



Pigmy Short-horned Lizard

Scientific name: *Phrynosoma douglasi douglasi*

The Pigmy Short-horned Lizard is a squat lizard with a flattened body, short legs, and a short tail. Smaller than B.C.'s other lizard species, the maximum size of a Pigmy Short-horned Lizard is a mere 12 cm from tip of the nose to tip of the tail. It is easily identified by the many spines on its back and side, row of spines between each front and hind leg, and its short, stout horns. The real challenge, however, is to see it at all! Brownish-beige in colour, with various dark markings and a pale belly, these little lizards blend in to their desert environment well. Their habit of burrowing into the substrate makes their camouflage extremely effective.

When feeling threatened, Pigmy Short-horned Lizards remain partially buried and motionless, relying heavily on their camouflage to avoid predation. If a predator (or curious human) manages to see it and continues to make advances, the lizard will inflate its body and open its mouth wide. All together, this display can be a great deterrent – who wants to swallow a puffy, huffy ball of spikes and horns?

There only are 3 reliable records of the Pigmy Short-horned Lizard in B.C., 2 near Osoyoos in 1898 and 1 in the Similkameen Valley in 1960.

Making a living

Information on the life history of the Pigmy Short-horned Lizard comes from studies done in the United States and on another subspecies of Short-horned Lizard found in Alberta. Unlike most reptiles in B.C., these lizards do not appear to rely on rocky over-wintering dens (hibernacula). Instead, they appear to dig burrows opportunistically in deep, sandy soils.

Mating occurs in the spring upon emergence from the hibernacula. Short-horned Lizards are live bearing; young develop inside their mother's body, and when fully developed, are born live. While there is a record of a Short-horned Lizard giving birth to 31 young, 5 to 10 young more commonly are born between July and September.

What's for dinner?

Short-horned Lizards are diurnal (daytime) predators. They use a "sit up and wait" style of hunting - they partially submerge themselves in the sand and wait for prey to pass by. Ants are their major food source, but they also feed on other insects and small invertebrates.

Places and spaces

Short-horned Lizards are the most wide-ranging horned lizard in North America. However, their range does not extend far into Canada – they are at the northern most extent of their distribution in the southern interior of B.C.

Pigmy Short-horned Lizards prefer Bunchgrass, Sagebrush, and dry forest ecosystems. These lizards like open habitats where the soil is loose and sandy. If there is too much vegetation, it makes it difficult for them to burrow into the sand. Amazingly, this species seems to be quite cold tolerant, considering its preferred habitat type. Short-horned Lizards occasionally are found in parts of the Cascade Mountains right up to the timberline. In these subalpine environments, scientists think they spend over two thirds of their lives hibernating!

Past, present, and...future?

Researchers think the Pigmy Short-horned Lizard currently is extirpated in Canada - that is, it doesn't exist in Canada anymore, but is still found elsewhere. Unfortunately, it is also considered quite rare in other parts of its range, and many biologists feel that horned lizards in general are declining throughout much of the United States.

In Canada, the Pigmy Short-horned lizard likely disappeared before the 1900's. Some biologists think that local populations never were very large, and might have been relict populations of a time when this lizard's range extended further north. As the climate cooled over the last 1000 years, these "pockets" were left behind. So why did these populations disappear? It may have been an entirely

natural event, driven by climate. Another theory is that the cattle drives of the mid-1800s may have pushed them to extirpation. During the Cariboo Gold rush, thousands of cattle were funnelled up from the USA through the very valleys that these little lizards like. Their natural defence strategy of remaining still would have been a death sentence as hundreds of hoofs pounded the soil. Either way, if these lizards exist in B.C., they fulfill a unique ecological role and should be protected.

Right now biologists are investigating suitable Pigmy Short-horned Lizard habitat to see if any lizards remain in B.C. If you see a horned lizard, you can help out by contacting your local branch of the Ministry of Water, Land, and Air Protection!