

Morocco, January 1-14, 2023

VLADIMIR DINETS

I first went to Morocco in the summer of 2018; it's a great country for mammalwatching and I spent the entire time doing precisely that, finding all local endemics and specialties (see my [trip report](#)). But I missed almost everything else, so when my wife suggested a family trip there, I was happy to oblige. By that time, Barbary stags in one of reintroduced herds had been released (kind of) from their enclosure, and one local bat species had been [split](#), so I gently guided the process of route planning towards the part of Morocco where they both occur.

Winter is not the best time to look for mammals in Morocco. There are fewer bats under bridges and in abandoned buildings; flying bats can only be seen for a few hours after sunset if at all; hedgehogs, ground squirrels and dormice are apparently hibernating. The temperatures were 7-21°C during the day, and above freezing at night except high in the mountains. It was a very dry year, so it rained only once, and the High Atlas was nearly snow-free. Full moon was on Jan 6 and the moonlight seemed to reduce small mammal activity drastically; rodents all but disappeared. Our kids were 2 and 8 years old and had different sleeping schedules, so I could look for wildlife mostly late at night or early in the morning. By the way, Morocco proved a perfect country for travel with children: I'd never seen them happier.

I focused on areas not on the mammalwatchers' usual route, and saw only 30+ species, including one lifer and some unexpected rarities. Birding was decent, with 110+ species total including a few goodies. It was two months too early for herping: I saw only two lizards and a few toads. There should've been newts and salamanders around Chefchaouen but I couldn't find any, likely because of the drought. Only one fish was seen, a cool-looking goby in a river above Tetuan.

1. Western Morocco

Sidi Bettache in the hills south of Rabat is often visited by birders who look for francolins and tchagras along R-403 road. That road has too much traffic, so for night drives try the tracks leading to Forêt Bni Abid trailhead (33.76835, -6.91294) where you can walk through cork oak forest with lots of rodent burrows. Likely due to brutally bright moonlight, I saw no mammals on the roads and only one mouse in the forest – an **Algerian mouse** sitting at a burrow entrance. Watch for beautiful but stinky Berber toads there. Wali Salih Sidi Serrakh, an old mausoleum at 33.71488, -6.93178, had a few bat droppings inside, and a very skittish **Barbary striped mouse** in the adjacent cemetery. The newer one of the two bridges in Cherrat (33.54144 -6.95014) had a dormant **meridional serotine** in one of the seams parallel to the edges.

El Jadida has an old Portuguese fort with lots of locked-up chambers in walls and towers. Peeking inside I saw a few ancient-looking bat droppings, but the only bat I saw in the area was a **common pipistrelle** flying around tollgate lights at 33.24004, -8.42623. The sea is very shallow off the town (great tidepooling!), so for seawatches go to the cliffs of Cap Blanc (33.16165, -8.62855), where unspecified **dolphins** are sometime seen according to local fishermen.

South of Cap Blanc the coastal road crosses a huge industrial area (I haven't seen such massive air pollution since my trips to the Urals in the last years of the Soviet Union), and goes below the edge of a limestone plateau near Ouled Chaoui that looks like good **Algerian mouse** and **sengi** habitat; there I found a **Whitaker's shrew** (obviously speckled and with white feet) under a discarded road sign in a ravine (33.07970, -8.65802), but couldn't catch it. Then, about 30 min from El Jadida, the road skirts Sidi Moussa Lagoon Nature Reserve. It is a narrow strip of fields, wetlands, and salt flats, separated from the sea by dunes, famous for the last known breeding population of buttonquails in the Western Palearctic and flocks of migratory shorebirds. I spent half a night there and saw no mammals other than feral cats, donkeys and a few **house mice**. In the morning it got better: I spotted a **mongoose** on a beach at 33.01793, -8.71893 (judging by the number of tracks, they patrol the beaches regularly), and then, as I was looking at waterbirds from 32.98879, -8.73398, a **least weasel** (very rare in Morocco, although likely under-reported) crossed a salt flat on the far side of the river.

2. Northern Morocco

My main targets in northern Morocco were two caves mentioned with exact coordinates in [Juste et al. \(2018\)](#) among the few known locations for the recently split **Zenate myotis**. I first went to check Kef Aissa cave (supposedly 33°42'05" N, 5°06'41" W) but there was no cave at that location. I spent the rest of the night exploring parts of Ifrane National Park located around Ifran. In 2018 I spent some time in its higher section above Azrou and saw a lot of **boar** tracks and a **red fox**, plus **Barbary macaques** and a few small mammals. This time I, again, found lots of **boar** trails and digs plus one pale-orangish **red fox** (at 33.55952, -5.19421), but it was a cold, very quiet night with bright moonlight, so I didn't see anything else. Just before dawn a large, gorgeous **African wolf** in long winter coat crossed the road in front of my car just E of Ifrane (33.51421, -5.09189). The town is probably the best place in Africa to see **Eurasian otter**; I saw one at 33.54330, -5.09464 and they are said to be even easier when there's no drought. As I was driving back to Meknes where we were staying, I spotted a long cliff with lots of cave openings near El Hajeb, stretching from 33.69125, -5.38513 to 33.68702, -5.39088. I had time to briefly check five caves and found a few **lesser horseshoe bats**, a **Savi's pipistrelle**, and a small cluster of **common bentwings**, but I'm sure I'd have found a lot more if I had time for proper exploration.

The second cave mentioned by Juste *et al.*, Mizou Cave above Tetuan, is listed there as located at 35.51153, -5.33141, but the real coordinates are 35.50968, -5.33022 for the main entrance and 35.50937, -5.33058 for the vertical shaft used by bats. When I found the cave after an hour of searching, the air temperature was 11°C, but the bats were swarming above the vertical entrance. A Pharaoh eagle-owl and a pair of Maghreb owls were perching around the swarming area, calling and generally looking happy – I assume they had had their full soon after dark. My bat detector app acted up and I couldn't save the recordings; had to photograph the sonograms on cell phone screen. There were three species of bats in the swarm and inside the cave, including **Zenate myotis** (small, dark-grey), **Geoffroy's myotis** (fluffy, reddish) and **common bentwing**, identified by sonograms and visually; see [Disca et al. \(2014\)](#) for calls of Zenate myotis ("species B"). As it got colder the bats stopped flying. I ran into two **boars** and a **hare** on my way back to the car; the latter had no orange neck patch (see below). I'm planning to publish a more detailed account of this swarming observation elsewhere.

Volubilis is an ancient Roman city great for lizards, **European rabbits** at dusk (if you manage to stay late enough before guards kick you out), and mosaics showing local fauna such as elephant, lion, leopard, deer, and African wild ass.

Deep in the heart of Rif Mountains, Chefchaouen lies on the slopes of a rocky peak called Jebel Tissouka known as the good area for Maghreb owl and North Africa's only salamander and newt. There are pine forests and other interesting habitats higher up but the road over the mountain is dismal, unsafe and might be impassible after rain. In the town there were **common pipistrelles** flying above the stream at 35.17071, -5.25663 at dusk. Along the bad road I saw a very large bat that could only be a **giant noctule** flying above Cave Acher (35.17605, -5.26142; the cave itself is too small to be interesting), but the bat left before I could get a sonogram. If you survive the road, you get to Tasselmtane National Park (also accessible by a rough but much better road from the south). It is a very ragged area with oldgrowth forests of Moroccan fir, Atlas cedar, maritime pine, junipers, and oaks. A half-night of driving and walking in these forests produced only one mammal, a **wood mouse** near a viewpoint called Plaza Espagna (35.13909, -5.13842); a muddy puddle there had tracks of **red fox** and possibly **African wolf** plus inevitable feral dog. Pairs of Maghreb owls were calling all over the forest; I wonder what they eat there when there are almost no rodents. Further south the main park road crosses a belt of moss-covered cloud forest (mostly of oak) where I saw a lone **Barbary macaque** (at 35.115385N 5.134236W, close to where I saw them in 2018), two **greater white-footed shrews** chasing each other (at 35.11045, -5.13709; tentatively identified by dark feet), and a **polecat** (at 35.09303, -5.15226). The latter was probably the best mammal of the trip. Polecats of N Morocco and NW Algeria are extremely rare; genetically they are closer to domestic ferrets but it's unknown if they are ancestral to those or feral, and there is a possibility they will be eventually split from European ones.

Tazekka National Park in the Middle Atlas east of Fez has extensive oak, cedar and sandarac forests and nice caves. Groto Friouato (34.10443, -4.07264) is permanently closed "for repairs" since some tourists suffered major injuries on slippery steps in 2014, but one of the windows in the entrance building has broken bars so you can squeeze in with some effort (use your car jack to bend the bars; don't forget to straighten them again afterwards). The cave begins with a huge cenote-type vertical chamber with an oculus-like natural opening on top, and on the bottom there are narrow passages leading to more large chambers. In summer the cave is said to have lots of **Maghreb myotis**, but in winter I found only one **greater horseshoe bat** (ID based on overall shape; it was too high to see the noseleaf well) and one **western barbastelle** barely visible in a crack very high up. Deer Valley is where **Barbary stag** was reintroduced many years ago, first into a small enclosure and then into a much larger one. The small enclosure reportedly has tame deer, but the deer in the larger one are fully wild; a few years ago the park stopped repairing the fence so the animals now occur outside the enclosure as well and are more countable. The best way to look for them is to walk very quietly along the dirt road starting at 34.04373, -4.19509; I spotted two deer there at night and one more on a distant slope at dawn. There were **red fox** and **genet** tracks on the road. I saw only two mammals while driving through the park at night: a **hare** at 34.10833, -4.05563, and, surprisingly, a tiny bat at 34.04670, -4.19520 (the air temperature was just 6°C); this time I had the detector at hand and IDed the bat as **mustached myotis** (FM 100->30 kHz). The road from Deer Valley back to the freeway passes through a large canyon (34.14472, -4.31037) with lots of small caves in the walls; I checked a couple and found no bats but would like to have a few more hours to explore them properly. **Otters** reportedly occur in that river.

3. Ouarzazate area

Ouarzazate is frequently passed by mammalwatchers traveling between popular sites in the Anti-Atlas Mountains to the west and deserts to the east, but nobody seems to ever stop here. Gravel and clay plains around the town are remarkably lifeless, but if you feel like a night drive, try road P1507: it's paved and has almost no traffic between 01:00 and 05:00. Check out Tarmigt Lake (30.88598, -6.94202; it had no water when I was there) and the side road to Fint, particularly the pond at 30.83317, -6.95436 and the small cave above it (the cave had what looked like very old droppings of a small carnivore). I climbed the short trail to Belvedere su Oasi du Fint (30.82748, -6.94469), past which there is a hilly plateau with a few black rock outcrops; after sunrise a **North African sengi** (of the rarely seen pale subspecies *deserti*) was basking on one such outcrop (30.83340, -6.94514). I checked a few abandoned houses in Fint; there was no sign of bats.

Another area worth checking is Afeggou, a settlement overlooking the shores of a large reservoir. Royal Golf Club Resort has lots of partially built and/or abandoned buildings. I checked a few for bats and found three buildings (two at 30.96873 -6.72658 and one at 30.96951 -6.73016) with lots of bat droppings, but only one **Mediterranean long-eared bat** – there should be a lot more in summer. The reservoir has a lot of waterbirds and is worth watching at dusk (good viewpoints at 30.96431, -6.73289 and 30.95845, -6.75581) – from the latter I got binocular views of an **African wolf** trotting along a distant shore; its head and coat looked remarkably different from the wolf in Ifran. Wadis around the reservoir are the only sandy patches in Ouarzazate area. I finally saw a rodent there, a **Libyan jird** at 30.96653, -6.73094. There were lots of **hare** tracks and I saw one animal at 30.96446, -6.72080. Interestingly, that hare had an obvious rusty-orange neck spot, supposedly diagnostic of **savanna hare**, although this is disputed. When the reservoir is full, Ecolodge L'île de Ouarzazate (30.90620, -6.85712) is reportedly very good for wildlife: I even heard of **hyena** sightings there.

The road to Tighza skirts a hilly plateau that still holds a small population of **Cuvier's gazelles**. To look for them, take the dirt track signposted "Auberge Ouahsous". After a couple hours of searching, I spotted two gazelles hopping from boulder to boulder like klipspringers at 31.27192, -7.17306. There were **porcupine** quills on the ground in the same area. I found a **Kuhl's pipistrelle** of *deserti* type in a roadside rock shelter near the main road a few km above Aït Benhaddou but forgot to write down the coordinates. The whole area has interesting habitats and is worthy of exploration.

Species list (subspecific classification based on location; tentative identifications marked with *)

1. Greater white-footed shrew*	<i>Crocidura russula yebalensis</i>	2, Tasselmtane NP
2. Whitaker's shrew	<i>Crocidura whitakeri</i>	1, Ouled Chaoui
3. Barbary macaque	<i>Macaca sylvanus</i>	1, Tasselmtane NP
4. Lesser horseshoe bat	<i>Rhinolophus hipposideros escalerae</i>	3, El Hajeb
5. Greater horseshoe bat*	<i>R. ferrumequinum ferrumequinum</i>	1, Tazekka NP
6. Western barbastelle*	<i>Barbastella barbastellus barbastellus</i>	1, Tazekka NP
7. Mediterranean long-eared bat	<i>Plecotus kolombatovici gaisleri</i>	1, Afeggou
8. Kuhl's pipistrelle	<i>Pipistrellus kuhlii deserti</i>	1, Aït Benhaddou
9. Common pipistrelle	<i>P. pipistrellus pipistrellus</i>	1, El Jadida; 2, Chefchaouen
10. Savi's pipistrelle	<i>Hypsugo savii darwini</i>	1, El Hajeb
11. Meridional serotine	<i>Eptesicus isabellinus boscai</i>	1, Cherrat
12. Giant noctule*	<i>Nyctalus lasiopterus</i>	1, Chefchaouen
13. Whiskered myotis	<i>Myotis mystacinus occidentalis</i>	1, Tazekka NP
14. Zenate myotis	<i>M. zenatius</i>	3+, Mizou Cave
15. Geoffroy's myotis	<i>M. emarginatus emarginatus</i>	5+, Mizou Cave
16. Common bentwing	<i>Miniopterus schreibersii</i>	~8, El Hajeb; 10+, Mizou Cave
17. European/North African polecat	<i>Mustela cf. putorius/furo</i>	1, Tasselmtane NP
18. Least weasel	<i>M. nivalis numidica</i>	1, Sidi Moussa Lagoon NR
19. Eurasian otter	<i>Lutra lutra angustifrons</i>	1, Ifran
20. African wolf	<i>Canis lupaster algirensis</i>	1, Afeggou; 1, Ifrane NP
21. Red fox	<i>Vulpes vulpes atlanticus</i>	1, Ifrane NP
22. Egyptian mongoose	<i>Galerella ichneumon sangronizi</i>	1, Sidi Moussa Lagoon NR
23. Wild boar	<i>Sus scrofa algira</i>	2, near Mizou Cave
24. Cuvier's gazelle	<i>Gazella cuvieri</i>	2, Tighza
25. Barbary stag	<i>Cervus elaphus barbarus/corsicanus</i>	3, Tazekka NP
26. Libyan jird	<i>Meriones libycus libycus</i>	1, Afeggou
27. Wood mouse	<i>Apodemus sylvaticus</i>	1, Tasselmtane NP
28. Barbary striped mouse	<i>Lemniscomys barbarus</i>	1, Sidi Bettache
29. Algerian mouse	<i>Mus spretus</i>	1, Forêt Bni Abid
30. House mouse	<i>Mus musculus domesticus</i>	4, Sidi Moussa Lagoon NR
31. Brown rat	<i>Rattus norvegicus norvegicus</i>	2, Casablanca; 1, Fes
32. Hare*	<i>Lepus sp./ssp. 1?</i>	1, Afeggou
	<i>L. sp./ssp. 2?</i>	1, near Mizou Cave; 1, Tazekka NP
33. European rabbit	<i>Oryctolagus cuniculus habetensis</i>	2, Volubilis
34. North African sengi	<i>Petrosaltator rozeti deserti</i>	1, Fint

Note: there are currently at least 5 proposed classifications of North African hares; hopefully this will get sorted out in my lifetime.