

## *Contia tenuis*

**English name** sharp-tailed snake

**Scientific name** *Contia tenuis*

**Other English names** sharptail snake, brown snake, Oregon worm snake, Pacific brown snake, Pacific ground snake

**Other scientific names** none

**Risk status**

BC: critically imperilled (S1); red-listed

Canada: COSEWIC: endangered

Global: secure (G5)

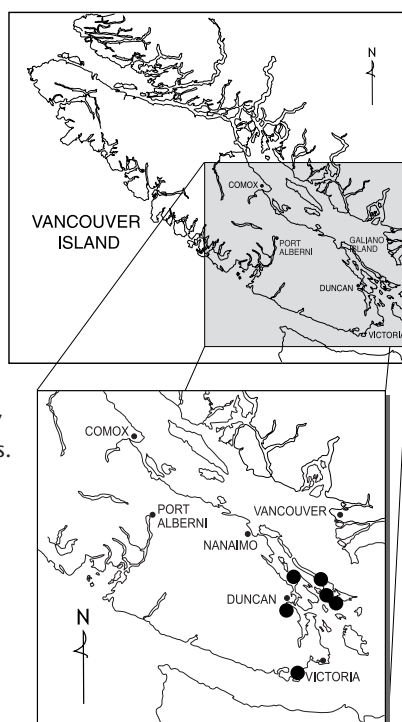
Elsewhere: California – secure (S5); Oregon – vulnerable (S3); Washington – imperilled (S2), candidate for state listing

**Range/Known distribution**

Sharp-tailed snakes are found from southern British Columbia to central California. They occur only in isolated locations in British Columbia and Washington, but are more widespread and abundant in coastal Oregon and throughout northern and central California from the coast to the Sierra Nevada mountains. Sharp-tailed snakes are at the northern limit of their range in British Columbia and their populations are isolated, so Canadian populations may be ecologically and genetically distinct from their American counterparts.

Confirmed occurrences of sharp-tailed snakes have been recorded at only seven locations in British Columbia, all on southern Vancouver Island and the Gulf Islands. (Another record in British Columbia's southern interior is questionable.) Population sizes are unknown and difficult to estimate, as these snakes are very secretive and hard to find.

Individual sharp-tailed snakes apparently remain in the same area year after year, staying close to their favourite sites. An average home range diameter of 25 m was recorded at one site.



**Distribution of *Contia tenuis***

● recently confirmed sites

## *Contia tenuis*

---

### Field Description

20-45 cm from snout to vent. A **small, slender**, harmless snake, about the thickness of a pencil, with smooth scales. The upper side is **reddish-brown or grey**, sometimes fainter yellow or red on each side, while the underside is pale cream with **distinctive barring**. A **dark stripe** can be seen across each eye. The tail ends in a **tiny, thorn-like spike**, from which this species derives its common name. Newly hatched juveniles are 6-7 cm long and a **bright reddish-brown** colour.

Sharp-tailed snakes are seldom seen, even where they are known to be present. Primarily nocturnal, they prefer cool, moist environments and will hide underground in dry conditions.

Sharp-tailed snakes feed almost exclusively on slugs, including introduced species of the genus *Arion*.<sup>\*</sup> The snakes' unusually long teeth may help them grip and ingest their prey.

### IDENTIFICATION TIPS

Sharp-tailed snakes can be confused with young garter snakes (*Thamnophis* spp.), but can be easily distinguished by distinct black-and-white barring on the underside, the sharp tail and smooth scales. Garter snakes usually have a mid-dorsal stripe and clearly defined lateral stripes along each side of the body.



Christian Engelstoft

*Contia tenuis*, juvenile



Kristilina Ovaska

*Contia tenuis*, adult

## *Contia tenuis*

---

### **Life History**

Unlike garter snakes, which give birth to live young, sharp-tailed snakes lay eggs. Mating probably takes place in early spring, with soft-shelled eggs laid by early summer in cracks between rocks or among grass roots. Females lay three to five eggs and have been known to share communal egg-laying sites with other sharp-tailed snakes and sometimes other reptiles. South-facing talus slopes are thought to be a popular choice for egg-laying.

Hatching likely occurs in the fall. Hatchlings take about three years to reach adult size. It is not known at what age sharp-tailed snakes reach sexual maturity, or whether mature females lay eggs every year.

Sharp-tailed snakes tend to aggregate, particularly in spring, possibly for mating purposes or perhaps because of the scarcity of suitable sheltered, warm sites. They become dormant (aestivate) during warm, dry conditions in the summer, although they may emerge during or following periods of summer rain. They hibernate in winter. Peak periods of activity include the cooler, moister months in early spring (February to April) and in fall (September to November).

### **Habitat**

In California and Oregon, sharp-tailed snakes prefer oak and redwood forests, oak-arbutus woodlands, meadows and forest edges, often near streams. In British Columbia they are found mostly on south-facing, rocky slopes and in small woodland and forest openings — areas where the micro-climate is mild and wet in winter, moist in spring, and warm and dry in summer. Within each snake's small home range, there must be a variety of habitat features including suitable sites for egg-laying, hibernation, aestivation, cover and foraging. Sharp-tailed snakes spend most of their time under cover, hiding under or within decaying logs, under rocks and boards, or in underground burrows. Coarse woody debris appears to be an important habitat requirement.

Sharp-tailed snakes can tolerate some degree of disturbance and may coexist with low-density residential developments. Garden watering may increase the numbers of slugs — their favourite food — and the snakes appear able to use boards and other human-made objects as cover.

## *Contia tenuis*

---

### **Why the species is at risk**

In British Columbia, sharp-tailed snakes are at the northern extremity of their range, and it is unlikely they were ever abundant. However, extensive human disturbance in southwestern British Columbia has further limited the availability of snake habitats and this has led to concerns for the survival of the species. Habitat fragmentation, coupled with the short distances travelled by these snakes, makes it unlikely that they would naturally colonise any new habitats that might be available.

Most of the known sharp-tailed snake locations are on private land, with no formal habitat protection. Although sharp-tailed snakes can coexist with humans in some urban and rural areas, they are vulnerable to death and disturbance from weed-eaters, off-road bikes and trampling. The use of pesticides and chemical slug-bait may also pose a threat to sharp-tailed snakes by reducing food availability and perhaps through the consumption of poisoned prey. Although snakes are not known to travel far, some have been killed on roads and further fragmentation of their habitat by roads is a concern.

### **What you can do to help this species**

Management practices should be tailored to the needs of this species and its habitat. Potential management tools will depend on the specific circumstances and may require experimentation prior to implementation. **Before taking any action, expert advice should be obtained, and no action taken without it. Please refer to the introductory section of this manual.**

A recovery team has been formed to initiate recovery of sharp-tailed snakes in British Columbia. You can help by reporting any sightings of this snake to the Conservation Data Centre in Victoria ([srmwww.gov.bc.ca/cdc](http://srmwww.gov.bc.ca/cdc)).

Conservation efforts that focus on the disappearing habitats of these secretive snakes should be supported. If sharp-tailed snakes are found near your home, avoid using pesticides and chemical slug-bait, and try to maintain natural areas with protective cover in your yard.

### **References**

- Ovaska, K.E. and C. Engelstoft. 2001. Draft COSEWIC status report on Sharp-tailed Snake (*Contia tenuis*, Baird & Girard 1852). Prepared for the Committee on the Status of Endangered Wildlife in Canada, Ottawa, Ontario.
- Conservation Data Centre and Biodiversity Branch. 2002. Sharp-tailed Snake, *Contia tenuis*. BC Ministry of Sustainable Resource Management and Ministry of Water, Land and Air Protection. Wildlife at Risk in British Columbia Fact Sheets.

For further information, contact the Garry Oak Ecosystems Recovery Team, or see the web site at: [www.goert.ca](http://www.goert.ca).

Photographs reprinted with permission of Christian Engelstoft and Kristiina Ovaska.

© 2003

\*Refers to non-native species.