## Tutorial-What to Do When Your Snake (or Other Reptile) Has a Bad Shed



\*Corn Snake/Red Ratsnake Shedding Skin. © DeathProneImages.co.uk

One common characteristic of all reptiles, whether they be snakes, lizards, turtles, tortoises, or others, is the fact that they all periodically shed their skin as a means of their growth and development. Like human hair and fingernails, and even the hair or feathers of other mammals and birds, a reptile's skin and scales are comprised of the same biological material, which is known as keratin. Unlike these other groups of animals, however, reptiles undergo and exhibit "indeterminate growth", meaning that these animals never fully stop growing throughout their lives, and their frequency of shedding of their skins is more often than not determined by the animal's age or life stage, overall food and resource availability, and other environmental conditions. Reptiles also continually shed their skin as a means of combatting external injury and infection as well, yet another remarkable feat of these amazing animals!

When we keep these amazing animals as pets in captivity, their ability to properly grow and shed is also as equally an important consideration in order to ensure they are happy and healthy. Many different species of reptiles have different habits and biology when it comes to their shedding, and also different care and husbandry requirements, which are some reasons why it is important to thoroughly understand the needs and specific requirements of these animals before making that decision to bring one home. While most reptiles might not need as elaborate and regular grooming as cats and dogs, there are still several issues to be aware of and to keep in mind when it comes to these animals shedding their skin, and what one can do if your reptile has a bad shed.



\*Painted Turtle Shedding. Turtles and Tortoises also shed their skin by shedding of their scutes on their carapaces (upper shells), and plastrons (lower shells). © All-Turtles.com

In this tutorial, we will cover several simple ways someone, as an individual pet owner, hobbyist, or enthusiast, can address the issue of those "bad sheds". While ideally, everyone's temperatures, humidity, and other aspects of care would always be spot on, and no such issues needing our correction or intervention would ever arise, the reality is that for many, if not most keepers, it is an issue which sometimes happens even to the best of keepers.

Certainly, a stuck or retained shed can cause discomfort and irritation to your reptile in the short term, and potentially more harmful outcomes (in some cases) over the long term such as loss of toes or digits, tails, damage to their eyesight or vision, infections, or other more permanent and disfiguring, yet preventable injuries. It is also important to note that while most instances of bad sheds which might happen every now and then can be corrected or remedied at home, more severe or chronic cases of what is scientifically and medically known as "Dysecdysis" are perhaps best seen and addressed by your local reptile and exotic animal veterinarian for a more proper and thorough diagnosis and prognosis of the problem.

Without further a-due, here is a tutorial on how to address a "bad shed" in your reptile!



\*Shed Snake Skin. © http://img1.etsystatic.com/

1. First ensure that your snake or other reptile is indeed ready to shed. Do not attempt to peel or pull away any skin before the animal begins shedding, as doing so can injure or damage their skin and scales. Allow for up to several hours to several days for the animal to complete shedding on its own. If any areas of retained skin are still remaining afterwards, particularly eye-caps, or around the tail-tips, feet, toes, or other digits, then intervention may be needed, in which case one can move onto step (2). Other areas of retained skin are usually less of an immediate concern, although if they still persist in those areas following the next shed, consider the following steps as well.



\*Ball Python in the "Blue" or "Opaque" Stage. © Where My Scales Slither.

1a. Prior to shedding, your snake or other reptile will often enter a phase known as being "opaque" or "in the blue". This is where certain fluids begin to build up under the skin, scales, and eyes, giving them an overall "cloudy" or "milky" appearance. Their colors and patterns are also often less intense, or are duller during this time, and their vision might also be impaired as well, potentially leading to more defensive behavior. This is all normal, and should not normally be cause for concern.

2a. Using a clear or opaque plastic container of appropriate size and with a securely fitting lid to prevent escape, fill to about ½ to ¾ of the animal's body height/diameter with lukewarm water. Use care that the water is not too cold, or too hot. Then gently place the animal into the container of water and allow them to soak for at least half an hour to one hour. This will help hydrate your animal, and also soften and loosen the stuck/retained skin.



\*Reticulated Python soaking in a container or bag with warm, luke-water. © CChardwick.

- 2b. Alternatively use a pillow case or snake bag of appropriate size, and wetted or moisten with lukewarm water, but not water which may be too cold or too hot. Place the animal inside the bag and securely tie the bag or pillowcase to prevent escape. This bag can also be placed into a container of shallow water as described in step 2a. Allow the animal to soak and work its shed skin off in the bag for at least the same amount of time, or at least a half hour to hour.
- 3. After about 30 to 60 minutes, slowly open the bag or container, and then gently remove the animal from within it. Much of the retained skin may have been worked off by now through the animal's movements upon itself within the bag or container.
- 4. For any remaining areas of shed, gently use a dampened paper towel or wash cloth with luke-warm water, and gently wipe the area from head to tail, or along with the scales. Avoid going against their scales. Repeat as necessary.



\*Leopard Gecko Shedding. © Reptile Jam.

5. Toes and digits with retained skin can be trickier and more tedious to remove, and require more care and precision. Using a small pair of hemostats or tweezers, very gently remove the

retained skin around each foot, toe, or digit, while properly restraining the animal. Toes on smaller animals can be delicate and easily damaged or lost (particularly when already constricted by retained skin). Therefore, do not pinch or pull on the entire foot. Repeat stems as necessary, beginning with the animal being able to stand in the lukewarm water while still able to submerge its feet and toes completely. If, however, a toe or digit is lost at any point, do not expect it to regrow.



\*Stuck Eyecap on a Ball Python. © WhereMyScalesSlither.

6. Eye-caps, or "spectacles", which are the clear, transparent scales covering the eyes of snakes and other reptiles, can also pose special considerations in their removal, and are another priority area to address when it comes to stuck or retained skin. First, ensure that there is in fact a retained eye-cap in place, which usually appears as an opaque, silvery or cloudy-looking covering over the eye. Other issues affecting the spectacle, such as lack of hydration or humidity, can often be mistaken for a retained eye-cap, but attempting to remove these when there is not an eye[cap there can cause injury or damage to the eye. Whenever in doubt, consult your local veterinarian.

7. Once the eye-cap has been moistened through steps above, gently roll a damp Q-tip back and forth over the eye-cap, and repeat as necessary. Conversely, a piece of scotch tape rolled inside-out can also be rolled over the eye, but use care as to not to forcibly rip or tear any skin or scales, including the eye itself. Tweezers might also be used by some, but require yet even more care and caution as not to damage the eye.

8. It is also important to remember not to overstress the animal as a result of this ordeal. If the stuck shed is not able to be successfully removed the first time, place the animal back into its enclosure, and either monitor its progress to see whether it is able to complete the shedding on its own, or try again at a later time.

## **Preventative Measures**

1. Provide plenty of décor and furnishings within your animal's enclosure for them to rub against, or on, and in order to assist them with shedding. Some of these furnishings can include rocks, branches, cork bark or log hides, or other rough objects or surfaces for them to rub on.



\*Example of a Leopard Gecko in a Humid Hide with Sphagnum Moss. © The Pet Enthusiast.

2. Consider providing a more humid and moist "micro-climate" for your reptile. While many species of reptiles might be commonly thought of as "desert dwelling" or arid-dwelling, they too, still utilize more moist microclimates within their natural ranges and habitats, which are important to understand. Thus, they can still have shedding and other health issues if these proper conditions are not provided for them in captivity. "Humid hides" for many small to medium sized species are now commercially available, or can be designed at home in many different ways! Some substrates used within a "humid hide" such as vermiculite and Sphagnum Moss can help provide that extra moisture needed to maintain good humidity levels.



\*A Commercially Available Reptile Humidifier or Fogger. © CooSpider.

3. Do your proper research before buying or adopting a reptile, and understand and become familiar with their habitats, needs, and natural history, both in the wild, and in captivity. Each species has their own different temperature and humidity requirements, which should also be

understood, met and monitored regularly. Consider using a quality TempGun, hydrometer, thermostat, and/or rheostat to monitor conditions within and outside your animal's enclosure, and make adjustments as necessary. Likewise, a mister or humidifier can also be used and installed in your animal's enclosure. Some moisturizing sprays are also commercially available as well, and can be used.

4. Ensure other aspects of care are proper and up to par for your specific species of reptile. This includes providing the proper diet and nutrition, heating for proper digestion, growth, and reproductive development, proper lighting and UVB for vitamin D3 and other nutrients, and other aspects of proper care and husbandry. Access to clean water and sanitary environmental conditions overall for your animal will go a long way in providing your reptile what it needs to thrive, while avoiding the possibility of having a bad shed, or other health issues.