

# Morocco 2017

## Chasing the recently-discovered *Onychogomphus boudoti*

Led by Magnus Billqvist and Roy Woodward

**Participants:** Jörg Adelman, Mike Averill, Allan Brandon, Günther Fuchs, Chris Heavilin, Paul Hopkins, Patric Karlsson, Harold van der Meer, Erland Nielsen, Michael Post, Hartwig Stobbe and Pam Taylor.

### Summary

This short but exciting tour hit all its species targets despite a poorly-timed Ramadan and some very high day-time temperatures. Some of the tour participants organised their own pre-tour extension to the desert to see *Ischnura fountaineae* which was equally successful by all accounts and will be incorporated if we repeat this tour to this dazzling country.

### Daily diary

#### 10/6 assembly outside Marrakech

Patric and Magnus land in Marrakech one hour earlier than planned. Or maybe not, the time zone thingy is confusing. According to Omar, who meets us to drive us to auberge, we landed at least earlier than planned. Anyway, we pass the extremely inefficient queues for passport checks just in time to see that Patric's luggage is missing on the band. After a nervous half hour it is found and we can finally leave the arrivals hall to be picked up by Omar.

It's hot, hot, hot, when we arrive at the auberge. We check in and watch *Trithemis kirbyii* and *Orthetrum chrysostigma* in the small channels in the garden. We enjoy birds such as European bee-eater, serin, house sparrow, common bulbul, Western olivaceous warbler, spotless starling and red-rumped swallow. We are, of course, worn out after the trip and since no one else has arrived we go for a nap.

Later a long-awaited and hearty lunch is enjoyed and in the meantime Erland and Günther arrive. We take a garden walk together but now it is 41 degrees and the dragonflies are absent. Instead more sleep, coffee, a dip in the pool etc while we wait for the others. Suddenly the sky darkens and the trees are whipped by a heavy wind, followed by a sandstorm and then a drizzle. Just a while later, it is quiet again and just as hot as before, but now humid as well.

One after another, the others arrive and gather for mingling, beer and snacks. At half past nine it is time for dinner (a good fish tagine) and then everyone has arrived except for Mike. We welcome everyone, give a little information about the trip and tomorrow. Most people go to bed at 2200, roughly when Mike finally arrives.

#### 11/6 Oued N'Fis, Lalla Takerkoust and Ait Ourir

Breakfast at 0730 and off shortly after 0800. Our driver Hassan insists that, despite Magnus instructions, he should be driving a strange road, probably because Omar gave him the wrong directions. After a while, Magnus insists, and Hassan realizes that it's really wrong and we turn around and drive back. We stop to buy water along the road before reaching the first field stop of the day: Oued N'Fis, just after nine.

We park and wander down along a gravel road that does not look so good to drive on, down to the river and open water. Some see a *Brachythemis impartita* male on the road. The first water is a small semi-seepage-like pond on both sides of the road. The first species and first specimen to be seen is somewhat unexpectedly a female *Pseudagrion sublacteum*, and we go on to find several copulas. These are of course photographed diligently.

In and around the same small site are *Coenagrion caeruleum*, *Ischnura saharensis*, *Trithemis arteriosa*, *Calopteryx haemorrhoidalis*, *Orthetrum chrysostigma* and *Platycnemis subdilatata*. Magnus goes up and fetches Hassan and the bus as it turns out that the road is OK after all. After a while, everyone walks along the road and, of course, there is water, but it is difficult to access. *Crocothemis erythraea* and *Orthetrum coerulescens* are found before we gather the team and continue on.

We do not drive far however, just a few miles south along the river, before we stop again. The time now is about 1100 and it is hot, very hot, but the odos are the focus and not the heat. It looks nice along the river, with varying environments and depths. *Platycnemis subdilatata* is the most common species here. All three *Trithemis* species are seen, including side-by-side in a small, secluded place with shade. Thus, in addition to the already mentioned *Trithemis arteriosa*; *Trithemis annulata* and *Trithemis kirbyi* are seen. When the libellulids are in the shade already, you know it's hot...

One or two possible *Orthetrum nitidinerve* are seen poorly, more *Orthetrum coerulescens* and the first *Erythromma lindenii*. There is not much more than that though, except for the terrapin that Magnus caught, a huge robberfly, Chris taking a mud bath and birds like crag martin, great reed warbler, Cetti's warbler and zitting cisticola.

Now we are not only hot but hungry too, so even if our hearts prefer to continue exploring Oued N'Fis, we need to have lunch and make sure we get more fluid. In the village of Lalla Takerkoust we buy several kilos of fruit and then drive to the Restaurant Taghmous on the beach to the big dam next door. The restaurant is of course closed for meals since it is Ramadan, but cold drinks can be had. Of course we get some of that, and then we walk along the beach a bit before we lay out the fruit buffet. Several males of *Brachythemis impartita* and the first *Sympetrum fonscolombii* are hanging around.

We are a bit fatigued now but we have a few hours of driving ahead of us to recuperate. The idea is now to keep follow the river a bit, up into the Atlas Mountains to Ouirgane. However, it is very slow with the bus on the often small roads. Time goes a bit fast in relation to how slowly we move forward... After a while, we realize that it's getting too far to drive, so we take off towards the hotel instead.

From the car we see the Moroccan landscape changing from plains to mountains and lesser kestrel, booted eagle, little owl, southern grey shrike and woodchat shrike are seen en route. We stop at some running water that looks nice, but we do not find a single dragonfly in, or around, the chilly water. The journey's first roller and yellow wagtail are enjoyed. Here, the participants also experience the first fossil and mineral dealers, and at least one of the two geologists of the trip (Allan) looks at what's on offer for a long time. However, the sellers don't make any deals, although maybe they would have been better off if more of us had some cash!

The problem is remedied a little further on, in Tahnaout, where some withdraw cash while others take an icecream or two. Warm, hungry and tired we arrive at the hotel next to Oued Zat outside Ait Ourir. We get a heap of keys and rooms, but it takes a while before Roy solves the chaos that the hotel has left us and everyone can check in and shower and/or take a swim in the pool. Some people prefer to go for a walk to the river, which unfortunately seems mostly dry. No dragonflies are seen. It's cloudy and clammy, and at 1900 it's like the night before, when suddenly the wind picks up followed by a sandstorm. No rain this time though.

Shortly thereafter we meet up and go through the species of the day and hand out information on tomorrow. The dinner starts off with a very good soup and an okay chicken (the only thing missing were spices and vegetables...). A "drinkable red wine" (quote Günther) is enjoyed by some (there is no beer) and some cheers accompany the wine since most people have seen new species during the day.

#### **12/6 Oued Tessaout, Oued Lahkdar and Cascades d'Ouzoud**

Some are up early and go to the riverbed but without finding either odos or water. We buy lunch to bring with us at Ait Ourir's market, which despite Ramadan is bustling. Then slowly the bus winds its way towards the northeast.

The first stop takes place as the road 120 passes Oued Tessaout. Here, things are heating up very quickly. *Ischnura graellsii* turns out to be common as well as all three *Trithemis* species, *Orthetrum coerulescens* and *Platycnemis subdilatata*. A female *Orthetrum nitidinerve* perches fine and long but a bit far away for everyone to be pleased. *Erythromma lindenii* and *Anax imperator* are seen by most while unfortunately *Anax ephippiger* and *Chalcolestes viridis* are only seen by a few (and sadly not later in the trip). For those with additional interests, the site also offered Barbary ground squirrel, Spanish terrapin and lesser kestrel.

Next stop is Oued Lahkdar, where we eat lunch in the shade under a lone olive tree. It's hard to find places to eat where nobody can see us, but we do our best because of Ramadan. Unfortunately, someone is complaining but what can we do? We have to eat. However, we are spreading ourselves out to search for dragonflies, but the site is a disappointment. Only occasional glimpses of *Onychogomphus costae* and *Calopteryx haemorrhoidalis*. All three *Trithemis* appear for perhaps the last time on the trip. At the end it is very hot and there is not much shade along the river. It cools when you wade across it, and we look on enviously as the village youngsters bathe.

We leave Oued Lahkdar without any of our target species and head for the Cascades d'Ouzoud. Once there, Roy takes care of the check-in and distribution of rooms at the hotel, while Magnus takes the rest of the company down to the view of the falls and the nearby Oued Tissakht. However, it is terribly hot and since dragonfly results are thin to say the least, most move on to the lure of icecream and soda. In the meantime Roy has arranged not only the rooms but also been down in the owner's wine cellar, to get something for us for later.

After refreshments and showers everyone comes out one-by-one to meet up down by the river. However, it is still extremely poor for odos. Is it because of silt – the water is very brown? Or perhaps the temperature? At 1730 odos suddenly appear, with about 100 *Platycnemis subdilatata* and several *Calopteryx haemorrhoidalis*. This makes us suspect that the temperature is the main culprit and that a morning walk may prove to be worthwhile.

Dinner at the hotel produces the best soup so far, chicken tagine (again but better and with vegetables), and lo and behold, not melon but crème caramel for dessert! Roy and Magnus leave the others after dinner since they are staying at another hotel. Scops owl calls in the night, as well as construction workers until midnight, festive villagers and various dogs...

### 13/6 Oued Tissakht, Oued Laabid and Cascades d'Ouzoud

Most start off the day by walking along the river Tissakht next to the waterfalls and the hotel. Again the absence of dragonflies is startling. Could be too early though? African blue tit, rollers and golden orioles at least make the birders shine. Breakfast at 0730 and then away towards Bzou and Oued Laabid. Peregrine, rollers, woodchats shrikes and then we stop for lunch shopping in Foug Jemaa.

It is cloudy when we reach the site at Oued Laabid near the N8 road. We are though of course hungry for odos so we start off anyway. However, there are no dragonflies along the latte-coloured river. Magnus goes away to pick up the lunch and we indulge next to the river while we wait for the odos to get started. We eat in the shelter of bushes and rocks where supposedly nobody will see us, but half the village's kids suddenly appear and look longingly at our tuna, mackerel, cakes and bananas. While we eat the sun breaks through and immediately the odos begin to stir. First out is *Pseudagrion sublacteum* and then *Platycnemis subdilatata*, *Ischnura saharensis*, *Trithemis kirbyi* and *Trithemis annulata*. Nice, for sure, but not really what we were hoping for, especially as we missed two important species yesterday, species that should be found here.

Once we have eaten though, we move away along the river, but only for a hundred metres, then we have to stop. There, at last, an *Onychogomphus costae* that everyone can see and take pictures of. The kids get a show out of it as well, with most of us down on our knees in the gravel.

After that things start to roll, at least for *Onychogomphus costae*, when we see almost ten individuals of both sexes at the same time. The other target species is *Zygonyx torridus*, which we find exuviae of immediately. A *Zygonyx* is seen briefly by some, later by a few more, before half the group watch a female laying eggs. In the end, all but two have at least seen the species. More exuviae are found later too. A female *Brachythemis impartita* puts on a short but appreciated appearance, as does rufous bush robin, before we have a snack in the form of a huge melon.

At 1530 we finally leave the place and drive a partially different route home. We are looking for any site with water but those we find are either not available due to deep gorges or badly polluted. We stop to photograph succulents and nice views, which also provides us with more rufous bush-robin and a black-eared wheatear.

We come back to the riad where some return to the river, others have a look at souvenirs, have a coffee, drink beer or take a power nap. There is a general gathering where pictures and exuviae are discussed and compared before we go through the checklist. At 2000 we have dinner (salad, meatball tagine, fruit salad).

#### 14/6 Oued Rbia and the *boudoti* site

Breakfast already at 0630 and we leave soon after that for the long drive northeast to Khenifra. It starts with a long and winding road through the passes north of Ouzoud, with magnificent views over and along deep gorges. It does take time though, even though Hassan has been told to try to step it up a bit for the long haul. After about 90 minutes we cross the mountains and then suddenly Erland misses one camera. There are a lot of loud curses and panic before we get in touch with the hotel and they are telling us that the camera remains where Erland put it; on the scooter outside the auberge... However, it is too far to turn back and the knowledge that we will get back eventually in the tour is enough. We are still far away from the goals of the day.

We stop for refuelling, biscuits, drinks, ice cream and en route we spot the usual little swift, roller, white stork, southern grey shrike and woodchat shrike. We still have a way to go but Hassan is driving faster than before. We stay and shop for lunch and water before we finally reach Khenifra. There we drive on narrow backstreets and Hassan, and the rest of the team, look increasingly sceptical; where is Magnus taking us? Finally out of town, we start to drive on a really bad and narrow road, until Magnus says stop. No openwater is seen out there, but Magnus makes sure we bring water and lunch and we head off.

We follow a small path down to the Oued Rbia, where Magnus lays out lunch under a well with a roof. No one is interested in it though, the others prefer to spread out and almost at once the target species *Calopteryx exul* is found. Both males and females are seen on both sides of the river, but they are sitting a little bit awkwardly so not everyone gets good photographs. *Onychogomphus uncatatus* and *Gomphus simillimus* here constitute two new species for the trip. In addition, *Calopteryx haemorrhoidalis*, *Onychogomphus costae*, *Erythromma lindeni*, *Coenagrion caerulescens* and *Orthetrum nitidinerve* are seen. We stay for almost two hours before we have to go. The next site is the long-awaited location – the place where *Onychogomphus boudoti* was first discovered in 2013.

Through the chaos of the city we finally reach the almost mythical site. Several *Orthetrum nitidinerve* are seen immediately and the first "monsters" in the form of *Cordulegaster princeps* get some well-deserved attention. A male *Onychogomphus uncatatus* causes a tremor before we reach the seepage where *boudoti* is to be found. Immediately, some males are found patrolling and very soon a female is seen laying eggs. But it goes fast, everyone does not get along, and then it's getting cloudy. All activity stops. The only odos seen are the numerous *Coenagrion mercuriale*. Among them are found a copula of *Ischnura pumilio*, the only record of the trip.

Frustration quickly grows, especially when the weather does not look to be improving. But two years ago Magnus had found *boudoti* directly on the ground in a field, let's check that out. Although it says in the description of the species that it does not like to perch on the ground, that's where they are. Many males and even females are seen fine, for a while it looks like everyone in the company crawls around on their knees or lies on the ground with their own *boudoti*.

Out on the fields we also find a few more *Orthetrum nitidinerve* and from time to time a *Cordulegaster princeps* buzzes by. After a while males of the latter species are found patrolling and females are watched laying eggs. Patric finds a hanging male that will happily let everyone come very close. *Calopteryx haemorrhoidalis* and *Orthetrum caerulescens* are also seen.

At 1700 we have to go back to allow Hassan to have the time Ramadan demands of him. Otherwise it would have been easy to stay even longer. Among the usual birds en route some also see brown-throated martin. We check in to the auberge in Azrou. It's charming but rather down-at-heel and there is no toilet paper or towels but at least the wi-fi works fine... Usual mingling and hanging out before dinner is served at 2030 (chicken tagine of course, and "vegetables" for Paul the Vegetarian). The day was very rewarding, but the journey a little too long. During the night we are reminded of how little we appreciate loud motorcycles,

soccer-playing youths and least of all a passing drummer (yes, you read that right: a drummer)...

#### 15/6 Dayet Zerouka and Dayet Aoua

Breakfast at 0830, unfortunately the worst so far... Luckily, no one is gluten-intolerant. Plenty of coffee at least, which gladdens Erland. We head north, toward Ifran, past the gatherings of lesser kestrels, cattle egrets and some see Seebohm's wheatear. In Ifran, we are vainly looking for an open market or shop for lunch. We skip the shopping for the moment and go on. A Levillant's woodpecker is seen by some in a park we drive by.

The small lake Dayet Zerouka is on the agenda and this species-rich place immediately delivers interesting odors. The lake is amazing, with at least 21 species seen during the morning, which is extremely good going in Morocco. But now we are moving ahead of ourselves.

Very rare species in Morocco such as *Aeshna isoceles*, *Libellula quadrimaculata*, *Sympetrum striolatum*, *Erythromma viridulum* and *Orthetrum cancellatum* are seen well by most. *Lestes dryas* and *Coenagrion puella* are seen by some. More individuals are seen of *Coenagrion scitulum*, *Ceriagrion tenellum*, *Crocothemis erythraea*, *Anax parthenope* and *Orthetrum nitidinerve*. We look at all the *Enallagma* males we get our hands on, but they are all *cyathigerum*. The same applies to *Ischnura*, where all those we look at properly are *Ischnura graellsii*. Knob-billed coot, black-necked grebe, booted eagle, rock sparrow and 100s of alpine swifts make for happy birders. Two hours goes by fast so we extend the leaving time closer to 1500, before we finally move on.

The first stop is the village of Immouzer Kandar, where we get lunch items and most people take the opportunity to get some ice cream. A little later we roll down to the big lake Dayet Aoua, where a shock awaits Magnus. Only one tenth of the lake remains! All streams, wet meadows, wetlands, orchids and beach vegetation are gone. The rest of the day was planned to be spent here, luckily the water still looks fresh. We quickly find ourselves on the shore of the lake and the first *Enallagma* caught is – finally – *Enallagma deserti*, and soon everyone is on their knees to get it an image. It is cloudy, so maybe we would have seen a lot more in better weather, for now we are pleased with an individual *Enallagma deserti*, as well as *Enallagma cyathigerum*, *Sympetrum fonscolombii*, *Sympetrum striolatum*, *Erythromma viridulum* and *Orthetrum cancellatum*.

Lunch is served in the woods above the lake and we share some of it with a lanky dog. Around us the birders spot firecrest, short-toed treecreeper, Atlas flycatcher and Levillant's woodpecker, while in the lake there are 100's of black-necked grebes and knob-billed coots, and a few great crested grebes and grey herons.

At 1530, we leave Aoua and return to Zerouka, but park this time at the other end and go along the outflow rather than along the lakeshore itself. The brook is incredibly nice, perhaps the finest water Magnus has seen in the country. The weather remains cloudy, but we do not get the thunder showers heard and seen from afar. Damselflies are plentiful and all get good shots of species like *Coenagrion caerulescens*, *Calopteryx haemorrhoidalis*, *Ceriagrion tenellum* and *Ischnura graellsii*. A few *Aeshna isoceles*, *Coenagrion mercuriale* and *Sympetrum striolatum* are also seen. A great site, probably one of the best in the country with at least 23 species for us during the session. We are as usual spread out, which means that not all birdwatchers see all interesting species here, but cumulatively we record Moussier's redstart, curl bunting and Seebohm's wheatear.

At 1730 we leave Ifrans's outskirts. In Azrou, Hassan takes a wrong turn but we are rewarded with an interesting trip along narrow streets in the city's market quarters. A second night and dinner at the auberge (meatballs and pasta and served half an hour early). In the middle of the night, drummer boy makes a second appearance. Not appreciated this time around either...

#### 16/6 boudoti site

The day starts off again with a lousy breakfast! Next time we will look for another auberge in this region! Anyway, we are off, and once again we see lesser kestrel, black kite, booted eagle and Seebohm's wheatear from the bus. Since some have expressed a wish to see *Calopteryx exul* again, we try to spot anywhere to reach the Oued Rbia from the N8 across from where

we saw it the other day. Once again to no avail, because building complexes, fences and cliffs are in the way, and we just do not have the time today to go round all the way to the site. We can only hope to spot *Calopteryx exul* at the *boudoti* site, where it has been recorded before.

Yes, the site for *boudoti* is the place we are going to again. The weather is better, and we spend two hours in the area. We start off by taking a group picture, and despite using a tripod, Magnus ends up taking really bad pictures... Maybe we should have asked Hassan for help instead?

We split up as usual but this time perhaps more than before, since one group heads downstream, another upstream, while some walk around the little site itself. No *Calopteryx exul* are found downstream, but we turn around earlier than planned because of a bunch of really annoying kids. We have to make do with maybe as much as a 100 *Cordulegaster princeps*, lots of *Onychogomphus boudoti*, even more *Coenagrion mercuriale*, and of course the usual supporting cast of *Orthetrum chrysostigma*, *Orthetrum nitidinerve*, *Onychogomphus uncatius* and *Calopteryx haemorrhoidalis*. A couple of terrapins, both small and large, bring smiles to most faces.

We drive back towards the west for a long and, as it turns out, extremely hot trip. It is 45 degrees outside, the hottest day of the trip, so maybe we were lucky that we were spending it in the bus. We have a pit stop after an hour for refreshments and Roy and Magnus buy lunch. Somewhere en route we also buy bread. There is hardly any traffic at all so we make good time. We have a very late lunch under some olive trees outside of Afourer, together with two donkeys, which get watered by Roy. The heat is oppressive, but despite this the cicadas are having a blast, and a corncrake hollers from a nearby field.

When we have 45 minutes left to go to Ouzoud, Hassan veers off the beaten track and insists that the route via the nearest dam is faster. Magnus does not protest much since the dam Bin El-Ouidane may also offer some field time. Unfortunately we can't access the dam and even if we could, we are not allowed to take any photos there. What is worse is that the route takes twice the time. So we arrive late, and most of us are tired, hungry and thirsty. Some nevertheless take a stroll to the falls and river and get back with exuviae of *Anax*, *Boyeria* and *Platycnemis*.

We stay for the final night of the trip again at the Riad, where dinner (lamb tagine and couscous) is served together with beer and wine. Roy and Magnus thanks everyone for their participation and a bottle of Japanese Whisky does not last long.

## 17/6 home

On the last day we split up, with one group leaving very early (breakfast at 0400) for the first flights. Magnus, Patric, Jörg, Mikael and Hartwig leave later with another driver that takes us on a fast trip to Marrakesh. Outside of the city we almost hit the first and only greater spotted cuckoo of the trip. When there, we have plenty of time, so we take a winding route through some of the older and teeming parts of the city. Roy takes the last team home and they do something somewhere too...

## Odonata recorded between 10<sup>th</sup> and 17<sup>th</sup> June

Scientific and English names follow Dijkstra (2006), except for for the recently discovered / split *Brachythemis impartita*.

<b>Glittering demoiselle</b>	<i>Calopteryx exul</i>	Local and usually only a few reported. Oued Rbia north of Khenifra was a good site though and here we saw both males and females.
<b>Copper demoiselle</b>	<i>Calopteryx haemorrhoidalis</i>	More or less common, seen at several, if not all, sites with running water.
<b>Robust spreadwing</b>	<i>Lestes dryas</i>	Very rare. We saw it at one site only, Dayet Zerouka, and only a few individuals were found.
<b>Western willow spreadwing</b>	<i>Chalcolestes viridis</i>	One observation only, at Oued Tessaout.
<b>Iberian bluetail</b>	<i>Ischnura graellsii</i>	More or less common, especially in the

<b>Sahara bluetail</b>	<i>Ischnura saharensis</i>	Middle Atlas, where it seems to be more widespread than <i>Ischnura saharensis</i> . More or less common, but mostly in the lowlands, and only a few seen at some of the early sites.
<b>Small bluetail</b>	<i>Ischnura pumilio</i>	One copula only, at the <i>boudoti</i> site.
<b>Common bluet</b>	<i>Enallagma cyathigerum</i>	Local – seen only at Dayet Zerouka and Dayet Aoua.
<b>Desert bluet</b>	<i>Enallagma deserti</i>	Local but can be very numerous. Only seen at Dayet Aoua this year.
<b>Azure bluet</b>	<i>Coenagrion puella</i>	Very rare. We saw it at one site only, Dayet Zerouka, and this was just one copula.
<b>Mercury bluet</b>	<i>Coenagrion mercuriale</i>	Seems to be rare and/or local. Numerous at the <i>boudoti</i> site. A few seen at the outlet of Dayet Zerouka.
<b>Dainty bluet</b>	<i>Coenagrion scitulum</i>	Very numerous but only seen at a few sites, most common coenagrionid at Dayet Zerouka.
<b>Mediterranean bluet</b>	<i>Coenagrion caerulescens</i>	First seen at Oued N'Fis on the first day. Later a few at 2-3 sites and quite common at the outlet of Dayet Zerouka.
<b>Small reedeye</b>	<i>Erythromma viridulum</i>	Rare. We saw it at two sites only; Dayet Zerouka and Dayet Aoua.
<b>Blueye</b>	<i>Erythromma lindenii</i>	Seen at several sites, but never common.
<b>Small red damsel</b>	<i>Ceriagrion tenellum</i>	Not uncommon at Dayet Zerouka. The only site.
<b>Cherry-eye sprite</b>	<i>Pseudagrion sublacteum</i>	Seen twice. First at Oued N'Fis on the first day, and then at Oued Laabid. Not that numerous, but at about 8-25 at both sites.
<b>Barbary featherleg</b>	<i>Platycnemis subdilatata</i>	More or less common, seen at several, if not all, sites with running water.
<b>Green-eyed hawk</b>	<i>Aeshna isocetes</i>	Rare, seen only at Dayet Zerouka.
<b>Blue emperor</b>	<i>Anax imperator</i>	Seen at a few sites but not common anywhere, most at Dayet Zerouka.
<b>Lesser emperor</b>	<i>Anax parthenope</i>	Only seen at a few sites, most at Dayet Zerouka.
<b>Vagrant emperor</b>	<i>Anax ephippiger</i>	Irregular – 1-3 seen by a lucky few at Oued Tessaout.
<b>Western spectre</b>	<i>Boyeria irene</i>	One of the exuviae collected by Roy at Ouzoud proved to be of this, otherwise unrecorded, species.
<b>Yellow clubtail</b>	<i>Gomphus simillimus</i>	Only seen at Oued Rbia but it is not uncommon.
<b>the new clubtail</b>	<i>Onychogomphus boudoti</i>	Two sites known since 2016 when another one was found after the first in 2013. We visited the one closest to Khenifra and saw plenty.
<b>Large pincertail</b>	<i>Onychogomphus uncatius</i>	More or less common in the Middle Atlas and seen well at at least Oued Rbia and at the <i>boudoti</i> site.
<b>Faded pincertail</b>	<i>Onychogomphus costae</i>	More or less common, but might be local? A few saw it briefly at Oued Lakhdar. Common (more than ten) at Oued Laabid and a few at Oued Rbia.
<b>Atlas goldenring</b>	<i>Cordulegaster princeps</i>	Probably not uncommon in the right habitat. Numerous at the <i>boudoti</i> site.
<b>Four-spotted chaser</b>	<i>Libellula quadrimaculata</i>	Very rare. We only saw it at Dayet Zerouka.
<b>Black-tailed skimmer</b>	<i>Orthetrum cancellatum</i>	Rare. We saw a few at the two dayets only.
<b>Keeled skimmer</b>	<i>Orthetrum coerulescens</i>	Seen at at least three sites; Oued N'Fis, Oued Tessaout and the <i>boudoti</i> site.
<b>Yellow-veined skimmer</b>	<i>Orthetrum nitidinerve</i>	Seen at several sites and at some in good numbers. Seems to be common and not only in arid or semi-arid habitats.

<b>Epaulet skimmer</b>	<i>Orthetrum chrysostigma</i>	Common in the lowlands, wherever there is running water, especially smaller ones. Seems to be absent at higher elevation.
<b>Long skimmer</b>	<i>Orthetrum trinacria</i>	Might be more common further north and towards the coast. A few “may-be’s” seen, but only one confirmed, on the last day at Oued Tensift close to Marrakesh.
<b>Red-veined darter</b>	<i>Sympetrum fonscolombii</i>	Irregular? Only very few seen in the lowlands, more common in the Middle Atlas, especially at Dayet Zerouka.
<b>Common darter</b>	<i>Sympetrum striolatum</i>	Not seen in the lowlands, a few seen at the two dayets.
<b>Broad scarlet</b>	<i>Crocothemis erythraea</i>	Widespread but not as numerous as in Southern Europe.
<b>Violet dropwing</b>	<i>Trithemis annulata</i>	More or less common with a few at almost every stop.
<b>Red-veined dropwing</b>	<i>Trithemis arteriosa</i>	Common but seems to disappear when you gain altitude.
<b>Orange-winged dropwing</b>	<i>Trithemis kirbyi</i>	Common. Might be absent on higher elevation though.
<b>Banded groundling</b>	<i>Brachythemis impartita</i>	Local, probably very numerous at the large dams and closer to the coast. We saw one male at Oued N’Fis, a few of both sexes at the dam at Lalla Takerkoust and one female at Oued Laabid.
<b>Black pennant</b>	<i>Selisythemis nigra</i>	Apparently colonising the country. No observations until the last couple of years or so, now a few at least since 2015. On this trip seen on the last day at Oued Tensift close to Marrakesh.
<b>Ringed cascader</b>	<i>Zygonyx torridus</i>	Probably not uncommon, especially in more rocky rivers. We saw a few including an ovipositing female at Oued Laabid and on the last day one at Ouzoud.