

HOW TO CREATE A SNAKE NESTING STRUCTURE

Snake Breeding Behaviour

Snakes reproduce by internal fertilization and either give birth to live young or lay eggs, depending on the species. Female live-bearing snakes will find a sheltered location to give birth before leaving the young to fend for themselves. Egg-laying females look to deposit their eggs in organic matter such as rotting logs, leaf litter or mulch piles. Not only are these locations sheltered, but as materials decay they provide heat which incubates the eggs, allowing for development of the young. Depending on the species, the female will either guard the eggs or leave them alone. Some females will nest at the same site each year, and some nest sites are used by multiple females.

The time frame in which nesting occurs for snakes is from the beginning of June to the end of August, depending on the species. Hatching occurs typically from late summer to fall. Nesting and incubation are weather, temperature, and species dependent. Although the nesting cage may be used by snakes, the chance of witnessing a nesting snake or neonates emerging is very rare.

Egg-laying species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Incubation		
Gray Ratsnake			Best time to mix up and add material to nesting box								Best time to survey and top up nesting box		≈ 60 days		
Eastern Foxsnake														≈ 50-65 days	
Eastern Milksnake															≈ 50-70 days
Smooth Greensnake															1-3 weeks
Northern Ring-necked Snake															≈ 60 days
Eastern Hog-nosed Snake*															≈ 60 days
Non egg-laying species															
Red-bellied snake															
Queensnake															
DeKay's Brownsnake															
Northern Watersnake															
Eastern Gartersnake															
Eastern Ribbonsnake															

*burrows into sand to nest overwinter

Legend: Egg laying time period Egg hatching time period Live birth period



Building a Snake Nesting Structure

Artificial nest structures are designed to mimic natural nesting sites while at the same time providing protection from nest predators such as skunks and raccoons. While a large compost pile may be used by snakes, building a large wooden frame box with heavy gauge wire openings is preferable. The box dimensions should be at least 1.5m on all sides with wire mesh openings of 5 to 7cm. Do not use chicken wire, which could cut or ensnare snakes. The wire mesh keeps out predators but lets snakes pass through freely. Having a removable side or roof to the structure will make any future maintenance much easier.

HOW TO CREATE A SNAKE NESTING STRUCTURE

Maintaining a Snake Nesting Structure

It is important to properly maintain the nesting structure by ensuring it is filled with suitable materials. The boxes will need to be topped up annually with new material since settling will occur from decomposition. The best times to top up a nesting structure are in the late winter after the snakes have gone into hibernation or in the very early spring before snakes emerge. Growing vegetation shades the structure and should be removed on a regular basis as roots can pose a danger to eggs.

Use approximately 1/3 coarse mulch (woodchips can be used as a substitute) or peat moss, 1/3 straw and 1/3 dry leaves. Mix all elements together and fill the structure until they are 75-100% full.

Including partially composted material in the nest structure can help maintain a higher temperature, which is necessary for egg incubation (28-30 degrees C).

Preferred materials to use in a nesting structure are:

Leaves

Woodchips (to provide moisture)

Composted manure

Peat moss

Straw



Surveying the structure

The best time to survey a snake nesting structure for possible signs of nesting, is in the late fall/early winter, after the snakes have gone into hibernation. Remove the top and one side of the box. Place a large tarp on the ground in front of the box to collect the material; it will be easier to sort through and return to the box once finished. Carefully sort through the material, looking for signs of egg shells; this is also the opportunity to remove any large pieces of root growing in the box. The best tools to use for this activity are pitch forks and spaded shovels. After the sorting is complete, place the material back into the box and fill it with new material, if required.

Long Point Basin Land Trust protects important natural habitats in the central Carolinian Region in southern Ontario. It promotes conservation through outreach, research, habitat restoration, and species at risk recovery projects. For more information and to report reptile sightings, visit www.longpointlandtrust.ca

P.O. Box 468 Port Rowan, Ontario N0E 1M0

nature@longpointlandtrust.ca

Follow us on Twitter @lpblt

Like us on Facebook /lpblt

