**Finding reptiles and Amphibians- the basics**

**By Scott and Tie Eipper**

The popularity of reptiles and amphibians as pets has also seen a rise in the amount of people actively searching for reptiles and amphibians in the wild known as “herping”.

The act of herping is certainly nothing new. Generations of reptile people have spent much of their time in the bush searching for these incredible animals. The motives of the people have for the most part changed but much of the methods utilized still remain the same.

In years gone by, reptile and amphibian people would go on collecting trips trying to find rare and unusual specimens so that they could be brought back from the wild to be kept in captivity by the collector or a friend. These days this act is outlawed in all Australian States and Territories with the exception of Tasmania. That said, you still need a permit to collect reptiles in Tasmania though. The scope of this article is not to explain the legal minefield that is concerned with reptiles/amphibians and herping. It is recommended that you contact your local wildlife department and herpetological society for advice on state specific legislation.

Now, most people are not to be interested in collecting reptiles or amphibians but rather observing and taking photographs so they can remember the experience of the whole trip. Hopefully this article will to give the reader new to herping some pointers and ethical guidelines to follow.

**Selecting and Planning**

It would seem simple enough but before you wander aimlessly around the bush, give some careful consideration as to what you are hoping to see. Once you have selected the species you are hoping to find spend some time researching it. Open up books, magazines and jump on the internet. You are trying to establish some knowledge about the basic ecology of the species in question. What habitat? Where in the habitat (the microhabitat)? When are they active? What weather conditions? Generally if you select one species you are hoping to see you will invariably see many others while searching for it.

**Couple of important points**

Some methods of herping can be very destructive to fragile habitat types. Flipping exfoliated sheets of rock and peeling loose bark from trees can turn up many animals but it can be very difficult to replace if one is not selective on how they do it. In conservation reserves this may actually be illegal as well.

I like to think of it the way my father told me when I was very young- how would you feel if a giant just ripped off the roof of your house? I would hope they would put it back!!! Don’t forget the layer of leaf litter that builds up on the sides of the rock- make sure you push that back too. Rather than flip or peel -try being in the location when those same animals are active- you can observe without having to flip a thing- That is much easier for you and preserves the environment for the future.

You need to mindful of other animals. If you are searching for a common bluetongue in a grassy paddock west of Melbourne you are just as likely to come across a Tiger Snake. Look before you put your hands in places- Last thing you want is to get bitten by a Curl Snake that you did not see when you put your hand down. In northern Australia, waterways may harbour crocodiles- wading and snorkelling in those areas is not advised for obvious reasons.

Lastly, Do Not bring any collection or animal manipulation equipment- you do not need bags, hooks and Jiggers. As you are not allowed to handle wildlife there is certainly no reason to place it into a bag.

**What you should take**

When travelling searching for reptiles and amphibians, it is similar to going for a bushwalk. Tell someone where you are going and when you plan to return. There have been two deaths I can recall, both involving young people getting bitten by Tiger Snakes that may have been avoided if they told their parents where they were going prior.

You should take certain things with you in case of emergencies. A couple of broad elastic compression bandages, plenty of water, sunscreen, a wide brimmed hat, a roll of toilet paper, possibly a mobile phone and if heading out a night spare torch and batteries should cover the very basics.

If you are walking, good footwear- not a pair of thongs is highly advisable- rolling an ankle far from the vehicle is a painful experience. If travelling in remote areas, knowledge of how to use GPS equipment and a compass is worthwhile. Areas with stinging trees a roll of duct tape is very handy. Have a good look at any trail maps and take careful note of landmarks such as ridgelines, fences and creeks. Some smart phones have apps that allow the user to view maps offline- very handy as long as you have battery!

Lastly, it is much more enjoyable to herp with a friend or group, you see more and experience the fun together. Also if something did go wrong, your chances are going to be much better of getting out trouble.

**Types of Herping**

Road Cruising

This is one of the easiest methods of seeing reasonable numbers of herps if the conditions are right. Tall stories, some friends, some hope and a good time is almost a guarantee if the herps make an appearance. The trick is to work out when the conditions are “right”. I have a little mantra that I have utilised to spur myself on when the conditions have been not as favourable as I had hoped- That it is that getting out and having a look gives you a chance- sitting in front of the idiot box is almost a guarantee not to see anything.

Ideally, you want to choose a paved road that passes through good habitat types that is quiet. You don’t want to hold up traffic and potentially cause an accident because you are driving too slow. Be courteous to other road users and obey the road rules.

If driving at night, think about fitting up a good set of spot/driving lights. These will help you see, not only herps but also road hazards like livestock and Kangaroos. If you do see an animal on the road remember you are not allowed to touch it- including shifting it off the road. Pull the vehicle up in a safe location put on your hazard lights and watch the animal leave the road.

Lastly, expect to pull up for sticks, leaves, straps, road kill, bits of tyre, rocks and with a little bit of luck- herps! Roadkill reptiles can also provide some really interesting insights into the biology of a species. A fresh road kill can provide information on when species can be active. Other biological information like size, sex, reproductive status and even prey items taken can be learnt. The rediscovery of the Pygmy Bluetongue was thanks to the gut contents of a DOR brown snake.

Bush Walking

There is nothing quite like setting off on a walk through a beautiful conservation reserve and seeing a gorgeous Red Bellied Black Snake sunning itself in the middle of the path. During the day, morning tends to be key- diurnal reptiles emerge in the morning to bask. The activity period depends on the species and the habitat. Generally, if herping in close forests I tend to concentrate of the sunlit patches. In open in environments, places that have sun but are out of any wind are usually good. Dragons often perch on rocks and logs and might be quite conspicuous and allow you to approach closely. Herps often get used people in reserves and continue to behave normally provided you give them plenty of space. This observation of wild herps and seeing how they interact in their environment can teach you so much about their lives. You can then take what you have learned in the field and hopefully apply that to the species you may keep at home.

Walking at night is exactly the same as during the day except that the species active during the day have usually retreated and the nocturnal species are now in their place. I personally use a cree LED head torch on half power and have a small LED hand torch as well. You look in the same places as you would during the day but hopefully you will locate different species. You can utilise a method called eyeshining. This is when the light from a torch is reflected off the retina of an animal back into the eyes of the person with the torch. The closer your torch is to your eyes the better the reflection will be. With some practise this is a very effective method of finding animals. You will wander up to plenty of spiders and moths as well as geckos, frogs and occasionally snakes and if in the right spot Crocodiles.

Call Triangulation

This is used to find calling amphibians. Ideally it is done by two or three people. You stand in a wide circle around the calling amphibian. When it calls you put your hands in the direction you think you heard the frog. The point that the projected lines from each person intersect should be where the call originates from. Be warned though this can be ridiculously frustrating with a frog that calls once every 5 minutes and then decides to shut up. They say its character building I suppose!

Snorkelling

There is nothing better than a cool clear river on a hot day especially after spending a few days in the heat, dust and in a vehicle with other herpers! A good mask and snorkel is the key here. It is best if possible to swim upstream so that up only murk up where you have already looked. Check amongst weed and beneath undercuts and submerged logs. Be careful though- Bullrouts can bring about the end of a very pleasant day snorkelling very abruptly and obviously don’t dive where you may find swamp geckos!

Raking

Your tool of choice is the three pronged cultivator and like the method’s name suggests- the time is spent raking over leaf litter hoping for fossorial herps. You can pick these up from most hardware stores- get one with a reasonable handle- last thing you want is the handle to snap. Be warned this is hard work. It can be very productive though in the right habitats. The blisters, sweat and aching back, arms and shoulders are worth it if you find what you were hoping to see. Remember just like if you were flipping over cover like rocks and logs you need to rake the litter back to the same thickness it was so that the habitat is returned to how you found it!

A COUPLE OF FINAL POINTS

Record what you find. Keep a note book, you might be lucky enough to witness rare events or if you repeatedly return to the same location note population trends. I have a friend who has been studying reptiles at the same location for just over 50 years. These notes can become the basis for articles/notes/papers for magazines and journals. Usually the location (via GPS), weather (including temperature and humidity), dates, times and species should be recorded as the very basics.

And lastly- ENJOY yourself and remember the old adage- take only photographs and leave only footprints!

Captions for accompanying images

1. A Common Death Adder found while walking
2. A Scrub Python Found driving along a quiet road
3. A Saw Shelled Turtle feeding on an aquatic plant
4. A Shingleback Lizard, threatening the photographer at the end of a hot summer’s day
5. A Lacelid’s large eyes make it easy to pick up eyeshine
6. The loud call of a Montane Toadlet can be difficult track down by a single person
7. A Bearded Dragon Threatening a would be predator as they approach the fence post used by this large Bearded Dragon
8. Wearing appropriate footwear when chasing snakes can save on trips to medical centres- besides the pain, time spent in a medical centre is time that could be spent Herping! Image by Max Jackson.