

Aggressive Behavior in Captive Reptiles

Aggression in caged reptiles is expressed as aggressive behavior between cagemates (intraspecies aggression) and aggression upon the owner by the reptile (interspecies aggression).

What species are affected?

Any reptile species can demonstrate aggressive behavior towards cagemates or owners. Large, territorial species, such as green iguanas (*Iguana iguana*), spiny-tailed iguanas (*Ctenosaura* sp.), and rock iguanas (*Cyclura* sp.), are most likely to show aggression toward owners.

Cagemate aggression

It is common to see cagemate trauma when multiple animals are crowded into a small enclosure, particularly juvenile animals. Fighting, chasing, mounting, and bite wounds as well as missing toes or tail tips are often observed. Whenever multiple animals are housed within a cage, there is also the possibility of dominance interactions, particularly when one animal is much larger. One individual may monopolize the food bowl, basking spot, perches, and/or hide areas. Dominance hierarchies can also lead to different activity levels by cagemates (one very active the other less active), or one cagemate may always be found in the dark, cool end of the cage.

DO increase enclosure size and reduce the number of animals in each enclosure.

DO provide enough basking sites, hide areas, and feed stations for each animal in the enclosure.

DO monitor the group to make sure one individual does not monopolize resources.

DO house most reptiles individually, except during breeding attempts.

DO house together only similarly-sized juveniles. Monitor for signs of aggression and be prepared to move some individuals as they continue to grow.

MALE AGGRESSION

Adult males of most reptile species cannot be housed together. Many species are highly territorial, including chameleons, iguanas, and some turtle and tortoise species. When kept together, these species will fight constantly or one of the animals will be restricted from a limited resource, such as a basking spot or hide area. These constant stressors can lead to immune suppression and subsequent health concerns, including poor appetite and weight loss, bacterial and fungal disease, reduced breeding, and/or skin problems.

DO NOT house adult males together in the same enclosure, especially for territorial species, like iguanas.

Reproductive behaviors

Reproductive behaviors in male reptiles are frequently associated with dominance behavior. Larger species of iguanas, such as green iguanas and rock iguanas, will usually exhibit a seasonal rise in aggressive behavior often directed at the male human (usually late fall or early winter). The lizard perceives the male in the household as a threat to its territory, which can lead to attacks on the male

owner. Territorial threat displays include rapid or slow head nodding movements, tail whipping, biting, a stiff gait with an inflated body that is turned to the side.

DO NOT allow an adult male to roam freely as he will consider the entire house his territory to defend.

Aggressive attempts to mate with human females in the household are also not uncommon. Mating attacks often include bites to the face and neck. These mating attacks are often associated with red clothing or even potentially the time of menses in the human female.

DO offer a surrogate, such as a stuffed animal or towel, for breeding male mating behaviors.

Defensive aggression

Defensive behaviors are associated with a perceived threat, such as a cagemate or a human moving the animal from a basking site, perch or food bowl. The reptile will consider its cage as its territory. Many species, especially large male iguanas, will defend this territory by biting or tail whipping when an owner “invades” the cage by reaching inside for handling or cleaning.

DO use calm, gentle movements around aggressive individuals.

DO NOT grasp your animal from above as predator attacks come from above in the wild and this may be perceived as an attack.

DO reach for lizards from below by sliding a hand beneath the animal’s belly. This will reduce the fight and flight response of defending itself from a perceived predator attack.

More on human-reptile interactions

DO keep a record of aggressive behaviors to see if a pattern can be recognized, such as clothing color or menses/ovulation. You can then work to modify or avoid those situations.

DO consider changing the room or enclosure in which the aggressive animal lives. This often reduces territorial aggression short-term, although, the reptile will eventually consider this new area its territory.

How can your veterinarian help?

Reproductive and defensive aggression can be challenging to manage. Your veterinarian will begin by obtaining a thorough medical history, including detailed questions about husbandry, and performing a complete physical examination. Your veterinarian will also want a detailed description of what happens aggressive behavior occurs in the home.

You and your veterinarian can then discuss ways to reduce or eliminate conditions that may lead to aggressive behaviors. Multiple treatments and behavior modification techniques are often indicated. No single treatment will work for all situations.

Your veterinarian can also discuss neutering, which can potentially reduce aggression in some species, like iguanas, under select circumstances. Castration should be performed before the breeding season begins, and it is usually only effective in modifying behavior when performed in young iguanas before they reach sexual maturity.

References

Kirchgessner M, Mitchell M, Domenzain L, *et al.* Evaluating the effect of leuprolide acetate on testosterone levels in captive male green iguanas (*Iguana iguana*). J Herpetol Med Surg. 2009;19(4):128-131. DOI: [10.5818/1529-9651-19.4.128](https://doi.org/10.5818/1529-9651-19.4.128)

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