Originally published in the May, 2005, issue of the **Active Page***:*

Exploring Our Little Corner of the World with the Galiano Naturalists

by Karen Harris

Imagine a wet spring afternoon in the garden…

C. Hey, what's that?
R. A worm?
C. Really? It's kind of a funny colour….
R. Maybe it's a snake –
C. Get back – it could be poisonous!!!
R. Don't be silly!! There are no poisonous snakes native to the Gulf Islands. I think that all we have here are Garter Snakes – it's really small, so it must be a baby. I hear that they give birth to live young in the summer to early fall, overwinter in communal dens and then emerge in the spring. Strange that it's out here in the rain, instead of somewhere sunny and warm. Oh, look, it coiled up – it must be cold, or maybe it's scared of us.
C. But it really doesn't look like a Garter Snake…it's tail is short and pointy, not long and tapered, and its head looks kind of blunt. I think it's a worm.
R. Worms don't have eyes. It must be a snake. I seem to remember something…. Sharp-tailed Snake! That must be it!

The Sharp-tailed Snake (*Contia tenuis*), so called for a thorn-like scute (scale) at the tip of the tail, is small (up to 30cm), with small eyes and a smooth body. Its back is brown with darker sides and mask, and its belly is conspicuously banded. They may be confused with young Garter Snakes, but can be distinguished by its strongly barred belly, smooth unkeeled scutes, a split anal scute, a barbed tail scute, and a lack of mid-dorsal (back) stripe or tapered tail. When disturbed, Sharp-tailed Snakes may curl up into a ball or thrash from side-to-side and "stab" their handler with their tail-spine in self-defence. However, like Garter Snakes, they are completely non-venomous and harmless.

These secretive snakes are found from southern British Columbia to the southern Sierra Nevada and the central coast of California. Only seven sites are known in Canada, all located on the southern Gulf Islands and south-eastern Vancouver Island. This extremely fragmented distribution suggests that our populations may be relics of a more extensive past distribution. However, their secretive habits and seasonal activity pattern make it difficult to assess their overall distribution and population.

In coastal British Columbia, they favour relatively open Douglas Fir-Arbutus stands and forest edges. All known sites are among forest edges in disturbed areas where snakes appeared to be confined to habitat patches of about 2 km in diameter. Concentrations of snakes have been found along south-facing, rocky slopes, which may provide both hibernation and egg-laying sites. These sites are moist in the spring, but dry during the summer.

Sharp-tailed Snakes in the Gulf Islands lay eggs between June and early July, which hatch in the fall. The clutch size is 3-5 eggs, and several females may lay eggs at communal sites. The snakes are active at the surface when conditions are cool and moist in the spring and fall. Then they probably aestivate (go dormant) during the dry summer periods and hibernate during cold winter periods. It is not known if they undertake seasonal migrations between hibernation, egg-laying, and feeding sites.

Although little is known about their feeding habits, it is thought that their diet comprises primarily small slugs - a boon to gardeners!

The rarity of this species in Canada is probably due to cool environmental conditions, rather than to human activities. However, local human threats could include forest fragmentation, destruction of habitat and reduction of availability of food.

The Sharp-tailed Snake is protected under the federal Species at Risk Act (SARA) and Red-listed in BC. All currently known locations of the snake are on private land, which are not subject to any habitat protection requirements. The Wildlife Act of British Columbia prohibits the collection, handling and trade of all native wildlife species without a permit, but does not provide habitat protection. A Sharp-tailed Snake Recovery Team has been working since 2001 to find more sites and to understand more about the biology of these elusive creatures.

You can help by keeping an eye out for Sharp-tailed Snakes and by reporting any sightings to the Conservation Data Centre in Victoria. Also, when making decisions about landscaping south-facing slopes, remember that they like "messy" areas with undisturbed cover and native plants for food, shelter and egg-laying – just what a lazy gardener wants to hear!

For more information on Sharp-tailed Snakes, visit the Species at Risk website, speciesatrisk.gc.ca, or the BC Ministry of Water, Land and Air Protection at wlapwww.gov.bc.ca or srmwww.gov.bc.ca.

* * *

Natural Mysteries

Last month's mystery was: Why does arbutus bark peel, and how do the trees survive without bark? The smooth sinuous limbs of our emblematic arbutus, looking more human than arboreal, more ropy muscular than wooden, fascinate both visitors who see them for the first time and those of us who've grown up with them. Who among us hasn't succumbed to the temptation to run a hand along the polished surface? The arbutus is the snake of the tree world, shedding its old flaky skin to reveal a new smooth skin underneath. And though this skin is more delicate, more susceptible to fire and injury, than that of, say, the gruffer Douglas fir, it has the uncanny ability to nourish the tree. During times of drought, the arbutus will drop some of its leaves to save water, and the bark turns chartreuse with chlorophyll to synthesize nutrients while basking in the sun.

This month's Natural Mystery: How come birds' feet don't freeze when they stand around on icy shores?
Have an answer? Send your thoughts to galianonaturalists@gulfislands.com. Have a Natural Mystery of your own? Let us know, and we'll try to answer it.

THE GALIANO NATURALISTS are a group of curious explorers who enjoy observing, marveling, and sharing information about the natural world around us. Come join us.