

Shedding in Snakes: What to Expect

Drs. Foster & Smith Educational Staff



The shedding of skin, or ecdysis, occurs in all reptiles including snakes. It is a natural process associated with growth and as such, it is dependent upon many factors including: species, age, health, nutrition, reproductive status, and ambient temperature and humidity. Adult snakes tend to shed or "slough" their skins roughly once every month but younger snakes will generally shed more frequently than adults.

Healthy snakes usually shed their skin in one single piece, but poor health, nutrition, husbandry, or improper [lighting](#), [temperature](#) or [humidity](#) can result in an incomplete slough. Therefore, the manner in which the skin is shed is a good indicator of snake health. Observe your snake prior to and after ecdysis to help determine the health of your snake.

Recognizing an impending shed

Snakes demonstrate distinct behavioral and physical changes prior to shedding. Changes in behavior may include decrease in appetite or activity, hiding, and increased nervous or defensive behavior. Physical changes include skin becoming lackluster and dull while the eyes turn cloudy or bluish. During this period, the snake's vision is impaired and behavior can become unpredictable and aggressive since the snake is in a vulnerable state. Provide a quiet and relatively stress-free environment and avoid handling your snake throughout the entire shed cycle.

About a week later, the eyes become clear again and the snake will begin seeking rough surfaces to initiate the shed. Be sure to provide decorations with rough surfaces such as branches and rocks to promote proper shedding. These rough surfaces are used to loosen or dislodge old skin near the nose and then as an anchoring site to slough out of the "old" skin.

This process can take several weeks and the shed skin will come off in a single inverted piece including the eye caps to reveal the new and shiny skin. If the shed is incomplete or there are patches of old skin still attached, examine these areas for external parasites or infections. At this point, it is a good idea to have your snake examined by an experienced reptile veterinarian since improper or incomplete shedding can be a symptom of more serious ailments.

Dysecdysis

Incomplete or improper shedding is referred to as dysecdysis and is most commonly associated with poor husbandry or improper nutrition. Other causes may include: external parasites, infections, trauma, dermatitis, malnutrition, over-handling and improper lighting, temperature or humidity. However, dysecdysis can also be a symptom of more serious problems requiring veterinarian care.

Shedded snake skin



Close-up of shed skin from the head showing eye caps



Tips to prevent incomplete shedding

If it has been determined that the dysecdysis is not due to more serious medical reasons, there are several steps you can take to prevent incomplete shedding in the future. The easiest is by monitoring the humidity in your snake's environment. Humidity is an important factor and most cases of dysecdysis can be managed by simply increasing the humidity. Most snakes require an environment of 50 to 70% humidity but always check the specific needs of your particular snake and adjust the humidity requirements accordingly.

For tropical snakes, misting your snake thoroughly with lukewarm water during the shed cycle can help provide the necessary humidity. You can also create a moist "shedding box" by placing damp moss or paper towels in a well-ventilated box. The humid microclimate provided by the shedding box will help promote a good shed.

Removing patches of unshed skin

Incomplete sheds or remaining patches of skin can be removed by soaking your snake in a lukewarm water bath or shedding aid to help dislodge the remaining patches of skin. This procedure should be properly monitored to prevent drowning. Never leave your snake unattended.

Another stress-free method of removing patches of skin is to place your snake between several layers of damp towels and allowing your snake to crawl through the damp towels. The humidity and the friction will gently remove the remaining patches of skin.

Never try to peel the remaining patches of skin, especially retained eye caps or "spectacles." Have your veterinarian or a properly trained individual remove these to avoid damage to the eyes.

Because a healthy snake will shed its skin on a regular basis, you can use this natural phenomenon as a method to monitor the health of your snake. Proper nutrition, husbandry, and environmental conditions all contribute to a healthy shed. If your snake is not shedding properly, spend time to get to the root of the problem and correct any deficiencies. A good shed means a healthy and beautiful snake for years to come.