Reptile Parasites

Quarantine and Disinfecting

Parasites are extremely common and are often an overlooked problem in captive breeding and general pet reptile collections. It is fair to say that most reptiles brought into captivity in the United States are either farm-raised or wild caught. Wild caught imported animals often bear a heavy parasite burden in their natural environment, while showing no signs of disease. The stresses of captivity can cause this same animal to develop clinical disease ranging from poor reproductive performance to death.

Captivity in general causes a certain degree of stress from the mere fact that the animal has lost its ability to vary its environment and food. The reptile relies now solely on its keeper to provide a varied diet, water, environmental security, temperature, light, humidity, etc. When reptiles do not have their basic needs provided, their ability to fight infection are suppressed, just as humans are with the AIDS Virus. Reptiles get bacterial, viral, fungal, and parasitic infections more easily in captive environments. The purpose of this article is to discuss quarantining, disinfecting, and parasites in the captive environment in various types of reptiles.

The New Reptile Quarantine

Quarantining is the act of isolating as a precaution against diseases that are contagious. Whether or not the new reptile is captively bred or wild caught, it should be quarantined for at least 30 days or it should have 3 negative fecal examinations before entering a collection. A clinically sick animal should be kept separated regardless of its parasite status. Wild caught reptiles may have parasites shed in their feces for months. A positive fecal (for internal parasites) or physical exam (for external parasites) necessitates that appropriate action be taken from the reptilian veterinarian and from the owner to rid the animal of the parasite or parasites. The reptile needs to be dewormed with the proper medication (anthelmintic) and the owner needs to clean (remove organic waste, such as feces) and disinfect (destroy harmful organisms such as parasites, bacteria, viruses, or fungi) the quarantine caging on a daily basis. These quarantining procedures should be done again for at least 30 days or and should have 3 negative fecals.

Several pitfalls can occur in the quarantine process that allows parasites to enter the “clean collection”. Some herpetoculturalist and pet owners will try to save money and use the “dewormer” that they buy from the pet store. Some reptile owners do not have the fecal material checked by a veterinarian. These dewormers may only rid the reptile of one type of parasite when others may be present. Parasites enter collections this way and may result in the death of a particular animal or decreased production from the entire collection. Another
common mistake that herpetoculturalists make involves trying to put the newly purchased reptile in with the potential mate in order to have quick breeding success. I have seen this work and backfire on clients. This break in quarantine can be analogous to Russian roulette. Other problems occur that may introduce parasites into a clean collection are using the same cleansing sponges, scrubbers, buckets or handling utensils like snake hooks, tongs, gloves, and water and food bowls for the quarantine cages as for the rest of the reptile cages. When cleaning cages, do the quarantine cages last. Strict hygiene should be practiced by serious reptile breeders. It is a good idea to wear rubber gloves and change between each cage during cleaning, particularly with quarantined animals. This is done in human medicine and should be practiced by veterinarians and serious reptile breeders as well. At the very minimum, wash your hands between handling animals in the quarantine status.

**Disinfection for Quarantine and for the Rest of the Collection**

Cleaning implies removing the organic debris (feces, uric acid, blood, dead or old food items, and various secretions) that is obvious to the eye. Disinfection implies that the area is cleaned of organic debris and relatively free of harmful organisms such as parasites, bacteria, fungi, or viruses. Cages must be cleaned before they are disinfected. Many disinfectants such as bleach are deactivated by organic debris.

With a quarantined animal, the cage should be cleaned daily to prevent reinfection through contaminated fecal material. Strict hygiene should be practiced between quarantine cages and the rest of the collection. The level of cleaning and disinfecting that needs to be done in a clean collection depends on the type of reptile owned and the amount of cage space per animal. In other words, if the reptile can avoid the fecal material (small reptile large cage) or the fecal material is not watery, then the reptiles tend not to ingest the material and the cage does not need to be cleaned immediately. Snakes will obviously need their tank cleaned every time they defecate due to the liquid content in their urine and their bodies’ constant contact with the surface of the tank.