

Safety in Handling Reptiles

Our topics for this week are:

- Safety measures for handlers of:
 - Turtles and tortoises
 - Snakes
 - Lizards

Handler Safety

No reptile is domesticated. Some tolerate being handled, but all prefer not to be handled and persist in seeking escape. Chelonians can inflict tissue crushing bites with the horny plates of their beaks, but with the exception of snapping turtles, most do not. Snakes and carnivorous lizards have teeth and their bites produce penetrating wounds. Their teeth slant back toward their throat and will either tear tissue if the victim jerks away or the reptile's teeth will dislodge in the wound. Non-venomous snakes have two to four rows of teeth.

Handlers of reptiles must become sufficiently familiar with various species to recognize aggressive species: rock pythons, anacondas, Tokay geckos, and iguanas, and poisonous species: Gila monsters, Mexican beaded lizards, rattlesnakes, copperheads, cottonmouths (water moccasins), and coral snakes.

Safer Handling of Chelonia

Chelonia do not have teeth, but they have a beak with serrations that can inflict injury and many have sharp claws. Tortoises generally hide in their shells and are not aggressive. Turtles (especially snapping turtles) are particularly aggressive.

Snapping, softshell, and mud turtles have long necks, dangerous bites, and bad dispositions. If restraint is absolutely necessary, a handler should hold these species by grasping the shell between the hind legs or grasp the top shell edge above the head and hold the base of tail. They should not be picked up by their tails.

Safer Handling of Squamata

Some snakes and lizards can grow to longer than six feet and become a physical danger to handlers. Constricting snakes longer than 8 feet and venomous snakes are inherently dangerous.

Snakes and lizards should be moved to a separate quiet, warm enclosure with no substrate to eat. Food should never be presented by hand. When taking the lid off any enclosure of an aggressive lizard or snake, the lid should be opened on the off side (away from the handler) and the lid held in front of the handler as a shield. Opening the side next to the handler may invite a strike or escape attempt toward the handler.

When holding calm lizards or snakes, they should be given a chance to hold onto the handler's hands and arms more than the handler holds onto the lizard or snake. The goal should be to allow lizards and snakes being held to have the illusion of being free while protecting them from falling and preventing their escape. Squeezing their body and attempting to prevent them from moving risks the lizard or snake trying to escape and the handler being bitten.

Snakes

Corn snakes and ball pythons are docile and popular pets. Ball pythons are nocturnal ground snakes with a calm disposition. Arboreal snakes, such as corn snakes, are more rapid moving than ground snakes. However, it is easier to accidentally drop a ground snake since they do not hold on to a hand or arm as well as arboreal snakes.

About two weeks prior to shedding, a snake produces a cloudy liquid between layers of the skin. This is most evident in the cloudy appearance to the eyes. During this period, snakes become irritable and likely to bite.

Snakes that cannot hide protect themselves by biting. Slowing of the flicking rate of the tongue and a stiffened body signals an impending strike. Snakes hunt for food by smell. Handlers should always wash their hands before handling snakes. If a snake smells rodent or rabbit odors on a handler's hand, they will be more likely to bite the handler. The odors of fingernail polish or hand lotion may elicit a defensive response from a snake unadapted to the smell. A handler should never allow any snake near his face. Some snakes may strike just from smell of food on the handler's breath. Snakes that eat other snakes, such as Kingsnakes, may bite if they smell other snakes on a handler's hands. Feeding a snake in its primary enclosure may cause the snake to become aggressive whenever approached. Food should only be offered in a separate enclosure dedicated for feeding. Handling of snakes should be done at random times. If all handling is only at the time of feeding, snakes will associate hands with food and may become aggressive when handled.

Snake mouths contain many harmful bacteria and all snakes are carnivorous with sharp teeth. The teeth angle inward, toward their throat, to aid in preventing the escape of their prey. If a handler is bitten on the finger or hand and the snake does not let go, the snake's head must be pushed forward while prying the jaws open to reduce tearing bitten skin further. Alternatively, a bitten handler may put a wooden spatula or plastic credit card in the snake's mouth and push between the handler's skin and the snake's teeth. Submerging a snake's head in water to stimulate it to release is unreliable since they have air reserves in their air sacs and can hold their breath for a long time. Teeth are typically small, except the long, backward curved teeth of *boids* (boas and pythons) for holding their prey while they constrict their body around it.

The fangs of venomous snakes are long to penetrate the skin of their prey or adversaries and deliver venom through a canal in the fangs or along a groove in the surface of the fangs. Only four species of snakes are venomous in North America: rattlesnakes, copperheads, water moccasins, and coral snakes. Poisonous snakes in captivity are more dangerous than those in the wild because captive snakes will store more venom than those that must hunt and kill their prey.

Constricting snakes constrict to kill food and may constrict on a perceived predator, including a handler. A constrictor snake should never be put around a handler's neck. That position puts the handler's face and neck vulnerable to bite. If a snake constricts around the handler's neck, it is very possible that the handler will be unable to remove it by himself, especially if the snake is more than 6 ft in length. Boids will bite the victim, anchor the tail on a stationary object which prevents the victim from unwrapping the snake, and constrict on the victim. Struggling and an increased respiratory rate will intensify the snake's strength of constriction. Large constrictor snakes can kill within a few minutes without the human victim being able to get to call out for help. The chance of surviving the bite of most venomous snakes is greater than surviving a large constrictor snake attack. If help is available, the snake must be

unwound from the tail since pulling on the snake's head will cause more struggling and increase the strength of constriction. When larger snakes are handled, an assistant handler should be present for every 5 feet of the snake's length.

Lizards

Lizards defend themselves by biting, clawing, or slashing with their tail when they cannot escape what they perceive as a threat. Some have sharp dental plates for plant diets and others have sharp teeth for eating insects or animals. All lizards may bite, some have long talons, and some have muscular tails that can inflict serious injury. Iguanas have long, sharp claws and long tails that they lash with for defense. Monitors will bite and hold while thrashing with their bodies. The Gila monster and Mexican beaded lizard are the only poisonous lizards in North America.

Popular pet lizards are bearded dragons and leopard geckos. Leopard geckos are nocturnal, gentle, and quiet, especially during the day. Bearded dragons, particularly males, can be aggressive to other bearded dragons, but they are docile to humans and easy to handle.

Lizards, like snakes, should not be fed in their primary enclosure to reduce the problem of aggression in anticipation of food each time a hand enters its main enclosure.

Now, let's recap the key points to remember from today's episode:

- Snakes should not be handled during shedding
- Food odors on hands may invite a bite from reptiles
- Constrictor snakes should never be put around a handler's neck
- Larger snakes should have a handler for every 5 ft in length
- Snakes and lizards should be fed in feeding containers, not their primary enclosure

More information on animal handling is available in my book, *Animal Handling and Physical Restraint* published by CRC Press. It is also available on Amazon and from many other fine book supply sources.

Don't forget serious injury or death can result from handling and restraining some animals. Safe and effective handling and restraint requires experience and continual practice. Acquisition of the needed skills should be under the supervision of an experienced animal handler.