

Preventing Herp Breeding

Is it possible to castrate a reptile?

By Margaret A. Wissman, DVM, DABVP

Q. Is there such a thing as getting a corn snake fixed (male or female)? I have a pair of cornsnakes that I'm convinced are too attached to each other to be happy apart. I don't want her to keep depleting her energy by laying clutches. Can I get either of them fixed?

A. Well, just when I think I have heard it all, someone like you asks a creative, honest new question like this. Good one!

Yes, technically it is possible to neuter a male or female snake, though these surgeries are more commonly performed on lizards.

Male snakes have two hemipenes, which are copulatory organs. To initiate breeding, male snakes perform certain courtship moves by using their bodies and tails for tactile stimulation. When the female is ready, an everted hemipenis is used for copulation. The testicles, where spermatozoa are produced, are within the male snake's body. These organs enlarge and regress in size depending on seasonal changes.

Normally, surgery to amputate a hemipenis is performed only when there is a problem with it, such as paraphimosis (prolapse of the hemipenis), trauma due to bite wounds, infection, inflammation, neurological problems or impaction of the cloaca with urates. If the hemipenis is too damaged or necrotic, and can't be safely returned to the normal location in the base of the tail, then amputation may be the only option.

I have never read of anyone amputating both hemipenes simply to prevent breeding. With bilateral amputation, the male snake would no longer be able to fertilize eggs. Male snakes do not urinate through the copulatory organs, so surgical amputation would not affect that function. However, the male would still have testicles, and in addition to producing sperm, these organs also produce male hormones. The male snake would still probably perform the ritual "mating dance" when around a female during the breeding season.

Abdominal surgery to remove the testicles is possible but not usually performed. Although this has been tried in green iguana males in an attempt to reduce aggression, I have not heard of this procedure being performed simply to neuter a male.

Female reproductive surgery is more commonly performed, but it usually is done to intervene when a female is egg-bound. Surgery to remove retained eggs is usually done after medical intervention has failed to correct the problem. In birds, it is possible to remove a portion of the shell gland, which will usually cause normal ovulation to cease. This is theoretically true in other species, as well, including snakes. It would also be possible to remove the ovaries and shell glands of a snake, which would effectively stop her from laying eggs. This is a much more drastic procedure than removal of a portion of the shell gland, which will also prevent a snake from producing normal eggs. Surgery to remove the reproductive tract, or a portion of it, is major abdominal surgery, and should only be attempted by an experienced herp veterinarian.

So, now that we know what is available, let's talk about your perceived problem with two snakes that are inseparable. I think you are anthropomorphizing a bit. Most people keep snakes in separate habitats, and this is very important, especially at mealtime. There have been instances where both snakes have grabbed for the same prey item, and one suffocated the other by attempting to swallow the opposing snake's head after swallowing the prey.

I don't think anyone truly knows what snakes think and whether they form attachments to one another. What we may perceive as two snakes in love may simply be two snakes curling up in the same warm, safe hide spot. I can't even begin to address what goes on during copulation. For snakes, this is purely biological and driven by hormones. I think you might be better off just separating these two snakes and not worry about their feelings.

This may seem sort of cold, but I am just being scientific about this problem. If you think your female is producing too many clutches of eggs, separating the pair is the best way to avoid this. Also, these snakes usually are induced to breed after a wintertime lowering of their ambient temperature, so avoiding the brumation cooling might thwart reproductive activity.



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Need a Herp Vet?

If you are looking for a herp-knowledgeable veterinarian in your area, a good place to start is by checking the list of members on the Association of Reptilian and Amphibian Veterinarian (ARAV) web site at www.arav.com. Look for DVMs who appear to maintain actual veterinary offices that you could contact.