Naturetrek Tour Report

22 May - 5 June 2013













Stripeless Tree Frog

Report & images compiled by David Tattersfield



Naturetrek Cheriton Mill Cheriton

T: +44 (0)1962 733051

E: info@naturetrek.co.uk

Alresford

Hampshire SO24 0NG

F: +44 (0)1962 736426

England

W: www.naturetrek.co.uk

Tour Leader: David Tattersfield Naturetrek Naturalist

Mohamed Zaki Local Guide

Participants: Cate Andreopoulos

Rod Ship Liz Ship Sergio Copett

Sergio Conetti

Day 1

Wednesday 22nd May

We assembled at Gatwick and departed in the afternoon. Clear, sunny weather allowed good views of the Channel Islands and the Portuguese coast, before we crossed into North Africa. As we descended into Marrakech Menara Airport, the High Atlas was visible to the south, its high peaks highlighted by ribbons of snow. We were met by Mohamed Zaki, our local guide and transferred to the delightful Riad Aladdin, beside the Bahia Palace, on the edge of the medina.

After settling into our rooms, we relaxed on the roof terrace, from where we could closely observe the White Storks, just a few meters away on the city walls. Overhead were hundreds of Pallid Swifts and numbers of the smaller Little Swift, with square-cut tails and white rump patch. We wandered into the centre of the medina to meet Mohamed and enjoyed a delicious dinner around 9.30pm. We rounded off the evening with a coffee, overlooking the bustle of the Jemaa el Fna, before retiring to bed.

Day 2

Thursday 23rd May

We breakfasted on the roof terrace, watching the courtship displays of Storks on their huge nests, several of which already had fledglings. House Buntings were nesting in the walls of the Riad and hopped around our feet in search of crumbs. We had the whole day to explore the Red City and started by returning to the Fna, now silent and almost empty. We wandered through the amazing souks that surround it, marvelling at the variety of little shops and the comings and goings of the locals. We made our way to the Medrassa Ben Yussef, taking advantage of a coffee break at the museum, first. After enjoying the magnificent architecture of the Koran School, one of the finest old buildings in the city, we walked to the edge of the souks to dyer's quarter. Back near the Fna, we enjoyed a simple lunch and then took taxis to the Marjorelle Garden, relaxing, during the hottest part of the day, in the shade of the palm trees in this peaceful oasis.

We returned by taxi in late afternoon and strolled around the Koutoubia Mosque, before drinks in a roadside cafe, watching the world go by. By 7.30 we were back in the Riad, after a long but interesting day, where we freshened-up before going out to dinner in a roof-top restaurant overlooking the Koutoubia Mosque.

Day 3 Friday 24th May

We were up early and after breakfast and packing, we left Marrakech around 8.30 am. Dropping off our excess luggage, we headed south, towards the High Atlas. In the foothills, we made our first stop, just beyond Tahahanout, to view our first typical Berber village.

In the Poplars and orchards lining the river, we had good views of Golden Oriole and Rollers. The road climbed steeply upwards, skirting the Moulay Brahim Gorge, to Asni, where we purchased water for the trek and had coffee, looking up the valley to snow-streaked peaks which culminated in Jbel Toubkal, the highest in North Africa. A little way up the Mizane Valley, we came to Imi Ourhlad, the start of our trek, where our mules and lunch were waiting. By 1.30 pm we were ready for off and crossed the river to a good mule trail that climbed steeply over the Tizi 'n Bour. There were many plants typical of the warmer southern Mediterranean maquis; Prickly Juniper Juniperus oxycedrus, Phoenician Juniper Juniperus phoenicia and Holm Oak Quercus ilex, with a rich ground flora, such as the blue Globularia alypum, Rockroses Cistus spp. and Mallow-leaved Bindweed Convolvulus althaeoides. In addition, there were plants exclusive to the region; the aromatic-leaved, pink-flowered Salvia taraxacifolia, the shrubby Milkwort Polygala balansae, the purple-pink daisy Rhodanthemum gayanum and in wet areas the endemic Eryngo Eryngium variifolium, to name but a few. It wasn't long before we saw our first Moussier's Redstart, a constant companion during the trek. After a careful search of the hillside, we also located Tristram's Warbler, first by its call and then with very good views of birds defending their territory. We descended through some rather barren rocky slopes to El Bour and past the cherry groves of Imsker to our campsite under Walnut trees, on a terrace above the river. All that remained was for us to install ourselves in our tents and look forward to the exciting days ahead.

Day 4

Saturday 25th May

We were woken by the dawn chorus and watched Golden Orioles in the trees, while we ate breakfast. We made an 8.30am start for our long ascent to our next campsite. Moussier's Redstart were common, with the occasional Black-eared Wheatear and Black Wheatear and Crag Martins swooped low over the cliffs. Salvia taraxacifolia was common on the rocky hillsides, along with the Fan-palm Chamaerops humilis var. glauca and the silver-budded Cupidone Catananche caerulea. Stunted Oaks were all that remained of any previous forest and everything was grazed to within an inch of its life by the flocks of sheep and goats, that could be seen streaming from every village, early each morning. Beyond a village, we followed a streambed, lined with roses, Elderberry and the Laburnum-like Adenocarpus anagyrifolius, where we saw our first Levaillant's Green Woodpecker.

As we ate lunch in the shade of Walnut trees, Speckled Wood, Cleopatra and Clouded Yellow flitted around us and a Nightingale sang from a nearby thicket. Continuing up a narrowing valley, we negotiated a steep, loose climb to gain a high ridge, with wonderful views back the way we had come. Mohamed's tape recording enticed Firecrest right overhead and we all had excellent views of these tiny colourful birds. We followed a stony plateau, crossing sparse barley fields, dotted with Gladiolus and Tassel Hyacinth *Muscari comosum*, to our excellent camp, overlooking the village of Gliz. Around us the hillsides were colourful with the deep yellow Broom *Cytisus balansae* and the spiny pink cushions of *Alyssum spinosum* and High Atlas Day Geckos ran around the warm sandstone rocks. We ate our meal, after a lovely sunset and the cloud, which had obscured the summit of Jbel Oukaimeden, high above us, cleared by 10.30 pm, to reveal a starry sky.

Day 5

Sunday 26th May

We left the campsite at 9.00am and gradually ascended through a forest of ancient Junipers *Juniperus thurifera*, with the multicoloured peaks of the Atlas stretching into a grey haze to the west. After a break for snacks, we crossed the scree on the northern slopes of Jbel Oukaimeden to the high pasture overlooking the ski resort.

A range of new plants greeted us, including the spiny cushions of *Astragalus ibrahimianus* the silver-budded *Catananche caespitosa*, the purple thistle *Jurinea humilis* and a St Bernard's Lily *Anthericum baeticum*. New birds to us were Wood Lark, Shore Lark, Seebohm's Wheatear, with Black Redstart and Blue Rock Thrush on the shepherds' azibs.

We settled into our dormitories at the Club Alpin Francais before lunch and after showers and a little relaxation, set off for an afternoon of exploration. We searched the sandstone slabs for some of the bronze-age rock carvings that are scattered across the hillside and, avoiding the trinket sellers, who had appeared out of nowhere, crossed the dam, to the line of low cliffs on the far side. Growing under the rocks was the Bluebell relative Hyacinthoides hispanica subsp. algeriense with creamy anthers, while on the drier exposed slabs the straw-yellow flowers of Rhodanthemum catananche made a fine show. Along the cliffs were lots of pink Valeriana tuberosa, deepblue Fodder Vetch Vicia villosa and quantities of Meadow Saxifrage Saxifraga granulata. The only prominent shrubs were Daphne laureola and a rather fine bush of Snowy Mespilus Amelanchier ovalis. We returned along the edge of the dam, startling many noisy frogs in the process. By 5.00 pm thick mist rolled up the valley but cleared away after darkness had fallen.

Day 6

Monday 27th May

After breakfast, we left the relative comfort of the Club Alpin Francais and headed off up the valley in warm sunshine to the sound of huge mixed flocks of Chough and Alpine Chough overhead. Below the ski lifts, in the wet margins of the stream, Robust Marsh Orchids *Dactylorhiza elata* were just coming into flower and the water was white with Thread-leaved Water Crowfoot *Ranunculus trichophyllus*. We walked slowly along the flat valley bottom, observing the birds among the mounds of gravel, where building materials have been extracted. Black Redstarts were busy nesting in the summer dwellings or azibs, and Woodlark, Thekla Lark and Tawny Pipit were all seen well and we were delighted to add Rock Thrush to our list. Of the smaller birds, flocks of Linnet and Serin were everywhere but with a little patient searching, we eventually located a number of Crimson-winged Finches, a speciality of the region.

The massive bulk of Jbel Angour was in front of us as we made a final steep climb to the Tizi n'ou Eddi, at 2960 m the highest point of our trekking route. To the south the view was outstanding with Jbel Toubkal and its satellite 4000m peaks, dominating the skyline and rising above an amazing cloud inversion in the valleys. We stopped for our usual mid-morning snack at an airy vantage point, from where we could see our destination and the next few days' walk far below us. A steep zigzag mule trail lay ahead, threading through the cliffs and screes down to Tachddirt, near the head of the valley. On arrival at our campsite, we were able to use the adjacent Gite to eat a late lunch and relax in the hot sunshine. By 4.30 the mist rose up the valley and a notable chill set in.

Day 7

Tuesday 28th May

We awoke to a chilly two degrees, with frost on the tents, but otherwise a bright sunny morning. A gentle road walk during the morning allowed us to fully appreciate the scenery. Robust Marsh Orchids lined some of the irrigation ditches, where green pasture had been created from the otherwise dry landscape. Alongside the road were many plants of the luminous-yellow Woad *Isatis tinctoria* and the silver rosettes of the endemic Thistle *Cirsium dyris*.

A number of butterflies included Bath White, Vaucher's Heath, Giant Grayling and the North African subspecies of Glanville Fritillary. From the Tizi n' Tachddirt, we descended steeply through Pine plantations and a village to our pre-determined lunch stop in a Walnut grove, where after the usual feast, we had time for a siesta.

By mid-afternoon, it became cloudy and cooler so we set off again, following a mule trail and water channels through the village and up through a maze of large boulders to the village of Aroumd. Crossing the river, we spotted our first Dipper racing upstream and heard the familiar call of Levaillant's Green Woodpecker in the walnuts. We were soon in our Gite, our home for two nights and, once more, the luxury of showers, a roof over our heads and an opportunity for some essential washing.

Day 8

Wednesday 29th May

The day dawned clear and bright, with the snows of Jbel Toubkal gleaming at the head of the valley. After a leisurely breakfast, we set off across the broad gravelly expanse of the flood plain and joined the mule trail that zig-zagged upwards to the religious shrine of Sidi Chamharouch. Crag Martin, House Martin and Red-rumped Swallow were constant companions overhead with Black and Moussier's Redstart, among the boulders. We enjoyed a refreshing brew of mint tea at the shrine, a drink to which we were all now well accustomed, while enjoying really close views of Alpine Chough. A cheery 'Hello' from our amiable cook, Mohamed, and a delicious hot lunch awaited us down in the river bed and we relaxed, watching the comings and goings of Dipper and Grey Wagtail.

We returned down the trail, busy with pilgrims and the usual Toubkal traffic and made a diversion along the water-channels, that had turned the steep valley side into a floral spectacle, with roses, yellow *Adenocarpus anagyrifolius*, colourful patches of Kidney Vetch *Anthyllis vulneraria* subsp. *maura*, *Aquilegia vulgaris* var. *ballii* and lots of Orchids. A good range of butterflies added to the afternoon's entertainment, as we made our way slowly back for our obligatory tea and biscuits.

Day 9

Thursday 30th May

We made our usual start, around 8.30am, initially following the piste above the busy road-head village of Imlil, before starting the steep 500 metre ascent to the Tizi Mzic. In the hot sun, a number of butterflies were on the wing and we had our best views of the endemic Vaucher's Heath. We took our time, enjoying the views, the colourful flowers and the noisy antics of the Atlas Magpies. Nevertheless, it was a relief to reach the top and relish our achievement. We descended gradually through magnificent Juniper forest, along the boundary of the National Park to lunch. Attempts to exclude grazing within the protected area had clearly been a pointless exercise, as the fencing wire had been cut in many places. Cloud was gradually building and we set off again for our campsite, hoping the anticipated rain would not materialise. It was an easy stroll, through a breathtaking landscape, to our camp at Azib Tamsoult, where our muleteers, who had effortlessly overtaken us earlier in the day, had everything prepared, as usual.

Day 10

4

Friday 31st May

The cloud had cleared overnight and we awoke to a perfect day. Apart from a shepherd and a large flock of sheep and goats, we had the place to ourselves.

We had the whole day to explore the higher part of the Assaden Valley, above our campsite and set off through the patchwork of terraced fields and azibs that would become a hive of activity later in the season. We entered a deep ravine, beneath huge cliffs and made our way up to the largest of the waterfalls. It was an impressive sight, with rainbows visible in the spray at its base. The cliffs had an interesting selection of plants, including Alpine Rock Cress *Arabis alpina* subsp. *cancasica*, the endemic Ivy-leaved Whitlowgrass *Draba hederifolia* and *Saxifraga maireana*, clearly enjoying the damp shaded conditions. The path continued steeply upwards allowing close views of the unusual cliff-dwelling shrubby daisies, *Aliella platyphylla* and *Aliella ballii*, which we had seen distantly on Jbel Angour.

Once above the cliffs, the trail became a straight-forward uphill walk to the Tazarhart Refuge at 3000 metres, where we could relax and eat our snacks. High above us was the snow-streaked Tazarhart Plateau and below were distant views of the foothills and the final stages of the trek. At this high elevation, we had hoped to see Alpine Accentor and were not disappointed, seeing up to ten individuals around the hut. We were back at the campsite by mid-afternoon, well satisfied with our achievements.

Day 11

Saturday 1st June

After an open-air breakfast and repacking our bags, we set off down on the easy mule trail through open Juniper forest. There were many venerable specimens, several thousand years old, despite the obvious signs of harvesting for firewood and the massive scale of soil erosion that currently affects the whole of the High Atlas. It wasn't long before we reached signs of habitation, with irrigation ditches, walnut trees and terraced hillsides around the villages. Passing through the narrow alleyways gave us an insight into the daily lives of the industrious Berbers and their time-honoured traditions.

We stopped for a long lunch break and some welcome shade from the strong sun before descending to cross the river to our Camp at Tiziane. Cloud had built up during the day but, although thunder rumbled around us, no rain came and we spent the remainder of the afternoon pottering around the campsite.

Day 12

Sunday 2nd June

We continued the second half of our long descent, setting off through Apple orchards where we had splendid views of Sardinian Warbler and Western Olivaceous Warbler. On dry hillsides, beyond, we had the fortune to spot several Atlas Agamas, sunning themselves on the rocks before a steep descent and river crossing was necessary to negotiate a narrow gorge. As we descended, the day warmer up considerably, with the temperature reaching 29 degrees in the shade. The vegetation changed markedly, as we entered the hotter Mediterranean zone, with Lentisc Pistacia lentiscus Carob Ceratonia siliqua, Prickly Juniper Juniperus oxycedrus and Holm Oak Quercus ilex dominating the maquis. Across the valley this was particularly dense, in the protected area of the Reserve de Takherkhort, where there may still be a small surviving population of Barbary Sheep. Several species of Cistus and Lavender were present, including the endemic Lavandula pedunculata subsp. atlantica. Noisy Cicadas sang from the trees and we came across a large Mediterranean Chameleon crossing the path.

We left the main trail and followed the riverbed, through colourful stands of Oleander, to our campsite on the river bank, where the usual delicious lunch was waiting.

Like previous days, storm clouds were gathering and thunder signalled an increasing threat of a storm. From previous experience, these can be spectacular and cause catastrophic flash flooding and in such circumstances our campsite was vulnerable. We decided to leave the site and continued along the road past the village of Tessa Ouirgane, where we found a much better position for our tents and had effectively reached the end of our trek. As it happed the thunder clouds dissipated, but it had been a good decision and was a comfortable place to spend our last night. As an added bonus, we had a real treat, when a number of Nightjars displayed their wing-clapping courtship, as darkness fell.

Day 13 Monday 3rd June

After a comfortable and warm night, it was time to pack away our camp for the last time. Our vehicles arrived, tents and equipment were packed away and our gear was stowed in the minibus. We thanked our trekking team and said our goodbyes. We were sorry to see them go; they had been great company and taken everything in their stride. Before our long drive, we continued our walk down the road for an hour or more, to fully appreciate the semi-desert environment and the eroded landscape. The prominent tree was the unusual conifer *Tetraclinis articulata*, the root of which, as we were to see, forms the basis of the wood-carving industry in Essaouira. Birds on the walk included Tristram's Warbler, Roller, a splendid male Black-eared Wheatear and both Southern Grey and Woodchat Shrikes.

We walked out to the main road and boarded the bus for the journey back to Marrakech. We stopped briefly to pick up the rest of our gear and continued west, stopping for a light lunch at Chichaoua, our half-way point. Beyond the dusty plateau, as we neared the coast, we made stops to see the Argan trees and an Argan cooperative, where souvenirs were duly purchased. A short while later we arrived in Essaouira and splendid Riad Al Madina in the centre of town. We had a little time to explore before going out to dinner on the ramparts overlooking the impressive Portuguese sea-defences, with Eleonora's Falcons gliding overhead.

Day 14 Tuesday 4th June

We shared breakfast with the resident House Buntings, before spending the morning walking along the beach. New birds on the estuary included Greenshank, Sanderling, Dunlin, Little Stint and Black-winged Stilt, with Kentish, Little-ringed and Ringed Plover. Best of all was a flock of seventeen Spoonbills, perhaps one hundred Eleonoras Falcon and a single Moroccan Wagtail, with its distinctive head pattern. New to our list of reptiles were Spur-thighed Tortoise and Spiny-footed Lizard. We returned along the road to Essaouira and after freshening up, went out for a simple lunch in the square. After a visit to one of the carpentry workshops, everyone went their separate ways in the afternoon, exploring the picturesque harbour, the markets and the maze of busy streets. After this, we ended up back in the square at the Cafe de France. A final lovely meal in a quiet restaurant finished the day before we returned to pack for our homeward journey.

Day 15 Wednesday 5th June

We needed to make an early start for the return journey. We made good time, and after dropping off Sergio at the airport and saying our goodbyes, we went for lunch in Marrakech and a final stroll round the Jemaa el Fna, before it was our turn to depart.

We thanked Mohamed for his great help and companionship during our time in Morocco and left with lasting memories of our many shared experiences in the High Atlas!

Receive our e-newsletter

Join the Naturetrek e-mailing list and be the first to hear about new tours, additional departures and new dates, tour reports and special offers. Visit www.naturetrek.co.uk to sign up.

Naturetrek Facebook

We are delighted to launch the Naturetrek Facebook page so that participants of Naturetrek tours can remain in touch after the holiday and share photos, comments and future travel plans.

Setting up a personal profile at www.facebook.com is quick, free and easy. The Naturetrek Facebook page is now live; do please pay us a visit!

Species List

Plants (• = endemic)

Scientific name Common name

LYCOPODIOPSIDA CLUBMOSSES

Selaginellaceae Lesser Clubmoss Family

Selaginella balansae• A Clubmoss

Selaginella denticulata Mediterranean Clubmoss

EQUISETOPSIDA HORSETAILS

EquisetaceaeHorsetail FamilyEquisetum ramosissimumBranched Horsetail

PTEROPSIDA FERNS

Adiantaceae Maidenhair Fern Family

Adiantum capillus-veneris Maidenhair Fern Anogramma leptophylla Jersey Fern

Cheilanthes vellea

Cheilanthes pteridioides

Aspleniaceae Spleenwort Family

Asplenium adiantum-nigrum Black Spleenwort
Asplenium onopteris Irish Spleenwort

Asplenium trichomanes Maidenhair Spleenwort

Asplenium ruta-muraria Wall Rue

Asplenium septentrionale Forked Spleenwort
Asplenium viride Green Spleenwort

Ceterach officinarum Rustyback

Dennstaedtiaceae Bracken Family

Pteridium aquilinum Bracken

Dryopteridaceae

Dryopteris felix-mas Male Fern

Polystichum aculeatum Prickly Shield-fern

Polypodiaceae Polypody Family

Polypodium cambricum Southern Polypody

WoodsiaceaeLady-fern FamilyCystopteris dickeanaDickie's Bladder-fernCystopteris fragilisBrittle Bladder-fern

PINOPSIDA CONIFERS

Cupressaceae Cyprus Family

Cupressus sempervirens Italian Cypress

Juniperus oxycedrus subsp. macrocarpa Large-fruited Prickly Juniper Juniperus oxycedrus subsp. oxycedrus Prickly Juniper

Scientific name

Common name

Juniperus phoeniciaPhoenician JuniperJuniperus thuriferaSpanish JuniperTetraclinis articulataTetraclinis

EphedraceaeJoint-Pine FamilyEphedra fragilisBrittle Joint-pine

PinaceaePine FamilyCedrus libani subsp. atlantica•Atlantic CedarPinus halepensisAleppo PinePinus pineaStone Pine

MAGNOLIOPSIDA MAGNOLIIDAE

FLOWERING PLANTS DICOTYLEDONS

AizoaceaeDew Plant FamilyCarpobrotus edulisHottentot FigMesembryanthemum cristallinumIce PlantMesembryanthemum nodiflorum

Anacardiaceae Sumach Family

Pistacia lentiscusLentiscPistacia terebinthusTerebinth

Rhus tripartita

Apiaceae Carrot Family

Bupleurum atlanticum

Bupleurum fruticosum

Bupleurum fruticesens subsp. spinosum

Crithmum maritimum

Daucus carota

Eryngium bourgatii

Shrubby Hare's-ear

Spiny Hare's-ear

Rock Samphire

Wild Carrot

Pyrenean Eryngo

Eryngium campestre Field Eryngo
Eryngium ilicifolium Holly-leaved Eryngo

Eryngium tricuspidatum Eryngium variifolium•

Bunium bulbocastanum

Foeniculum vulgare subsp. piperatum Fennel

Heracleum sphondylium Orlaya daucoides

Pseudorlaya pumila Pseudorlaya
Scandix pecten-veneris Shepherd's Needle

Sesili libanotis subsp. atlanticum•

Tordylium apulum Tordylium
Torilis elongata

Torilis elongata

Apocyanaceae

Apocyanaceae Periwinkle Family

Nerium oleander Oleander Vinca difformis

Araliaceae Ivy Family

Hedera helix subsp. maroccana• Ivy

Aristolochiaceae Birthwort Family

Aristolochia paucinervis A Birthwort

Asteraceae Daisy Family

Achillea ligustica Aliella ballii• Aliella platyphylla•

Anacyclus pyrethrum var. depressus.

Andryala maroccana• Anthemis pedunculata

Anthemis rigidaRayless ChamomileArctium minusLesser BurdockAtractylis cancellataBird-cage ThistleAtractylis gummiferaAtractylis

Bellis annua Bellis caerulescens•

Calendula arvensis Field Marigold

Carduncellus pinnatus var. acaulis• Carduncellus rhaponticoides• Carduus macrocephalus Carduus nutans subsp. maurus

Carlina corymbosa Flat-topped Carline Thistle

Annual Daisy

Carthamnus arborescens Carthamnus lanatus

Catananche caerulea Cupidone

Catananche caespitosa•

Centaurea calcitrapaRed Star-thistleCentaurea melitensisMaltese Star-thistle

Centaurea pullata

Centaurea solstitalis Yellow Star-thistle

Centaurea sphaerocephala Centaurea takredensis Chamaemelum scariosum•

Chondrilla juncea Chondrilla Cichorium intybus Chicory

Cirsium chrysacanthum•

Cirsium dyris•

Cladanthus arabicus Cladanthus

Crepis hookeriana• Hooker's Hawksbeard

Crupina crupinastrum Crupina Cynara cardunculus Cardoon

Dittrichia graveolens

Dittrichia vicosaStinkweedEchinops spinosusA Globe ThistleErigeron mairei•Maire's FleabaneEupatorium cannabinumHemp Agrimony

Evax pygmaea

Galactites tomentosaGalactitesGlebionis coronariaCrown DaisyGlebionis segetumCorn Marigold

Hieracium pilosella Mouse-ear Hawkweed

Helichrysum italicum Curry Plant

Scientific name

Common name

Hyoseris radiata Inula montana Jurinea humilis

Lactuca perennis Blue Lettuce Prickly Lettuce Lactuca serriola Launaea arborescens A Launea

Launaea resedifolia

Leontodon tuberosus **Tuberous Hawkbit**

Mantisalca Mantisalca salmantica

Onopordon acaulon

Pallenis Pallenis spinosa

Phagnalon rupestre Phagnalon saxatile

Picnomon acarna Picnomon

Picris hispanica

Pseudognaphalium luteo-album Jersey Cudweed

Ptilostemon hispanicus

Reichardia tingitana Reichardia Rhagadiolus stellatus Star Hawkbit

Rhodanthemum atlanticum• Rhodanthemum catananche• Rhodanthemum depressum• Rhodanthemum gayanum•

Spanish Oyster Plant Scolymus hispanicus

Scorzonera pseudopygmaea•

Silybum marianum Milk Thistle

Sonchus asper

A Dandelion Taraxacum cf. obovatum A Dandelion Taraxacum sp. Tolpis barbata **Tolpis**

Tragopogon crocifolius Tragopogon dubius Tragopogon hybridum

Tragopogon porrifolius Salsify Goat's-beard Tragopogon pratensis Tragopogon sinuatus Prickly Sow-thistle Urospermum dalechampii Urospermum

Volutaria lippii

Xanthium spinosum Spiny Cocklebur Xanthium strumarium Rough Cocklebur Xeranthemum inapterum Xeranthemum

Boraginaceae

4

Borage Family Anchusa azurea Large Blue Alkannet

Madwort Asperugo procumbens Borage Borago officinalis Cerinthe major Honeywort

Cynoglossum creticum Cynoglossum watieri• Echium arenarium Echium boissieri• Echium flavum

Cretan Hound's-tongue

Scientific name

Common name

Echium plantagineumPurple Viper's BuglossErucaria hispanicaSpanish MustardHeliotropium europaeumHeliotropeMyosotis atlantica•A Forget-me-notNeatostema apulumYellow Gromwell

Brassicaceae Cabbage Family
Aethionema saxatile subsp. latifolium Burnt Candytuft

Alyssum atlanticum•

Alyssum spinosum Spiny Alyssum
Arabis alpina subsp. caucasica Alpine Rock Cress

Arabis erubescens•
Arabis conringioides•

Arabis verna Spring Rock Cress

Biscutella didyma Biscutella Cakile maritima Biscutella

Capsella bursa-pastoris Shepherd's Purse
Cardaria draba Hoary Cress

Crambe filiformis

Descurania sophia Flixweed

Draba hederifolia subsp. hederifolia•

Erysimum gramineum• Erysimum incanum Hirschfeldia incana

Hirschfeldia incanaHoary MustardHornungia petraeaHutchinsiaIsatis tinctoria subsp. tinctoriaWoadLepidium drabaHoary CressLobularia maritimaSweet AlisonNasturtium officinaleWatercress

Thlaspi perfoliatum Perfoliate Pennycress

Buxaceae Box Family

Buxus sempervirens Box

Cactaceae Cactus Family

Opuntia cylindrica

Opuntia ficus-barbarica Prickly Pear

CallitrichaceaeWater Starwort FamilyCallitriche stagnalisCommon Water Starwort

CampanulaceaeBellflower FamilyCampanula erinusAnnual Bellflower

Campanula filicaulis• Campanula lusitanica• Campanula mairei•

Campanula rotundifolia Harebell
Campanula sp. A Bellflower

Jasione crispa

Legousia hybrida Venus's Looking Glass
Legousia speculum-veneris Large Venus's Looking Glass

Wahlenbergia nutabunda Wahlenbergia

Cannabaceae Hemp Family

Cannabis sativa Hemp

Capparaceae Caper Family

Capparis spinosa Caper

CaprifoliaceaeHoneysuckle FamilyLonicera etruscaEtruscan Honeysuckle

Lonicera implexa

Sambucus nigra Elder
Viburnum tinus Laurustinus

CaryophyllaceaePink FamilyAgrostemma githagoCorncockle

Arenaria pungens•

Cerastium arvense Field Mouse-ear

Cerastium boissierianum

Cerastium brachypetalum Grey Mouse-ear

Cerastium cerastoides Dianthus lusitanus•

Dianthus sylvestris Wood Pink

Herniaria glabraSmooth RupturewortMinuartia vernaSpring SandwortMoehringia trinervia subsp. pentandraMoehringia

Paronychia argentea
Paronychia kapela

Paronychia polygonifolia

Petrorhagia prolifera Proliferous Pink

Petrorhagia velutina

Polycarpon tetraphyllumFour-leaved AlseedSagina procumbensProcumbent PearlwortScleranthus annuusAnnual KnawelScleranthus perennisPerennial Knawel

Silene boryi Silene colorata

Silene gallica Small-flowered Catchfly

Silene latifolia White Campion

Silene nocturna

Silene nutansNottingham CatchflySilene vulgarisBladder CampionSpergularia fimbriataA Sea SpurryStellaria mediaCommon Chickweed

Stellaria media Common Ch Vaccaria hispanica Cow Basil

Vaccaria hispanica Cow Basil Velezia rigida Velezia

Chenopodiaceae Goosefoot Family

Blitum exsuccum

6

Chenopodium album Fat Hen

Chenopodium bonus-henricusGood King HenrySasola kaliPrickly SaltwortSuaeda maritimaAnnual SeabliteSueda veraShrubby Seablite

Cistaceae Rock Rose Family
Cistus creticus Cretan Cistus

Cistus crispus

Cistus salvifolius Sage-leaved Cistus
Fumana thymifolia Thyme-leaved Fumana

Halimium atriplicifolium Halimium halimifolium Helianthemum croceum

 ${\it Helian the mum\ helian the moides}$

Tuberaria guttata Spotted Rockrose

Tuberaria lignosa

Convolvulaceae Bindweed Family

Convolvulus althaeoides Mallow-leaved Bindweeed

Convolvulus arvensis Field Bindweed

Convolvulus sabatius subsp. mauritanicus.

Cuscuta campestrisField DodderCuscuta epithymumCommon Dodder

Cuscuta nivea
Cuscuta triumvirati

Ipomea purpurea A Morning Glory

Crassulaceae Stonecrop Family Pistorinia breviflora subsp. breviflora•

Sedum acreBiting StonecropSedum albumWhite Stonecrop

Sedum amplexicaule subsp. tenuifolium

Sedum dasyphyllumThick-leaved StonecropSedum hirsutumHairy Stonecrop

Sedum hirsutum Sedum modestum Sedum sediforme

Sempervivum atlanticum•

Umbilicus horizontalis A Navelwort

Umbilicus rupestris A Navelwort

Cucurbitaceae White Bryony Family

Bryonia dioica White Bryony

Ecballium elaterium Squirting Cucumber

Dipsacaceae Teasel Family

Pterocephalus depressus• Scabiosa atropurpurea

Scabiosa columbaria Small Scabious

EuphorbiaceaeSpurge FamilyEuphorbia biumbellataWhorled Spurge

Euphorbia characias Large Mediterranean Spurge

Euphorbia helioscopia Sun Spurge

Euphorbia villosa

Mercurialis annua Annual Mercury

Ricinus communis Castor Oil Plant

Fabaceae Pea Family

Adenocarpus anagyrifolius.

Anagyris foetida Bean Trefoil
Anthyllis vulneraria subsp. maura Kidney Vetch
Anthyllis tetraphylla Bladder Vetch

Astragalus ibrahimianus•

Astragalus lusitanicus subsp. lusitanicus.

Bituminaria bituminosa Pitch Trefoil
Ceratonia siliqua Carob

Colutea atlantica• a Bladder Senna

Coronilla juncea Rush-like Scorpion Vetch

Coronilla valentina subsp. glauca

Coronilla varia Crown Vetch

Coronilla viminalis•

Cytisus balansae subsp. balansae•

Dorycnium hirsutum Dorycnium

Ebenus pinnata

Erinacea anthyllis Hedgehog Broom

Genista cinerea

Hippocrepis multisiliquosa A Horseshoe Vetch Lathyrus aphaca Yellow Vetchling

Lathyrus clymenum Lathyrus sphaericus

Medicago arabicaSpotted MedickMedicago lupulinaBlack MedickMedicago polymorphaToothed MedickMedicago sativaLucerne

Medicago suffruticosa subsp. leiocarpa•

Ononis atlantica• Ononis cristata

Ononis natrix Large Yellow Rest-harrow

Ononis spinosa Spiny Rest-harrow

Retama monospermasubsp. monosperma•

Robinia pseudoacaciaFalse AcaciaScorpiurus muricatusScorpiurusSpartium junceumSpanish BroomTrifolium campestreHop TrefoilTrifolium fragiferumStrawberry Clover

Trifolium humile

Trifolium pratenseRed CloverTrifolium repensWhite CloverTrifolium stellatumStar CloverTrifolium tomentosumWooly Trefoil

Vicia benghalensis

Vicia cracca Tufted Vetch

Vicia glauca

Vicia hirsuta Hairy Tare
Vicia tenuifoia subsp. villosa Fodder Vetch

FagaceaeBeech FamilyQuercus cocciferaKermes OakQuercus ilexHolm Oak

Frankeniaceae Sea Heath Family
Frankenia hirsuta A Sea Heath

FumariaceaeFumitory FamilyFumaria officinalisCommon Fumitory

GentianaceaeGentian FamilyBlackstonia perfoliataYellow WortCentaurium erythraeaCommon Centaury

Geraniaceae Geranium Family
Erodium cicutarium Common Stork's-bill

Erodium cossonii• Erodium guttatum Erodium malacoides

Globularia nainii

Erodium malacoidesMallow-leaved Stork's-billGeranium lucidumShiny Crane's-billGeranium dissectumCut-leaved Crane's-billGeranium malviflorumMallow-flowered Crane's-billGeranium molleDove's-foot Crane's-billGeranium pyrenaicumPyrenean Crane's-billGeranium robertianumHerb Robert

Globularia Family
Globularia alypum
Globularia liouvillei

Globularia Family
Shrubby Globularia

Grossulariaceae Currant Family Ribes uva-crispa Gooseberry

HypericaceaeSt John's-wort FamilyHypericum perforatumPerforate St John's-wortHypericum pubescens

JuglandaceaeWalnut FamilyJuglans regiaWalnut

Lamiaceae Mint Family

Ajuga iva

Ballota nigra

Black Horehound

Hyssopus officinalis var. maroccanus•

Lamium amplexicaleHenbit DeadnettleLavandula dentataToothed LavenderLavandula multifidaCut-leaved Lavender

Lavandula pedunculata subsp. atlantica•

Lavandula stoechas French Lavender

Marrubium vulgare White Horehound

Mentha gattefossei• Mentha suaveolens Nepeta atlantica•

Origanum vulgareMarjoramPrasium majusPrasiumPrunella vulgarisSelf-healRosmarinus officinalisRosemary

Salvia taraxacifolia•

Salvia verbenaca Wild Clary
Satureja acinos Basil Thyme

Satureja alpina subsp. meridionalis

Satureja atlantica• Satureja filiformis Satureja graeca

Satureja nepeta Lesser Calamint

Satureja rotundifolia

Satureja vulgaris Wild Basil

Scutellaria orientalis Eastern Scullcap

Stachys saxicola
Teucrium capitatum

Teucrium chamaedrysWall GermanderTeucrium fruticansShrubby GermanderTeucrium poliumFelty Germander

Thymus atlanticus•
Thymus satureioides•

Linaceae Flax Family
Linum bienne Pale Flax

Lythraceae Loosetrife Family

Lythrum hyssopifolia Grass-poly
Lythrum portula Water Purslane

MalvaceaeMallow FamilyMalva neglectaDwarf MallowMalva sylvestrisCommon Mallow

Moraceae Fig Family

Ficus carica Fig

OnagraceaeWillowherb FamilyEpilobium hirsutumGreat WillowherbEpilobium obscurumShort-fruited WillowherbEpilobium parviflorumHoary Willowherb

Epilobium psilotum•

Epilobium tetragonum Square-stemmed Willowherb

Oleaceae Olive Family

Fraxinus angustifolia

Jasminum fruticans

Olea euopaea

Phillyrea latifolia

Narrow-leaved Ash
Wild Jasmine
Wid Olive
Mock Privet

Phillyrea angustifolia Narrow-leaved Mock Privet

Orobanchaceae Broomrape Family

Orobanche alsatica
Orobance minor
Lesser Broomrape
Orobanche ramosa
Branched Broomrape

OxalidaceaeWood-sorrel FamilyOxalis corniculataProcumbent Yellow Sorrel

Oxalis pes-caprae Bermuda Buttercup

PapaveraceaePoppy FamilyGlaucium corniculatumRed Horned-poppyGlaucium flavumYellow Horned-poppy

Glaucium flavum Yellow Horned-poppy Papaver atlanticum subsp. atlanticum •

Papaver dubiumLong-headed PoppyPapaver hybridumRough PoppyPapaver rhoeasCommon Poppy

Plantaginaceae Plantain Family

Plantago afra
Plantago coronopus
Buck's-horn Plantain

Plantago lagopus
Plantago major
Greater Plantain

Plumbaginaceae Thrift family

Armeria alliacea• A Thrift

Armeria atlantica• A Thrift

Limonium sinuatum Wavy-leaved Sea Lavender
Plumbago europaea European Plumbago

Polygalaceae Milkwort Family

Polygala balansae•

PolygonaceaeDock FamilyOxyria digynaMountain SorrelPolygonum aviculareKnotgrass

Polygonum bistorta Bistort
Rumex acetosa Common Sorel

Rumex acetosal Sheep's Sorrel
Rumex bucehalophorus

Rumex scutatus French Sorrel

Portulacaceae Purslane Family

Montia fontana Blinks

PrimulaceaePrimrose FamilyAnagallis arvensisScarlet PimpernelAnagallis foeminaBlue Pimpernel

Anagallis monelli subsp.linifolia
Anagallis monelli subsp. monelli

Asterolinon linum-stellatum Asterolinon

Scientific name

Common name

Ranunculaceae Buttercup Family

Aconitum lycotonumMonkshoodAquilegia vulgaris var. ballii•A ColumbineClematis cirrhosaVirgin's BowerClematis flammulaFragrant Clematis

Consolida ajacis Delphinium balansae• Nigella damascena Nigella hispanica

Ranunculus dyris •

Ranunclus acrisMeadow ButtercupRanunculus arvensisCorn ButtercupRanunculus bulbosusBulbous Buttercup

Ranunculus repens Creeping Buttercup
Ranunculus scleratus Celery-leaved Crowfoot

Ranunculus trichophyllus Thread-leaved Water Crowfoot

Resedaceae Mignonette Family
Reseda alba White Mignonette

Reseda alba White Migno Reseda luteola Weld

Reseda phyteuma Corn Mignonette

Reseaa pnyteuma Corn Mig

Sesamoides purpurascens

Rhamnaceae Buckthorn Family
Rhamnus alpinus Alpine Buckthorn

Rhamnus alaternus Mediterranean Buckthorn

Rhamnus lycioides susp. atlantica.

Ziziphus lotus

Rosaceae Rose Family
Alchemilla atlantica• A Lady's Mantle

Amelanchier ovalis Snowy Mespilus

Cotoneaster granatensis

Crataegus monogyna Hawthorn

Crategus laciniata

Potentilla recta

Prunus prostrata Rock Cherry
Rosa canina Dog Rose

Rosa micrantha Rosa sempervirens

Rubus ulmifolius Bramble
Sanguisorba minor Salad Burnet

Rubiaceae Bedstraw Family

Asperula aristata

Asperula arvensis Blue Woodruff
Crucianella maritima Coastal Crucianella

Cruciata laevipes Crosswort
Galium aparine Cleavers

Galium lucidum

Galium mollugo Hedge Bedstraw
Galium parisiense Wall Bedstraw

Putoria calabricaPutoriaRubia peregrinaWild MadderSheradia arvensisField Madder

Valantia muralis

Rutaceae Rue Family

Ruta angustifolia Narrow-leaved Rue

SalicaceaeWillow FamilyPopulua albaWhite PoplarPopulus nigraBlack PoplarSalix albaWhite WillowSalix cinereaGrey WillowSalix purpureaPurple Willow

Santalaceae Sandalwood Family

Osyris alba Osyris

Sapotaceae

Argania spinosa Argan

Saxifragaceae Saxifrage Family

Saxifraga globulifera

Saxifraga granulata Meadow Saxifrage

Saxifraga maireana•

Scrophulariaceae Figwort Family

Chaenorrhinum rubrifolium

Chaenorrhinum flexuosum

Digitalis lutea subsp. atlantica• Small Yellow Foxglove

Kickxia commutata Linaria amethystea• Linaria maroccana• Linaria micrantha

Linaria pelisseriana Jersey Toadflax

Linaria simplex

Linaria tristis var. lurida•

Misopates orontium Weasel Snout Parentucellia viscosa Yellow Bartsia

Parentucellia latifolia

Satureja alpina subsp. meridionalis

Satureja atlantica

Scrophularia canina French Figwort

Scrophularia auriculata Scrophularia laevigata

Scrophularia sambucifolia Elder-leaved Figwort

Verbascum rotundifolium A Mullein

Verbascum sinuatumWavy-leaved MulleinVeronica anagallis-aquaticaWater SpeedwellVeronica arvensisField SpeedwellVeronica beccabungaBrooklime

Veronica hederifolia Ivy-leaved Speedwell

Veronica repens var. cyanea•

Veronica rosea•

Veronica verna Spring Speedwell

Solanaceae Nightshade Family

Datura stramoniumThornappleHyocyamus albusWhite HenbaneHyocyamus nigerHenbane

Lycium barbarum Dukeof Argyll's Teaplant

Lycium intricatum

Nicotiana glaucaShrub TobaccoSolanum nigrumBlack NightshadeSolanum villosumHairy Nightshade

TamaricaceaeTamarisk FamilyTamarix africanaA Tamarisk

ThymelaceaeDaphne Family
Daphne laureola
Spurge-laurel

Daphne gnidium subsp. mauritanica•

Ulmaceae Elm Family
Celtis australis Nettle Tree

UrticaceaeNettle FamilyParietaria judaicaPellitory-of-the-WallUrtica membranaceaMembranous Nettle

Urtica piluliferaRoman NettleUrtica urensSmall Nettle

Valerianaceae Valerian Family

Centranthus angustifolius Narrow-leaved Valerian

Centranthus calcitrapa

Centranthus lecogii subsp. maroccanus•

Valeriana tuberosa Tuberous Valerian
Valerianella locusta Corn Salad

Verbenaceae Verbena Family

Verbena officinalis Vervain
Vitex agnus-castus Chaste Tree

ViolaceaeViolet FamilyViola kitaibelianaDwarf PansyViola odorataSweet VioletViola palustrisMarsh Violet

Viola parvula

ZygophyllaceaeCaltrop FamilyPeganum harmalaPeganumTribulus terrestrisMaltese Cross

LILIIDAE MONOCOTYLEDONS

AgavaceaeAgave FamilyAgave americanaCentury Plant

Amaryllidaceae Daffodil Family

Narcissus jeanmonodii•

Narcissus rupicola subsp. watieri•

Anthericaceae St. Bernard's Lily Family
Anthericum baeticum A St. Bernard's Lily

Araceae Arum Family
Arisarum vulgare Friar's Cowl

ArecaceaePalm FamilyChamaerops humilis var. glaucaFan PalmPhoenix canariensisCanary PalmPhoenix dactyliferaDate Palm

AsparagaceaeAsparagus FamilyAsparagus albusWhite Asparagus

AsphodelaceaeAsphodel FamilyAsphodelus aestivusCommon AsphodelAsphodelus fistulosusHollow-leaved AsphodelAsphodelus tenuifoliusAnnual AsphodelColchicaceaeColchicum Family

Cyperaceae

Colchicum Iusitanum•

Cyperus longus Sweet Galingale Isolepis cernua Slender Club-rush

HyacinthaceaeHyacinth FamilyHyacinthoides hispanica subsp. algerienseSpanish Bluebell

Muscari comosumTassel HyacinthOrithogalum algerienseA Star-of-BethlehemOrnithogalum pyrenaicumSpiked Star-of-Bethlehem

Urginea maritima var. maura Sea Squill

Iridaceae Iris Family

Gladiolus byzantinus

Iris florentina

Iris germanica

Byzantine Gladiolus

Florentine Iris

German Iris

JuncaceaeRush FamilyJuncus acutusSharp RushJuncus bufoniusToad RushJuncus effususSoft RushJuncus inflexusHard Rush

Scientific name

Common name

Liliaceae

Fritillaria messanensis var. atlantica•

Lily Family

Orchidaceae

Dactylorhiza elata subsp. sesquipedalis Orchis mascula subsp. olbiensis Orchid Family
Robus Marsh Orchid
Early Purple Orchid

Poacae

Aegilops geniculata Aegilops triuncialis

Alopecurus aequalis Alopecurus geniculatus Ammophila arenaria Anthoxanthum odoratum

Arrhenatherum elatius Arundo donax Avenula bromoides

Briza maxima
Bromus sterilis
Catapodium rigidum
Cynodon dactylon
Deschampsia cespitosa

Lagurus ovatus Lamarckia aurea Polypogon monspeliensis Stipa tenacissima Vulpia unilateralis Vulpia geniculata

Glyceria notata

Holcus lanatus

Grass Family

_ _ . ..

Orange Foxtail Marsh Foxtail Marram

Sweet Vernal Grass False Oat-grass Giant Reed

Large Quaking Grass

Barren Brome
Fern Grass
Bermuda Grass
Tufted Hair-grass
A Flote Grass
Yorkshire Fog
Harestail Grass
Golden Dog's-tail
Annual Beard-grass
Esparto Grass
Mat-grass Fescue

PotamogetonaceaePondweed FamilyPotamogeton natansBroad-leaved Pondweed

Ruscaceae Ruscus aculeatus

Smilacaceae Smilax aspera **Butcher's Broom Family**

Butcher's Broom

Smilax Family

Smilax

Birds (✓ = recorded but not counted; H = heard only)

									M	lay/Ju	ne						
	Common name	Scientific name	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5
1	Great Cormorant	Phalacrocorax carbo maroccanus														✓	
2	Cattle Egret	Bubulcus ibis		✓	✓	✓									✓	✓	
3	Little Egret	Egretta garzetta														✓	
4	Grey Heron	Ardea cinerea														✓	
5	Spoonbill	Platalea leucorodia														17	
6	White Stork	Ciconia ciconia	✓	✓	✓										✓		
7	Short-toed Eagle	Circaetus gallicus												✓			
8	Northern Sparrowhawk	Accipiter nisus								✓			✓	✓			
9	Long-legged Buzzard	Buteo rufinus cirtensis				2	✓	✓	✓				2	2			
10	Booted Eagle	Hieraaetus pennatus	✓			✓	✓						✓	✓	✓		
11	Barbary Falcon	Falco pelegrinoides								✓							
12	Eleonora's Falcon	Falco eleonorae													10	100	
13	Common Kestrel	Falco tinnunculus	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	
14	Barbary Partridge	Alectoris barbara				Н			Н	✓							
15	Black-winged Stilt	Himantopus himantopus														✓	
16	Ringed Plover	Charadrius hiaticula														✓	
17	Little Ringed Plover	Charadrius dubius														✓	
18	Kentish Plover	Charadrius alexandrinus														✓	
19	Sanderling	Calidris alba														10	
20	Dunlin	Calidris alpina														✓	
21	Little Stint	Calidris minuta														✓	
22	Greenshank	Tringa nebularia														✓	
23	Western Yellow-legged Gull	Larus michahellis													✓	✓	✓
24	Lesser Black-backed Gull	Larus fuscus														✓	
25	Rock Dove	Columba livia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓
26	Stock Dove	Columba oenas															
27	Woodpigeon	Columba palumbus	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
28	Collared Dove	Streptopelia decaocto	✓	✓	✓										✓	✓	✓
29	Turtle Dove	Streptopelia turtur		Н	✓									2	✓	✓	
30	Cuckoo	Cuculus canorus													✓		

									M	lay/Ju	ne									
	common name	Scientific name	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5			
31	Scops Owl	Otus scops												✓						
32	Nightjar	Caprimulgus europaeus				Н						Н		✓	Н					
33	Little Swift	Apus affinis	✓	✓	✓										✓					
34	Common Swift	Apus apus													✓	✓				
35	Pallid Swift	Apus pallidus	√	✓	✓										✓					
36	European Roller	Coracias garrulus			2										✓					
37	Levaillant's Woodpecker	Picus vaillantii•				3	✓		Н	✓	✓		✓	Н						
38	Great-spotted Woodpecker	Dendrocopos major			✓	Н			✓	✓			✓							
39	Woodlark	Lullula arborea					✓	✓												
40	Crested Lark	Galerida cristata			✓										✓	✓	✓			
41	Thekla Lark	Galerida theklae						✓												
42	Shore Lark	Eremophila alpestris					✓													
43	Crag Martin	Ptyonoprogne rupestris				✓	✓	✓	✓	✓	✓	✓	✓	✓						
44	House Martin	Delichon urbica							✓	✓		✓								
45	Red-rumped Swallow	Hirundo daurica			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
46	Swallow	Hirundo rustica		✓	✓									✓	✓					
47	Tawny Pipit	Anthus campestris						✓												
48	Moroccan Wagtail	Motacilla subpersonata•														✓				
49	Grey Wagtail	Motacilla cinerea			✓	✓			✓	✓	✓	✓	✓	✓						
50	Common Bulbul	Pycnonotus barbatus	✓	✓	✓	✓			✓					✓	✓	✓	✓			
51	Alpine Accentor	Prunella collaris										10								
52	Nightingale	Luscinia megarhynchos		Н	Н	✓			Н	Н	Н		Н	✓						
53	Robin	Erithacus rubecula		✓	✓	✓							✓	✓						
54	Black Redstart	Phoenicurus ochruros					✓	✓	✓	✓	✓	✓	✓							
55	Moussier's Redstart	Phoenicurus moussieri•			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
56	Seebohm's Wheatear	Oenanthe oenanthe seebohmi•					✓	✓												
57	Black-eared Wheatear	Oenanthe hispanica			✓	✓									✓					
58	Black Wheatear	Oenanthe leucura				✓			✓	✓	✓									
59	Rock Thrush	Monticola saxatilis						✓												
60	Blue Rock Thrush	Monticola solitarius				✓	✓	✓		✓										
61	Blackbird	Turdus merula	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓			
62	Mistle Thrush	Turdus viscivorus					✓	✓			✓									

	Common name								M	lay/Ju	ne						
		Scientific name	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5
63	Cetti's Warbler	Cettia cetti		✓	✓	✓											
64	Fan-tailed Warbler	Cisticola juncidis													Н		
65	Western Olivaceous Warbler	Hippolais opaca			Н				Н					✓		Н	
66	Blackcap	Sylvia atricapilla		✓	✓	✓	✓	✓	✓	✓	✓		✓	Н	✓		
67	Sardinian Warbler	Sylvia melanocephala			Н						✓			✓	✓	✓	
68	Tristram's Warbler	Sylvia deserticola•			✓									✓	✓		
69	(Western) Subalpine Warbler	Sylvia cantillans inornata			✓	Н			✓	✓	Н						
70	Firecrest	Regulus ignicapillus				✓	✓		Н		✓						
71	Spotted Flycatcher	Muscicapa striata			✓	✓			✓	✓	✓		✓	✓	✓		
72	Coal Tit	Periparus ater				✓	✓		✓	✓	✓	✓	✓	✓			
73	Great Tit	Parus major			✓	✓	✓		✓		✓	Н	✓	✓	✓		
74	Blue Tit (African)	Cyanistes caeruleus ultramarinus			✓	✓			✓	✓	✓		✓	✓	✓		
75	Short-toed Treecreeper	Certhia brachydactyla					✓										
76	Wren	Troglodytes troglodytes			Н	✓			✓	Н		✓	✓	✓			
77	Dipper	Cinclus cinclus							✓	✓		✓		✓			
78	Southern Grey Shrike	Lanius meridionalis			✓										✓		
79	Woodchat Shrike	Lanius senator													✓		
80	Jay	Garrulus glandarius												✓	✓		
81	Magpie	Pica pica mauritanica	✓			✓	✓				✓	✓	✓	✓			
82	Chough	Pyrrhocorax pyrrhocorax					✓	✓	✓		✓	✓	✓	✓			
83	Alpine Chough	Pyrrhocorax graculus					✓	✓	✓	✓	✓	✓	✓				
84	Raven	Corvus corax					✓				✓						
85	Golden Oriole	Oriolus oriolus			✓	✓											
86	Spotless Starling	Sturnus unicolor	✓	✓	✓										✓	✓	
87	Rock Sparrow	Petronia petronia					✓	✓									
88	Spanish Sparrow	Passer hispaniolensis		✓													
89	House Sparrow	Passer domesticus	✓	✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓
90	Chaffinch	Fringilla coelebs africana			✓	✓	✓		✓	✓	✓	✓	✓	✓	✓		
91	Serin	Serinus serinus		Н	Н	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
92	Linnet	Acanthis cannabina		✓	✓	✓	✓	✓	✓	✓		✓	✓		✓	✓	
93	Goldfinch	Carduelis carduelis				✓							Н	✓	✓	✓	
94	Greenfinch	Carduelis chloris		✓	Н	✓	✓		✓						✓		

	Common name								M	lay/Ju	ne						
		Scientific name	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5
95	Hawfinch	Coccothraustes coccothraustes												✓			
96	African Crimson-winged Finch	Rhodopechys alienus•						✓									
97	Corn Bunting	Miliaria calandra			✓												
98	House Bunting	Emberiza striolata sahari	✓	✓	✓			✓	✓	✓	✓		✓	✓	✓	✓	✓
99	Rock Bunting	Emberiza cia			✓	✓	✓		✓	✓	✓	✓	✓	✓			
100	Cirl Bunting	Emberiza cirlus				Н									✓		
Mar	nmals																
1	Barbary Ground Squirrel	Atlantoxerus getulus•				✓		✓			✓	✓	✓				
2	Red Fox	Vulpes vulpes								Н	Н						
Rep	otiles															ı	
1	Moorish Gecko	Tarentola mauritanica					✓	✓	✓	✓		✓					
2	High Atlas Day Gecko	Quedenfeldtia trachyblepharus•				✓	✓										
3	Atlas Agama	Agama impalearis•												4			
4	Spiny-footed Lizard	Acanthodactylus erythrurus•														✓	
5	Atlas Wall Lizard	Podarcis vaucheri•			✓		✓	✓	✓	✓	✓	✓	✓	✓			
6	Moroccan Eyed Lizard	Timon tangitanus•			✓								✓				
7	Moroccan Rock Lizard	Lacerta perspicillata subsp. chabanaudi•					✓										
8	Atlas Dwarf Lizard	Atlantolacerta andreanszkyi•					✓										
9	Mediterranean Chameleon	Chamaeleo chamaeleon												✓			
10	Montpellier Snake	Malpolon monspessulanus								✓							
11	Spur-thighed Tortoise	Testudo graeca														✓	
12	Spanish Terrapin	Mauremys leprosa		✓													
Am	phibians																
1	StripelessTree Frog	Hyla meridionalis					✓										
2	Saharan Green Frog	Pelophylax saharicus•			✓		✓	✓	Н	Н	Н			Н	Н		
3	North African Green Toad	Bufo mauritanicus•			✓	✓	✓						✓				
But	terflies																
1	Large White	Pieris brassicae	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓		
2	Small White	Pieris rapae mauretanica•											✓	✓	✓	✓	
3	Green-veined White	Pieris napi segonzaci•										✓					

	Common name								M	lay/Ju	ne						
		Scientific name	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5
4	Bath White	Pontia daplidice							✓	✓	✓		✓	✓			
5	Clouded Yellow	Colias crocea			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
6	Berger's Clouded Yellow	Colias alfacariensis					✓										
7	Cleopatra	Gonepteryx cleopatra			✓	✓	✓			✓			✓	✓			
8	False Ilex Hairstreak	Satyrium esculi mauretanica•												✓			
9	Small Copper	Lycaena phlaeas			✓	✓	✓	✓	✓	✓	✓		✓	✓	✓		
10	Moroccan Copper	Thersamonia phoebus•									✓						
11	Lang's Short-tailed Blue	Leptotes pirithous												✓		✓	
12	Holly Blue	Celastrina argiolus			✓									✓			
13	Mazarine Blue	Cyaniris semiargus maroccanna•				✓											
14	Atlas Blue	Plebicula atlantica atlantica•					✓	✓									
15	Brown Argus	Aricia agestis			✓	✓				✓				✓			
16	Comma	Polygonia c-album										✓					
17	Red Admiral	Vanessa atalanta														✓	
18	Cardinal	Argynnis pandora seitze∙				✓	✓							✓			
19	Queen of Spain Fritillary	Issoria lathonia				✓				✓			✓				
20	Glanville Fritillary	Melitaea cinxia atlantis•					✓	✓	✓	✓							
21	Moroccan Marbled White	Melanargia galathea lucasi•					✓		✓		✓		✓	✓			
22	Giant Grayling	Berberia abdelkadar•				✓	✓	✓	✓	✓	✓			✓			
23	Dark Giant Grayling	Berberia lambessanus•				✓	✓	✓									
24	Vaucher's Heath	Coenonympha vaucheri•						✓	✓	✓	✓	✓	✓				
25	Speckled Wood	Pararge aegeria			✓	✓	✓			✓			✓	✓			
26	Wall Brown	Lasiommata megera				✓	✓	✓	✓	✓	✓	✓	✓	✓			
27	Small Skipper	Thymelicus sylvestris iberica							✓		✓			✓			
28	Moroccan Small Skipper	Thymelicus hamza•						✓									
29	Marbled Skipper	Carcharodus lavantherae								✓							
Mo	ths																
1	Hummingbird Hawk Moth	Macroglossum stellatarum													✓	✓	
		1 2															