moraceae	Olive
Ficus carica	Fig
Apocinacea e	' 'Y
Nerium oleander	Wild oleander
Resedaceae	TTIM OIGHTING
Reseda alba	White mignonette
R. lutea	mignonette
R. phyteuma	a mignonette
Rhamnaceae	a mignoriotto
Rhamnus alaternus	Small leaved buckthorn
Poaceae	Omaii leaveu bucktiiom
Arundo donax	the largest grass in the
Audido dollax	world
Araliaceae	WORK
Hedera algeriensis	An ivy
Cucurbitaceae	7 11 1V y
Bryonia dioica	White bryony
ים yorna uioica	vville bryony

Colchicaceae	T
Androcymbium	An autumn 'crocus' relative
aramineum	All addulling crocds relative
grammeam	
ELMAASA VILLAGE	
Agavaceae	
Agave sisalana	Sisal
Aizoaceae	
Aizoon canariense	Aizoon
Mesembryanthemum	A white Livingstone-daisy
crystallinum	,
Cactaceae	
Opuntia ficus-indica	A large-fruited prickly pear
Opuntia maxima	A purple-fruited prickly
•	pear
Solanaceae	
Solanum nigrum	Black nightshade
Hyoscyamus albus	Henbane
Boraginaceae	
Heliotropium crispum	A cherry-pie
Echium horridum	A red bugloss
E. tuberculatum	A bristly bugloss
E. petiolata	A blue bugloss
Lamiaceae	
Ajuga chamaepytis	Ground pine
Marrubium vulgare	White-horehound
Asteraceae	
Euphorbia offiicinarum	A spiny spurge
Ricinus communis	Caster-oil plant
Fabaceae	
Coronilla emerus	A shrubby scorpion-vetch
Coronilla segurioides	A scorpion-vetch
Lotus creticus	A bird's foot trefoil
Medicago murex	A medick
Lathyrus clymenum	A two-tone pea
Ceratonia siliqua	Carob
Ebenus pinnata	
Boraginaceae	
Trichodesma calcarata	Pale blue and white with swept back petals
Plantaginaceae	
Veronica anagallis-	Blue water-speedwell
aquatica	
Orobanchaceae	a purple breemrens
Phelipanche ruteriana	a purple broomrape- relative
Cistaceae	relative
Helianthemum ellipticum	a shrubby rock rose
Verbenaceae	a siliubby fock fose
Vitex agnus-castus	The chaste tree
Asteraceae	The onaste tree
Pulicaria mauritanica	A fleabane
Chrysanthemum	Crown daisy
coronarium	J. S. M. Galoy
Volutaria cuprinoides	a dainty knapweed-relative
Rhodanthemum	a white/pink daisy
pseudocatanche	
Typhaceae	
Typha domingensis	A reedmace
Juncaceae	
Juncus acutus	Sharp rush
Zygophyllaceae	
Fagonia arabica	A fagonia
	. •

Anvillea garcinii	A yellow daisy bush
Cladanthus arabicus	Orange daisy, feathery
	leaves
Bidens auriantiaca	A bur marigold
Volutaria maroccana	A knapweed relative
PARADISE VALLEY	
Cupressaceae	
Tetracinus declinata	A juniper relative
Smilacaceae	
Smilax aspera	Smilax
Arecaceae	
Phoenix dactylifera	Date palm
Polygonaceae	
Rumex induratus	Buckler dock
Papaveraceae	
Papaver rhoeas	common poppy
Plumbaginaceae	
Limonium lobatum	A sea-lavender
Hypericaceae	
Hypericum aegypticum	A shrubby St. John's wort
Primulaceae	
Anagallis arvensis	Blue pimpernel
Euphorbiaceae	
Euphorbia helioscopa	Sun spurge



Common bulbul (TW).