

Townsend's Mole:

Townsend's Mole has the scientific name *Scapanus townsendii*. It is a mole that belongs to the Family Talpidae. Townsend's Moles are the largest and heaviest North American talpids. They are terrestrial mammals with strong claws that enable them to burrow extensive tunnel systems. A small population of Townsend's Moles live in the Fraser Valley of British Columbia. These moles are endangered.

Description

The Townsend's Mole has a body in the shape of a cylinder. Their bodies are covered in dark grey or black, short, soft fur. Adult moles grow between 179 mm (7.04 inches) and 237 mm (9.33 inches) in length. Male moles grow to an average weight of 142 grams (5.68 ounces) and female moles grow to an average weight of 119 grams (4.76 ounces).

These moles have broad, flat front feet with five straight claws that are used for burrowing tunnels. The palms of their front feet face outward. This enables them to push the soil aside while moving forward. They have a hairless pink snout and tail. Their small blue eyes, that tend to be hidden by their fur, have poor vision. The Townsend's Mole does not have external ears, but they do have acute hearing, and an excellent sense of touch.

Distribution

The Townsend's Mole ranges from northwest California along the west coast to southwestern British Columbia. The small British Columbian population consists of about 700 moles. They can be found within the 13 km² of the flat, fertile land of the Fraser Valley. This area includes Abbotsford and Huntingdon near the Canadian-American border.

Habitat

Townsend's Moles thrive in the Central Fraser Valley, which lies within the dry coastal western hemlock zone. They are well suited to this mild climate. These moles prefer manured pastures, hayfields, moist meadows, fir forests, prairie and shrub habitats where they can feed on earthworms, which make up most of their diet. They also eat sow bugs, tubers and some root crops.

Biology

Townsend's Moles become sexually mature during their first winter. Female moles dig round underground cavities for their nests. These nests are situated on higher ground,

in order to prevent flooding during periods of high rainfalls. They breed in January and their young are born between March and April. Their gestation period is four to six weeks. Canadian moles have one litter in their lifetime. Their average litter size is three pups. Pups weigh about five grams (0.20 ounces) at birth, but within a month, they weigh between 60 and 80 grams (2.40 and 3.20 ounces).

These are solitary mammals except during their short breeding season. They have little overlap of movements, which suggest, that they are territorial animals. The Townsend's Mole is thought to be mainly nocturnal. Studies on food habits show that these moles eat a higher proportion of plant bulbs and tubers than those of other mole species.

Threats

Natural enemies of the Townsend's Mole include; weasels, snakes, coyotes, barn owls, great horned owls and red-tailed hawks. Additional threats come from dogs and cats. However, dogs and cats have minimal impact on the mole population. Cattle have been known to trample mole nests, killing young nestlings. Flooding of nests also cause the death of young moles.

The greatest threat to the population of the Townsend's Mole is man. Intensive agricultural practices and increased urbanization have greatly reduced the Townsend's Mole habitat. Most of these moles are found on unprotected private property. It is homeowners who do not like tunnels on their properties that cause the greatest destruction of mole habitat, and thereby, drastically reduce mole numbers.

Protection

The status of the Townsend's Mole has been listed on Schedule 2 of the Species At Risk Act (SARA). Also, as of May 2003 the Townsend's Mole has been designated as an endangered species by The Committee on the Status of Endangered Wildlife in Canada (COSEWIC).

Summary

The Townsend's Mole is well suited for the mild climate found in our Central Fraser Valley. This mole population is small consisting of less than 1000 individuals. The Townsend's Mole inhabits an area highly valued by man. This prime agricultural land is itself in danger of being lost to urbanization. Townsend's Moles consume earthworms and root crops. Their extensive tunnelling troubles farmers as well as homeowners.

The fact that these moles only breed once in their lifespan reduces the potential for any immediate increase in their population, if something should happen to their nestlings.

Increased urbanization fragments the area of suitable land used by Townsend's Moles, and thus reduces the potential for breeding in the first place. Townsend's Moles are solitary individuals who do not have overlapping territories. The fragmentation of their habitat only increases the danger from predators when they do attempt to reach a potential breeding mate.

Townsend's Moles experience pressures from natural enemies such as coyotes, domestic animals such as cattle trampling their nests, and most of all man in his desire to urbanize. Dogs and cats also plague the existence of Townsend's Moles. This small population is at great risk of extinction. Disease, increase in coyote population and urbanization are just a few conditions that can wipe out a population of Townsend's Mole.

COSEWIC and SARA have listed Townsend's Mole as an endangered species. This protection is an important step towards saving the Townsend's Mole from extinction. However, since most of these moles live on unprotected private property, this population will continue to be at risk. Public education on the value of diversity of fauna and flora, as well as, compensation to landowners for any damages caused by these moles would increase the chances of this mole species remaining a part of our environmental heritage.

SOURCES:

Websites

1. www.csi.uottawa.ca
2. <http://home.cc.umanitoba.ca>
3. <http://www.speciesatrisk.gc.ca>