

PHOTOGRAPHING REPTILES

by Raymond T. Hoser

INTRODUCTION

Photographing reptiles is a time consuming though satisfying pastime. In this article I shall outline the basics of reptile photography in an easily understandable manner. This article is not intended for the expert, but rather for those new to the field. Besides taking up much time, reptile photography, if done properly, is not a cheap hobby. Equipment accounts for the main capital outlay, although films and processing are no longer as cheap as they used to be, largely due to increased silver and labour costs. In this article I shall outline the most commonly used photographic methods and points where I deviate from these.

EQUIPMENT

Camera

Obviously the piece of equipment fundamental to photography is the camera. For reptile photography a single lens reflex (SLR) camera capable of accepting interchangeable lenses is mandatory. Of the various formats (sizes) of cameras I would recommend the 35 millimetre format as opposed to others such as a 2 1/2 inch square format. This is because the 35 mm format has relatively cheaper cameras (of SLR's) of acceptable quality and has the widest range of accessories available. Most serious professional and amateur photographers use 35 mm cameras. As cost is usually a good indication of how good a camera is, I would advise one to buy the most expensive camera one can reasonably afford, but don't forget to allow yourself enough funds for other equipment such as other lenses and flashes which are necessary to good reptile photography. Before rushing out to buy a camera it is best to shop around and be aware of what is on the market and relative prices of different makes. By shopping around and getting to know about cameras you will probably be able to save yourself much money in your more costly purchases.

Don't buy "supermarket style SLR's". Make sure you buy a camera of a reputable make such as the following: Nikon, Canon, Pentax, Minolta, Olympus, Fujica. I have a Pentax

ME-Super and prior to this used a Fujica STX-1. Both are excellent cameras for reptile photography.

Lenses

Cameras consist of a "body" and a "standard lense" when bought. For reptile photography other lenses must be bought, or some provision for close up photography must be made. Methods used for close up photography include standard 50-55 mm Marco Lenses, Wide angle/Marco to Zoom/Marco Lenses, Diopter lenses, Extension tubes, and Bellows. Any accessory lenses purchased must be able to "fit" onto the camera body. For example, a Takumar lense has a base compatible to the Ricoh camera body. Relatively cheap "mounts" available make a wide range of brands of lense compatible to individual brands of camera. For example with the use of mounts, Takumar, Rocoh, Tamron, Sigma, Soligor, Vivitar and other brands of lense may be used on most good 35 mm SLR's.

Of the above mentioned methods of close-up photography most reptile photographers use a standard focal length macro lense. This enables maximum manoeuvreability around a reptile at close quarters. I use this method occasionally, but am relatively unorthodox in making frequent use of a zoom/macro lense (Tamron 80/21 mm) on a tripod for my reptile photography. This method is unpopular because many reptile photographers claim that manoeuvreability relative to the subject is unduly hampered. I believe that the loss of manoeuvreability incurred is minimal and worthwhile considering improvements in photograph quality incurred by lack of camera shake and by flash positioning. Diopter lenses, extension tubes and bellows are regarded as being too fiddly for most reptile photographers.

A standard macro lense is a lense similar in appearance to a standard lense (50-55 mm) except that it extends out further from the camera as one focuses close up. Standard lenses cannot focus close up. Zoom lenses are the heavier elongated lenses that are often seen in cartoons with cameras and typify many a photographer. Extension tubes are relatively cheap tubes or rings placed between a non-macro standard lense and a camera to enable close up photograph.

Bellows are an unusual apparatus square in shape which sit in front of the camera and operate on a similar principle to tubes.

Tripod

Most reptile photographers do not use a tripod, finding them far too restrictive. Ron Sayers, one of the world's foremost herpetological photographers, uses a tripod and a long focal length lense (greater than 100 mm) commonly. If one is to use a tripod it must be sturdy in construction with a sturdy head. A tripod's function is to prevent any camera shake, so a flimsy tripod is as good as no tripod at all.

Film

Most professionals take colour slides rather than colour prints. Black and white is out of fashion and generally only used by those who intend to publish what they photograph. Unless you have an extremely powerful flash such as a Metz I would advise one to use a "fast film"—that is, one with a high ASA rating. 400 ASA film is generally excellent for reptile photography as it enables people to obtain maximum depth of field (region of focus). Which brand of film one uses is purely a matter of taste. For example, in Australia I always use Kodak in preference to Agfa film although many people have the reverse preference. Higher ASA films tend to get more grain (accumulation of silver iodide (AgI) in enlargements), although this is largely dependent on the quality of processing as well. For normal photographic requirements grain poses no problem.

Light Sources

Usually the only acceptable light sources available are natural sunlight, flashlight or a combination of both. For photography of most reptiles (and amphibians) a flash is essential. If you use a flash your camera shutter speed is prestricted to a certain flash synchronization speed, usually about 1/60th of a second. If not using a flash but are relying upon natural light you may use any shutter speed you choose. The smaller your subject the more you need to have your aperature (light entry into the camera when the film is exposed) closed down. The smaller the aperature the higher the f-number. For close up photography f-8 is a bare minimum useable for adequate depth of field whilst it is advisable to use much higher f-numbers if possible. Most lenses go as far as f-22. Unfortunately in daylight photography, the higher your f-number the slower your shutter speed and hence the greater your need for a steady hand or a tripod, and a still subject.

In daylight close up photography a flash may be used to eliminate shadows in a photo, or simply be used to enable one greater depth of field, hence rendering the sun superfluous. For extremely large subjects such as some monitors, daylight photography is mandatory.

Flash types vary, But I simply advise one to buy the largest most powerful available. The more powerful the flash, the greater the depth of field obtainable, and excluding other variables, the better the photograph. Put simply, the bigger the better. A good flash may well cost over \$100 (U.S. or Aust.). Many photographers use more than one flash, either for extra light or to kill off unwanted shadows. Many people regard the double shadow effect resulting from the use of two flashes as damaging to the overall quality of the photo. I only use one flash. For close up photography it is usually better to have the flash/s situated to the side of the camera rather than on top of the camera so as to enhance light distribution on the subject.

A third light source that may be used is artificial lights such as tungsten lights. These lights are not as bright as the sun, and when used in photography using normal film, will result in brownish coloured photos unless you use a blue (B) filter which will balance this property. Films are made which are compatible to artificial lighting for which no filter is required. Although I do occasionally use tungsten lights in reptile photography (at home) I find them cumbersome and too prone to mechanical failure to be regularly used. All photos I took recently for NOAH Journal VII(1) involved use of tungsten lighting.

Other Accessories

Filters are a commonly used accessory. Simply glass sheets or lenses, they screw onto the front of a lense and serve the dual function of filtering out unwanted light rays and protect the more valuable lense from dust particles, etc. Filters only cost a few dollars, and because of this virtually all photographers routinely use them.

Other accessories include camera hotshoe attachments enabling use of multiple flashes, and cords which can be connected to a camera to set off its shutter by remote control, hence eliminating any possibility of camera shake.

PHOTOGRAPHING THE REPTILE

There are probably more ways to photograph reptiles than

there are reptiles and types of cameras combined. Some reptile photographers go out into the field and do all their photography in the field, not actually capturing the reptile, although most successful reptile photographers capture their reptiles and then photograph the reptile in some nice looking place, such as habitat typical of the reptile.

A third category is that which I fall into, which is carrying out the vast majority of my reptile photography at my home. This involves bringing reptiles into my home (either wild caught or captive), placing them on a suitable "stage" and then photographing them. The stage is set up so as to resemble the natural habitat of the reptile. When photographing the reptile, one must make sure never to include anything unnatural such as the edge of the stage in the photo which may ruin the composure of the photo. The advantages of doing reptile photography in one's home are that one does the photography in the same place all the time and hence, can get to know correct exposures for the few possible conditions available; one has no risk of the animal escaping; posing the reptile is made far easier by the availability of cooling facilities such as a fridge (cold reptiles are less restless than warm reptiles). I would cool roughly 60% of all reptiles I photograph. For smaller species such as fast moving skinks, this may involve near freezing the animal. Cooling in this manner for photographic purposes by myself has never harmed any reptile. Many Australian reptile photographers cool reptiles as frequently as myself although some won't publicly admit to it.

Posing the Reptile

The beginner is easier to please than the expert. The pose of a reptile, its setting, etc., is completely up to the discretion of the photographer. My opinion follows:

Don't be afraid to use film. Often one may need to take several photos until one gets one of the desired standard. Be your own judge of this.

The background should be as natural as possible and typical of the habitat occupied by the reptile. I find no point in photographing a rock dwelling gecko on a tree and vice-versa. The reptile should be in the centre of the picture and I usually like the reptile to fill most of the frame. As much of the body as possible should be visible. The whole dorsal

surface should always be visible, and as much lateral surface as possible should also be visible. The head is by far the most important part of a reptile and all focusing should be done from the head. Often I do a whole head shot of a reptile as well as a whole body shot. It is advisable that the body should never go over itself, a common problem in snakes, as this results in less of the animal being seen, and the bit concealed may be the most important bit. For example, in the Common Death Adder, *Acanthophis antarcticus*, many photographers fail to include a full view of the tail tip in their photos; a great error, considering the morphological importance of this snake's tail tip which is used for caudal luring and ends in an unusual terminal spine.

For the positioning of the reptile, it should be loosely coiled. For snakes this is self explanatory, and for other reptiles this may mean the tail coiled behind or in front of the body with the reptile in a side-on "U" shape. The reptile usually appears better with the head towards the front of the picture, in profile rather than as a frontal view. The eye should always be easily detectable and highly visible. This property can make or break a photo. I find the inclusion of more than one reptile in a photo unfavourable except in unusual circumstances as this reduces attention from a single subject. Unusual circumstances may include two snakes mating or fighting.

Probably the pinnacle of a herpetologist's photographic career would be photographing reptiles copulating, egg laying and so forth. My initial reason for taking up reptile photography was for photographing breeding activities within my own reptile collection. I've captured photos of several species of snake copulating including two different species of Death Adder mating with each other (of which the female is pregnant as of this writing), erect hemipenes and so on. Whenever I do this kind of photography, I use tungsten lights. Strangely enough, the heat put out by these lights stimulates copulating snakes still further and the risks of the snakes breaking apart is minimized. I then take photos at my leisure. On one occasion, 1000 watts of red hot lights accidentally fell on top of two copulating Death Adders *Acanthophis antarcticus* and smashed. Neither snake was harmed and they actually carried on copulating! Reptile photography has its risks. In this case I was simply lucky!

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