Greece Lightning! Herping Athens and Milos

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Herping into the unknown

Mainland Greece and it's surrounding islands has one of the richest diversity of reptiles and amphibians in Europe with around 90 amphibian and reptile species including many rare and endangered species such as the loggerhead turtle, the Karpathos marsh frog and the Milos viper (Uetz *et al.* 2018).

From 30th September to 7th October a group of Bangor University herpers went to Milos for the wedding of equality reptile-crazy friends, with a detour in Athens and plenty of herping thrown in. Our group had little experience herping in mainland Greece or the island of Milos, but with a list of the species found in our areas and online research at our disposal, we targeted our search primarily for the Milos viper Macrovipera schweizeri. With no real plan or field sites in mind we enjoyed the puzzle and reward of testing our "goodhabitat" identification skills. We largely relied on identified habitat from satellite images and spotting promising sites from the car. This report consists of day by day accounts and field observation of the places we visited and the amphibians and reptiles found at each.

30th September - A slow start

After taking an afternoon flight from Manchester, we didn't arrive into Athens until the evening, where we were welcomed by rain, lots of rain! Greece had been hit by gale-force winds of up to 62mph slamming into the country from the west from a medicane – a combination of the words Mediterranean and hurricane –from the Ionian Sea southwest of mainland Greek. After finding the shuttle bus to deliver us to the hire car office, down built-

up streets and then a lane straight from a horror movie, we drove to our hotel in Porto Rafti, on the East side of Greece. All herping for the night was abandoned forced by hunger, pizza and the rain pouring down. Even on the sheltered balcony there was not a gecko in sight!

1st October - The big climb

The morning revealed not only the damage and water left over from the storm but also some amazing views and ideal habitat! The weather was still not on our side but we headed off undiscouraged in the drizzly grey, to a rocky hillside on the other side of the bay that looked promising. The rocks being volcanic were rough and jagged, great for getting a good grip underfoot but not great on the hands! The plants didn't help either- nearly every plant had spines. The habitat was typical Mediterranean scrubland; small, low-lying shrubs with small, leathery leaves with thick cuticles, and often needles. A vast array of different lichen covered nearly every surface and the air was filled with the aromatic smell of thyme and oregano.

Although there was plenty of evidence of tortoises from their droppings, it took a long time before we had a sighting of the first herp of the trip - although brief! A small break in the clouds brought out a Dahl's whip snake (*Platyceps najadum*) that quickly disappeared into the vegetation and rocks. After further climbing to reach the top of the hill we were met with stunning views but still no reptiles, although plenty of interesting spiders and small mantids, and so decided to head down to visit the hillside across the valley that was now receiving a good dose of sunlight. Only after



Figures 1a-d. (Top-bottom left-right) Chalcides ocellatus, Malpolon insignitus, Vipera *ammodytes*, *Testudo marginata*.

risking life and limb (and pride) scaling down the jagged hillside and spiky bushes, did the sun break properly on our side, bringing an almost immediate change! In a piece of wasteland at the back of some houses, littered with junk (refugia, yay!), in rapid succession we saw 4 reptiles in the space of around 10 minutes. The first being another Dahl's whip snake, a small juvenile that fled into a rock pile, two Ocellated skinks (*Chalcides ocellatus*) (fig.1a), a juvenile and an adult both found under flipped rocks and a beat-up looking Eastern Montpellier Snake (*Malpolon*

insignitus) (fig. 1b) found at the edge of a pile of branches.

After lunch we headed west to a hillside overlooking Athens where previous herp groups had reported horned vipers (*Vipera ammodytes*) (fig. 1c) and marginated tortoises (*Testudo marginata*) (fig. 1d). The habitat rarely altered from the aromatic, low-lying scrubs and lichen covered rocks, although there were a few more trees and more evidence of people, being so close to civilisation and farmland. We quickly found one of the target species, a *T. marginata* found out in the open amongst the vegetation,

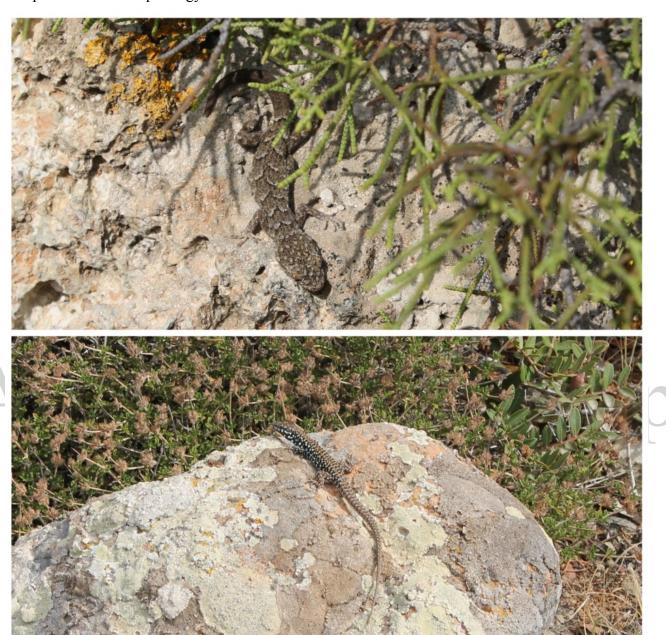


Figure 3a-b. (top-bottom) Mediodactylus kotschyi, Podarcis milensis

distinctive with their flared supracauda scutes. Followed by the other target V. ammodytes, a juvenile only measuring ≈ 10 cm long, found on a rock with an over-hanging rock giving cover from above. Further searching around the site found more T. marginata, either basking in the open or moving along the gravel access road. Of the dozen tortoises we saw, all were adults and only one was a female. Many of the

2nd October - Athens to Milos

Before checking out and heading to the airport for the next leg of our trip in Milos, a quick tortoises we found in this area had chips exposing the bone beneath their scutes, a result of old-age and fighting in the males. The female in particular, had lost most of the dark pattern on her scutes. Heading back to the hotel, on the curb of a shopping centre car park, we had our first gecko of the trip (no surprise!) a Turkish Gecko (*Hemidactylus turcicus*).

return to the wasteland site and nearby fields revealed some more interesting finds: two *P. najadum*, one basking on a dry-stone wall and another underneath corrugated roofing sheets,





Figure 4a-b. (top-bottom) Telescopus fallax, Lacerta trilineata

along with 10+ *H. turcicus* and snake eyed skinks (*Ablepharus kitaibelii*) moving amongst the fallen pine needles. The habitat in this area was a more cultivated, and was either farmed land not in use or rocky fields, broken into long rectangle plots down a slope by dry stone walls

A very short flight to Milos later and exiting the small, propeller plane we immediately saw Milos wall lizards (*Podarcis milensis*), running around the dry grass next to drainage ditches on the runway. Even more were found on the

walls of the airport building, but sadly also found by the many stray cats around the building. A few were rescued but unfortunately this was a reoccurring theme during the rest of our stay on Milos. Travelling from the airport to the hotel in Pollonia, we spied some promising looking habitat from the side of the road. The small, charming town of Pollonia, located right on the water is a beautiful place, thoroughly enjoyable for the holiday side of this trip. It has great restaurants, friendly people and excellent natural pools for

snorkelling. It was, however, lacking in reptiles apart from *P. milensis*.

With that in mind we headed back to the potential sight spotted earlier in search of cat snakes (Telescopus fallax), Leopard snakes (Zamenis situla) and the target of the trip, Milos vipers (*M. schweizeri*). The site in question was a rocky valley leading down onto ploughed farmland; the terrain was still just as difficult, with the same rough rocks and sharp plants as before. The valley was a particular interest to the lichen expert of the group; with huge diversity caused by humid air that comes into the valley from the nearby sea. Just as the sun started to set we got our first snake, a juvenile cat snake (T. fallax) found under a rock. After photographing and releasing the snake, the group split up and searched both sides of the valley. Driven by tiredness and reluctance to lose more of my blood to the

3rd October - In search of frogs

In the morning we returned to the previous night's site and didn't see much, more P. milensis basking or running on top of the rocks. Taking a picture without a powerful lens (or a lot of patience to sneak up) was difficult as they wouldn't let you within 2m. In the afternoon we met up with more reptile and amphibian enthusiasts and headed to a lake, where there were possible but unconfirmed Milos water frogs (Pelophylax cf. kurtmuelleri). The taxonomic status of this species is not fully clear, and it may represent a distinct endemic taxon, so the small, scattered populations on this island are incredibly rare. The site consisted of riparian habitat; a large lake with rocky hills surrounding it from one

4th October - Friends in high places

Eager to return to the riparian site we set off straight after breakfast; our aim was to walk up the dried river bed to check the small groupings of trees dotted along it for *M. schweizeri*, which are known to wait in trees in

spikey plants, I surveyed the perimeter of the farmland. At the edges of the mud field, dry plants, straw and tubing was thrown in piles. On these and likewise on the rocks up the valley, we found Kotschy's gecko (Mediodactylus kotschyi) - distinctive from H. turcicus because they lack adhesive pads on their toes. Hope of finding a Milos viper was diminishing fast, when a large viper cruised across the path of my torch beam heading from the farmland towards a patch of scrub and tree. With no snake hook and the rest of the group up the valley side, it unfortunately disappeared into the vegetation! We were in luck though because only 15 mins later and the rest of the group also surveying the edge of the farmland, another M. schweizeri was found, just off the field moving between the scrubs. Success! Interestingly while heading back up to the car we found *H. turcicus* on exposed rock close to the road, living alongside *M. kotschyi*. side, with dried river beds leading down from the hillside. There were more open gravel spaces and larger boulders than the previous sites. Upon arrival, we walked down a path leading past a small church and sparse woodland to the get to the rocky hillside and lake. Sadly, we found a dead M. schweizeri exposed in the open, that appeared like it had been hit on the head. Although horrible to see a dead viper, it did confirm they were there. After hours of searching the only reptiles we saw were M. kotschyi which are mainly nocturnal but at cooler times of year they are often active in the day. Some of the group heard frog calls but the source could not be found. A stop at a patch of salt farms near the airport in search of the elusive P. cf. kurtmuelleri found nothing either.

ambush for birds during their autumn migration (Adamopoulou *et al.*, 1997; Nilson *et al.*, 1999). On our way up the riverbed we found the usual suspects of *M. kotschyi* and *P. milensis*, a common site on the rocks. On a slightly flatter part of the riverbed further up the hillside a large *T. fallax* was spotted;

spread-out basking on the bordering dry stone walls. Although usually nocturnal this individual was found mid-morning in broad sunlight. It wasn't long before we had our next snake, a M. schweizeri found curled in a small hollow along the riverbed, positioned immediately next to a small puddle left over from the medicane. It was a perfect ambush spot to prey on birds landing for a drink! One the way down the riverbed a Balkan Green lizard (Lacerta trilineata) was found cryptically basking within a scrub – a nice brightly coloured, big lizard to even get the snake-lovers interested. A return to the site in the evening proved unsuccessful for herps (just the usual *M. kotschyi*), and almost disastrous for us, negotiating down the big boulders and dried up waterfalls in the dark!

5th October - When in Greece

This was a long-needed "tourist" day spent

7th October - Flying home

The time had come to say goodbye to this fantastic island. Before heading to the airport and our onward journey to Athens and Manchester, we made one last stop to see the *P. cf. kurtmuelleri* (only 5 adults this time) and the *M. schweizeri*, which hadn't moved from the crack in the mud under the plastic sheet. A further search around the farmland and its piles of sheeting and junk found more *M. kotschyi* and *P. milensis* but unfortunately no more snakes.

Although finding a modest number of species in total we found our targets for the trip and saw a few interesting behaviours. Our research before the trip suggested that *M. schweizeri* were most common in the West of the island, undisturbed by tourists due to the poor roads and infrastructure (Nilson *et al.*, 1999). From our observations I believe Milos vipers, although rare, are a lot more widespread and adaptable than previously thought, seeming to

enjoying the sun, amazing food, snorkelling in the sea and visiting Tripiti and its catacombs.

6th October – The main event

The day had come for the big event - the wedding! But being herpers of course there was a last ditch effort in search of the rare *P. cf. kurtmuelleri* and any other herps we could find. The other group of herpers had discovered a site the night before that had a small population of the water frogs. We finally found them! What we didn't expect was to find a *M. schweizeri* under some plastic sheet in a sunken hollow near farmland, not far from the

small drainage ditch the frogs were found in.
Seven frogs were counted in the small patch of water and surrounding clay bank - which could well be the entire adult population on the island!

favour habitats, either rural or near agriculture that provide a source of water and in turn prey. Athens and Milos are both beautiful locations with friendly people, tasty food and great herps. It was a great trip with great people! I would like to thank everybody involved and to thoroughly recommend these destinations!

References

Uetz, P., Freed, P. and Jirí Hošek (eds.), The Reptile Database, http://www.reptile-database.org, accessed [22/10/18]

Nilson, G., Andrén, C., Ioannidis, Y., and Dimaki, M. (1999). Ecology and conservation of the Milos viper, Macrovipera schweizeri (Werner, 1935). *Amphibia-Reptilia*, *20*(4); 355-375.

Adamopoulou, C., Valakos, E. D. and Legakis, A. (1997). Notes on the diet and reproduction of the Cyclades Blunt-nosed Viper, Macrovipera schweizeri (WERNER, 1935). *Herpetozoa* 10 (3/4): 173-175.