

Wildlife Identification Field Guide

Red and Blue Listed Amphibians and Reptiles in British Columbia



2010 Edition

British Columbia Ministry of Transportation and Infrastructure

Engineering Branch • Environmental Management Section

940 Blanshard Street • PO BOX 9850 ST PROV GOVT

Victoria, British Columbia • Canada • V8W 9T5



Ministry of
Transportation
and Infrastructure

Library and Archives Canada Cataloguing in Publication

Sielecki, Leonard E.

Wildlife identification field guide: red and blue listed amphibians and reptiles in British Columbia / Leonard E. Sielecki. – 2010 ed.

Available also on the Internet.

Includes bibliographical references: p. 52

ISBN 978-0-7726-6310-8

1. Rare amphibians – British Columbia – Identification. 2. Rare reptiles – British Columbia – Identification. 3. Endangered species – British Columbia – Identification. 4. Wildlife conservation – British Columbia. I. British Columbia. Ministry of Transportation and Infrastructure. Environmental Management. Section II. Title.

QL654.2 B7 S56 2009 333.95'4209711 C2010-905767-8

© Copyright 2010

All rights reserved. No part of this report may be reproduced in any form or by any means without permission in writing from the author or the Government of British Columbia.

To order additional print copies of this publication online, go to www.publications.gov.bc.ca.

Publications can also be ordered by contacting Queen's Printer Publication Services by phone, fax or email.

QP Publication Services

Phone: (250) 387-6409

Toll-free (Canada and United States) 1-800-663-6105

Fax: (250) 387-1120

Email: QPPublications@gov.bc.ca

For digital copies, please visit: www.th.gov.bc.ca/publications/eng_publications/environment/RedBlue/

DISCLAIMER: This document is not intended to be an exhaustive, comprehensive, or authoritative source of expert information on amphibians and reptiles in British Columbia. This document provides simple, cursory descriptions of the red and blue listed amphibians and reptiles found in British Columbia to help Ministry field staff and maintenance contractors more accurately identify these species should they encounter them during the course of their work.

Author

Leonard E. Sielecki, M.Sc., MCIP, R.P.Bio, A.Ag

Date

June 25, 2010

Prepared for

Environmental Management Section, Engineering Branch
British Columbia Ministry of Transportation
and Infrastructure
Victoria, B.C., Canada

Contact Person

Leonard E. Sielecki, M.Sc., MCIP, R.P.Bio, A.Ag

Environmental Issues Analyst
Environmental Management Section, Engineering Branch
British Columbia Ministry of Transportation
and Infrastructure
4B – 940 Blanshard Street
PO Box 9850 STN PROV GOVT
Phone: (250) 356-2255
Victoria, B.C., Canada V8W 9T5
Email: leonard.sielecki@gov.bc.ca

Abstract

The British Columbia Ministry of Transportation and Infrastructure (BC MoT) began its efforts to protect amphibians and reptiles in the late 1950's when rattlesnake crossing structures were constructed under roads in the Okanagan Valley. Since then, the Ministry has been involved in numerous projects to protect amphibians and reptiles around the province. This guide provides species-specific information on species of frogs, toads, lizards, salamanders, snakes and turtles found in British Columbia that are red and blue listed by the British Columbia Ministry of Environment (BC MoE). The guide provides photographs and general descriptions on the physical appearance and life stages of each species, and maps showing their geographic distributions in the province.

Comments

This guide was developed for the British Columbia Ministry of Transportation and Infrastructure (BC MoT) to provide the information on the provincially red and blue listed species of frogs, toads, lizards, salamanders, snakes and turtles found in British Columbia. The guide is designed to help Ministry field staff and maintenance contractors more accurately identify

these species should they encounter them during the course of their work. Improved accuracy in species identification will help support the Ministry's decision-making process for amphibian and reptile protection initiatives.

Keywords

Amphibian, Reptile, Identification, Guide, British Columbia, Roads, Highways, Wildlife, Coastal Tailed Frog, Coeur d'Alene Salamander, Gopher Snake, Great Basin Spadefoot Toad, Leatherback Turtle, Night Snake, Northern Leopard Frog, Oregon Spotted Frog, Pacific Giant Salamander, Pigmy Short-horned Lizard, Red-legged Frog, Rocky Mountain Tailed Frog, Sharp-tailed Snake, Tiger Salamander, Western Painted Turtle, Western Pond Turtle, Western Rattlesnake, Western Skink, Western Yellow-bellied Racer

Photo © James Bessato



NOTE: The animals described in this guide are protected by the *British Columbia Wildlife Act*. These animals cannot be killed, collected or held in captivity without special permits issued by the British Columbia Ministry of Environment.

Photo Credits III

Photo Copyright Advisory – Please be advised, that unless otherwise noted, all photos contained in this guide are not public domain and are subject to copyright by their lawful owners. All photos used in this guide are used with permission for publication in this edition of this guide only. The photo owners reserve all rights to their property. No reproduction or distribution without permission.

Order of photo credits on page – top to bottom, left to right

Front Cover	Tiger Salamander, Paddy Ryan, Ph.D.	Page 7	Red-Legged Frog, Carl Page
Front Cover	Pygmy Short-horned Lizard, Gary Nafis	Page 7	Spadefoot, James Bettaso, U.S. Fish and Wildlife Service
Front Cover	Red-Legged Frog, Carl Page	Page 8	Coastal Tailed Frog, Gary Nafis
Front Cover	Western Rattlesnake, Bradford Norman	Page 10	Leopard Frog, istockphoto
Front Cover	Sea Turtle, John Herring	Page 12	Oregon Spotted Frog, Gary Nafis
Page iv	Western Skink, James Bettaso, U.S. Fish and Wildlife Service	Page 14	Northern Red-Legged Frog, Gary Nafis
Page viii	Spadefoot Toad, istockphoto	Page 16	Rocky Mountain Tailed Frog, Gary Nafis
Page 2	Western Diamondback Rattlesnake, Shutterstock	Page 18	Great Basin Spadefoot, istockphoto
Page 6	Oregon Spotted Frog, Gary Nafis	Page 20	Pygmy Short-horned Lizard, Gary Nafis
Page 6	Coastal Tailed Frog, Gary Nafis	Page 20	Large Larva in Water (Giant Salamander), Gary Nafis
Page 6	Northern Red-Legged Frog, Gary Nafis	Page 20	Tiger Salamander, Paddy Ryan, Ph.D.
Page 6	Northern Red-Legged Frog, James Bettaso, U.S. Fish and Wildlife Service	Page 21	Pacific Giant Salamander, William Flaxington
Page 7	Male Tailed Frog, James Bettaso, U.S. Fish and Wildlife Service	Page 21	Coeur d'Alene Salamander, Gary Nafis
		Page 21	Western Skink, James Bettaso, U.S. Fish and Wildlife Service
		Page 22	Pygmy Short-horned Lizard, Gary Nafis
		Page 24	Western Skink, James Bettaso

Page 26	Cour d'Alene Salamander, William Leonard	Page 46	Western Painted Turtle, Christian Engelstoft
Page 28	Pacific Giant Salamander, Gary Nafis	Page 46	Western Pond Turtle, James Bettaso, U.S. Fish and Wildlife Service
Page 30	Tiger Salamander, Shutterstock	Page 46	Western Painted Turtle, Christian Engelstoft
Page 32	Western Rattlesnake, James Bettaso, U.S. Fish and Wildlife Service	Page 47	Leatherback Sea Turtle, Georgia Sea Turtle Center
Page 32	Sharp-tailed Snake, James Bettaso, U.S. Fish and Wildlife Service	Page 47	Pond Turtle, Gary Nafis
Page 32	Western Rattlesnake, Bradford Norman	Page 47	Leatherback, Scott R. Benson, Southwest Fisheries Science Center, National Marine Fisheries Service, Office of Protected Resources, U.S. National Oceanographic and Atmospheric Administration
Page 33	Sharp-tailed Snake, Gary Nafis	Page 47	Western Pond Turtle, Jackson Shedd
Page 33	Pacific Gopher Snake – Size Comparison, K. Bell, Wikipedia	Page 48	Leatherback Sea Turtle, Georgia Sea Turtle Center
Page 33	Western Yellow-bellied Racer Snake, James Bettaso, U.S. Fish and Wildlife Service	Page 50	Painted Turtle, istockphoto
Page 33	Gopher Snake, University of Georgia	Page 50	Western Painted Turtle, Gary Nafis
Page 34	Gopher Snake, William Flaxington	Page 52	Western Pond Turtle, Jackson Shedd
Page 34	Western Rattlesnake, William Flaxington	Back Cover	Western Painted Turtle, Gary Nafis
Page 34	Western Rattlesnake, James Bettaso, U.S. Fish and Wildlife Service		
Page 36	Great Basin Gopher Snake – Gary Nafis		
Page 38	Night Snake – Gary Nafis		
Page 40	Sharp-tailed Snake, Gary Nafis		
Page 42	Western Rattlesnake, Gary Nafis		
Page 44	Western Yellow-bellied Racer Snake, James Bettaso, U.S. Fish and Wildlife Service		

Acknowledgements III

This guide was made possible because of a wealth of information, materials and photographs provided by individuals and organizations dedicated to protecting amphibians and reptiles.

The text and maps in this guide were adapted from material provided by:

The British Columbia Frogwatch Program,
Environmental Stewardship Division, British Columbia
Ministry of Environment
www.env.gov.bc.ca/wld/frogwatch

The Canadian Amphibian and Reptile Conservation
Network (CARCNET)
www.carcnet.ca

The Committee on the Status of Endangered Wildlife
in Canada (COSEWIC), Government of Canada
www.cosewic.gc.ca/eng/sct0/index_e.cfm#sar

The Northern Prairie Wildlife Research Center,
United States Geological Survey, United States
Department of the Interior
www.npwrc.usgs.gov/resource/herps/amphibid

The Royal BC Museum, Amphibian and Reptile Collections,
**[www.royalbcmuseum.bc.ca/Natural_History/
Amphibians_and_Reptiles.aspx](http://www.royalbcmuseum.bc.ca/Natural_History/Amphibians_and_Reptiles.aspx)**

Special thanks is given to the following two individuals
who generously provided many of the photographs used
in this guide:

Gary Nafis, CaliforniaHerps.com; and

James Bettaso, United States Fish and Wildlife Service.

Their photographic contributions were critical for the
success of this guide.

Comments and suggestions from the following reviewers were instrumental in the production of this guide:

Dave Fraser, M.Sc., R.P.Bio, Coordinator
British Columbia Conservation Data Centre
Environmental Stewardship Division, Ecosystems Branch
British Columbia Ministry of Environment

Purnima Govindarajulu, Ph.D., R.P.Bio
Small Mammal and Herpetofauna Specialist
Environmental Stewardship Division, Ecosystems Branch
British Columbia Ministry of Environment

Professional design, layout, mapping and graphic production services were provided by:

Kathy Macovichuk, Graphic Production Technician
Engineering Branch
British Columbia Ministry of Transportation and Infrastructure

Beverly van Druten-Blais, Graphic Design Specialist
Engineering Branch
British Columbia Ministry of Transportation and Infrastructure



Photo © istockphoto

Table of Contents III

Photos Credits iii

Acknowledgements iv

Introduction 2

**Provincial Red and Blue Lists
in British Columbia 3**

**Red and Blue Listed
Amphibians and Reptiles
in British Columbia 4**

Frogs and Toads 6

Coastal Tailed Frog 8
Northern Leopard Frog 10
Oregon Spotted Frog 12
Red-legged Frog 14
Rocky Mountain Tailed Frog 16
Great Basin Spadefoot 18

Lizards and Salamanders 20

Pigmy Short-horned Lizard 22
Western Skink 24
Coeur d'Alene Salamander 26
Pacific Giant Salamander 28
Tiger Salamander 30

Snakes 32

Know Your Snakes 34
Know the Difference 35
Gopher Snake 36
Night Snake 38
Sharp-tailed Snake 40
Western Rattlesnake 42
Western Yellow-bellied Racer 44

Turtles 46

Leatherback Sea Turtle 48
Western Painted Turtle 50
Western Pond Turtle 52

References 54

For More Information 57

III Introduction

The British Columbia Ministry of Transportation and Infrastructure (BC MoT) began its efforts to protect amphibians and reptiles in the late 1950's when rattlesnake crossing structures were constructed under roads in the Okanagan Valley. Since then, the Ministry has been involved in numerous projects to protect amphibians and reptiles around the province. This guide is designed to help ministry field staff and maintenance contractors more accurately identify those species of frogs, toads, lizards, salamanders, snakes and turtles found in British Columbia, that are Red and Blue listed by the British Columbia Ministry of Environment, should they encounter these species during the course of their Ministry work. The guide provides photographs and general descriptions on the physical appearance and life stages of each species, and maps showing their geographic distributions in the province. Improved accuracy in species identification will help support the Ministry's decision-making process for amphibian and reptile protection initiatives.



Photo © Shutterstock

Provincial Red and Blue Lists in British Columbia

Since 1992, Red and Blue lists have been produced by the British Columbia Ministry of Environment. The Red and Blue lists serve two purposes:

1. To provide a list of species for consideration for more formal designation as Endangered or Threatened, either provincially under the *British Columbia Wildlife Act*, or nationally by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC).
2. To help inform setting conservation priorities for species/ecological communities considered at risk in British Columbia.

The rankings highlight species and ecological communities that have particular threats, declining population trends, or restricted distributions that indicate that they require special attention. These lists serve as a practical method to assist in making conservation and land-use decisions and prioritize research, inventory, management, and protection activities.

RED LIST

The Red list includes any ecological community, and indigenous species that is extirpated, endangered, or threatened in British Columbia. Extirpated species no longer exist in the wild in British Columbia, but do occur elsewhere. Endangered species are facing imminent extirpation or extinction. Threatened species are likely to become endangered if limiting factors are not reversed. Red-listed species may be legally designated as, or may be considered candidates for legal designation as Extirpated, Endangered or Threatened under the *British Columbia Wildlife Act* (see www.env.gov.bc.ca/wld/faq.htm). Not all Red listed groups will necessarily become formally designated. Placing groups of species on these lists flags them as being at risk and requiring investigation.

BLUE LIST

Includes any ecological community, and indigenous species considered to be of special concern (formerly vulnerable) in British Columbia. Species are of special concern because of characteristics that make them particularly sensitive to human activities or natural events. Blue listed species are at risk, but are not legally designated as Extirpated, Endangered or Threatened.

Red and Blue Listed Amphibians and Reptiles in British Columbia – June 2010 (subject to change)

COMMON NAME	SCIENTIFIC NAME	BC STATUS	COSEWIC STATUS
Frogs			
Coastal Tailed Frog	<i>Ascaphus truei</i>	Blue	Special Concern
Great Basin Spadefoot	<i>Spea intermontana</i>	Blue	Special Concern
Northern Leopard Frog	<i>Rana pipiens</i>	Red	Endangered
Oregon Spotted Frog	<i>Rana pretiosa</i>	Red	Endangered
Red-Legged Frog	<i>Rana aurora</i>	Blue	Vulnerable
Rocky Mountain Tailed Frog	<i>Ascaphus montanus</i>	Red	Endangered
Lizards and Salamanders			
Pigmy Short-horned Lizard	<i>Phrynosoma douglasi douglasi</i>	Red	Extirpated (not seen since 1898)
Western Skink	<i>Eumeces skiltonianus</i>	Red	Special Concern
Coeur d'Alene Salamander	<i>Plethodon idahoensis</i>	Red	Special Concern
Pacific Giant Salamander	<i>Dicamptodon tenebrosus</i>	Red	Threatened
Tiger Salamander	<i>Ambystoma tigrinum</i>	Red	Endangered

Extirpated species no longer occur in the wild in British Columbia but occur elsewhere; **Endangered species** are facing imminent extinction or extirpation; **Threatened species** are likely to become endangered if limiting factors are not reversed.

COMMON NAME	SCIENTIFIC NAME	BC STATUS	COSEWIC STATUS
Snakes			
Desert Night Snake	<i>Hypsiglena chlorophaea</i>	Red	Endangered
Pacific Gopher Snake	<i>Pituophis catenifer catenifer</i>	Red	Extirpated (not seen since 1957)
Great Basin Gopher Snake	<i>Pituophis catenifer deserticola</i>	Blue	Threatened
Sharp-tailed Snake	<i>Contia tenuis</i>	Red	Endangered
Western Rattlesnake	<i>Crotalus viridis</i>	Blue	Threatened
Western Yellow-bellied Racer	<i>Coluber constrictor mormon</i>	Blue	Special Concern
Turtles			
Leatherback Turtle	<i>Dermochelys coriacea shlegeli</i>	Red	Endangered
Western Painted Turtle (Intermountain – Rocky Mountain)	<i>Chrysemys picta bellii</i>	Blue	Special Concern
Western Painted Turtle (Pacific Coast)	<i>Chrysemys picta bellii</i>	Red	Endangered
Western Pond Turtle	<i>Actinemys marmorata</i>	Red	Extirpated (not seen since 1959)

Source: COSEWIC. 2009. Canadian Wildlife Species at Risk. Committee on the Status of Endangered Wildlife in Canada.
 Web site: www.cosewic.gc.ca/eng/sct0/rpt/rpt_csar_e.pdf [accessed 25 August 2009]



Frogs and Toads III



Photo © J. Bettaso

COASTAL TAILED FROG



Photo © J. Bettaso

GREAT BASIN SPADEFOOT



Photo © C. Page

RED-LEGGED FROG

Coastal Tailed Frog (*Ascaphus truei*) – Amphibian Blue Listed

Description

The Coastal Tailed Frog is a little frog, unique to British Columbia in Canada. It ranges in length from 2.5 to three centimetres from nose to rump. Adults are usually tan or brown in colour although some may be shaded green or red, or even entirely black.

The skin has a rather grainy appearance. The frogs have vertical pupils, no external ear and are voiceless. The toes on the hind feet are flat and wide, especially the outer toes. The most remarkable feature is their “tail” which gives the species its common name (found

only in males). The tadpoles are easily identifiable because they have a very large sucker-like mouth. Hatchlings are almost transparent, while older tadpoles are dark mottled brown or black, often with a white spot on the tip of the tail. Tadpoles are found clinging to stones in streambeds.

Habitat

Tailed Frogs like clear, cool coastal mountain streams that contain water year round.

They are usually found in streams with large stones, cobbles, and stable boulders.

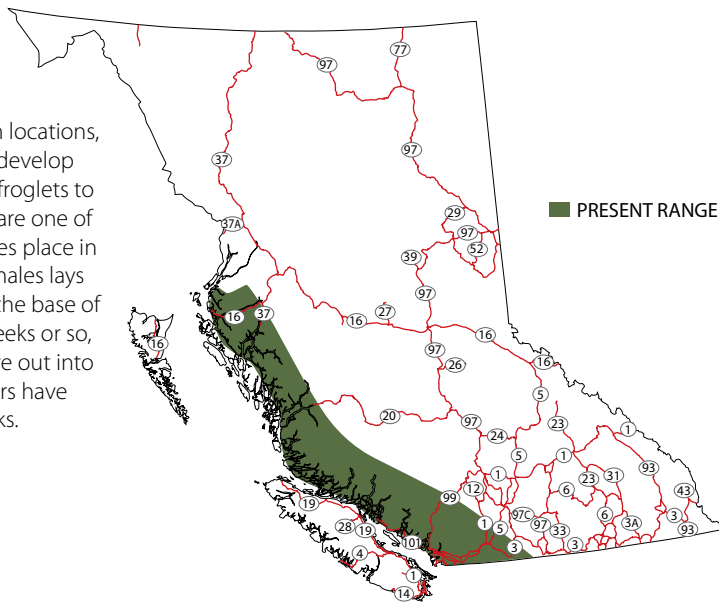
Eggs and hatchlings can be found in side pools. Adult frogs often hide and hunt on the stream banks, but need to stay moist. They are much less able to withstand drying than other frogs. Although young frogs disperse from their hatching sites, once they reach adulthood they usually not move far from their chosen stream.



Photo © G. Nafis

Lifecycle Stages

Tailed Frogs grow very slowly. In high mountain locations, it may take up to four years for the tadpoles to develop into froglets. It takes several more years for the froglets to mature. The frogs may live 15 to 20 years. They are one of the longest-lived frogs in the world. Mating takes place in streams in the fall. In the following summer, females lay strings of eggs underwater, attaching them to the base of large stones. Hatchlings emerge in about six weeks or so, and overwinter in the quieter waters. They move out into the stronger current areas once their oral suckers have developed enough to let them cling to the rocks.



Northern Leopard Frog (*Rana pipiens*) – Amphibian Red Listed

Description

The Northern Leopard Frog is a medium-sized green or brown frog with distinctive dark spots ringed with paler borders. The number and colour of spots varies. The frogs have large hind legs with dark bars, pale stomachs, and prominent ridges on their back that are paler than the back. A white stripe runs along the upper jaw and back to the shoulder. Adult frogs range from 5.5 to 10 centimetres from nose to rump. Tadpoles are dark brown or grey, with light blotches on the underside. They have pale tan coloured tails. The frog's call is usually described as a "chuckling" or "gabbling" sound, like the sound of a hand rubbing a wet balloon. If handled, the frogs emit shrill squeaks.



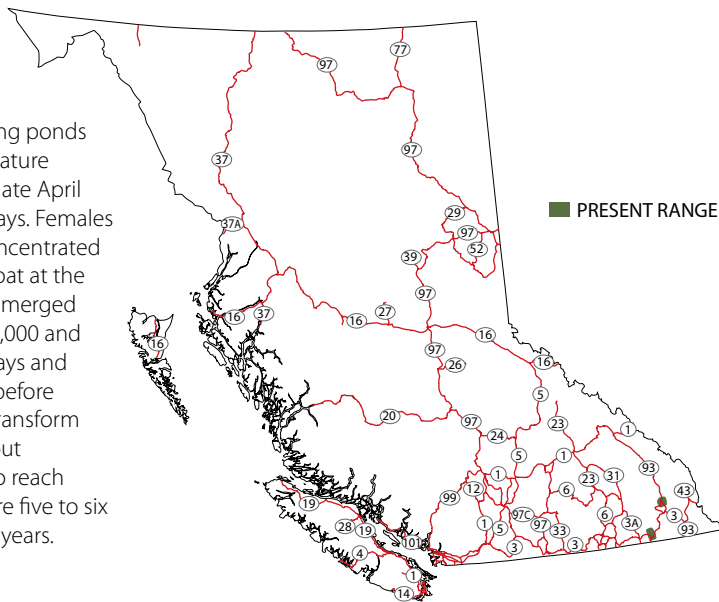
Habitat

Adult Northern Leopard Frogs live on land during the summer. They maintain home ranges of up to 600 square metres in area, favouring open, grassy sites. They spend much of their time in small clearings of damp soil, or in crevices in forested areas. Breeding ponds are usually under 60 metres in diameter, and typically less than two metres in depth. Breeding ponds are warmer and shallower than the streams and ponds used for hibernation. From October to March, the frogs hibernate in small indentations in the mud of deep ponds or streams. These water bodies must have adequate oxygen and not freeze solid in winter.

Photo © istockphoto

Lifecycle Stages

Adult Northern Leopard Frogs gather at breeding ponds very early in the spring when the water temperature approaches 10°C. Mating takes place between late April and early June, over a period of two to seven days. Females each lays a single egg mass. Egg masses are concentrated in warm, shallow water. The egg masses may float at the surface of the waterbody or be attached to submerged vegetation. Each egg mass contains between 1,000 and 5,000 eggs. Hatchlings emerge in about nine days and spend a couple of days clinging to vegetation before becoming free-swimming tadpoles. Tadpoles transform in late July. They emerge as miniature frogs about 3.5 centimetres long. Those frogs that survive to reach maturity do so in about two years when they are five to six centimetres in length. The frogs live about four years.



Oregon Spotted Frog (*Rana pretiosa*) – Amphibian Red Listed

Description

The Oregon Spotted Frog is a medium-sized frog with light-centred black spots on the head and back. Adult frogs are green, brown or reddish brown. Juvenile frogs are brown or olive green. Two folds located on the frog's back are usually lighter in colour than the frog's body, appearing as stripes part way along the back. The frog's eyes are set so if the frog is viewed from above, the frog gives the appearance of looking straight back up at you. Adults can grow to a length of five to 10 centimetres from nose to rump. The frogs have a distinct posture on land. Unlike most native frogs, which sit up, these frogs crouch to the ground,



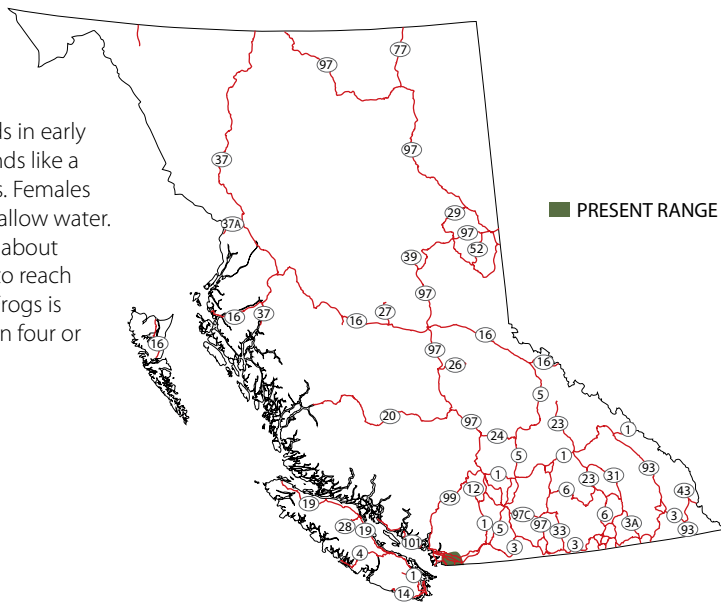
Habitat

Oregon Spotted Frogs live in floodplain wetlands associated with permanent water bodies. The frogs prefer ponds that are exposed to sunlight, so the water can be warmed. Too much shade can make an area unsuitable for the frogs. They prefer the warm, shallow edge of marshes to lay their eggs. Oregon Spotted Frogs are far more aquatic than other native frogs. They leave the water for very short periods when looking for food. They never move between ponds except by connecting waterways. When disturbed, they will dive to the bottom of a water body and stay there for an extended period of time. This behaviour makes them very difficult to find.

Photo © G. Nafis

Lifecycle Stages

Oregon Spotted Frogs gather in breeding ponds in early spring. Males make a low-pitched call that sounds like a series of soft knocks on wood to attract females. Females lay egg masses communally, or in groups, in shallow water. The tadpoles transform into small froglets after about four months. The frogs take two or three years to reach breeding age. The lifespan of Oregon Spotted Frogs is unknown. However, it is probably not more than four or five years.



Red-legged Frog (*Rana aurora*) – Amphibian Blue Listed

Description

The Red-legged Frog is a medium sized brown or reddish frog. It has smooth skin marked by small black “freckles.” Adult frogs range in length from seven centimetres to about 10 centimetres. The frogs are fairly slim and have long, slender hind legs and prominent folds on their backs running from behind their eyes down the sides of the back. They usually have a dark mask, and a light upper jaw stripe running back to the shoulder. The most distinctive characteristic of these frogs is the red translucent colouring of the underside of their hind legs. The eyes are gold coloured and oriented to

the sides of the head. The eyes appear mostly covered by the eyelids if the frog is viewed from above. Red-legged Frogs have smoother skin and less webbing between their toes than Oregon Spotted Frogs.

Habitat

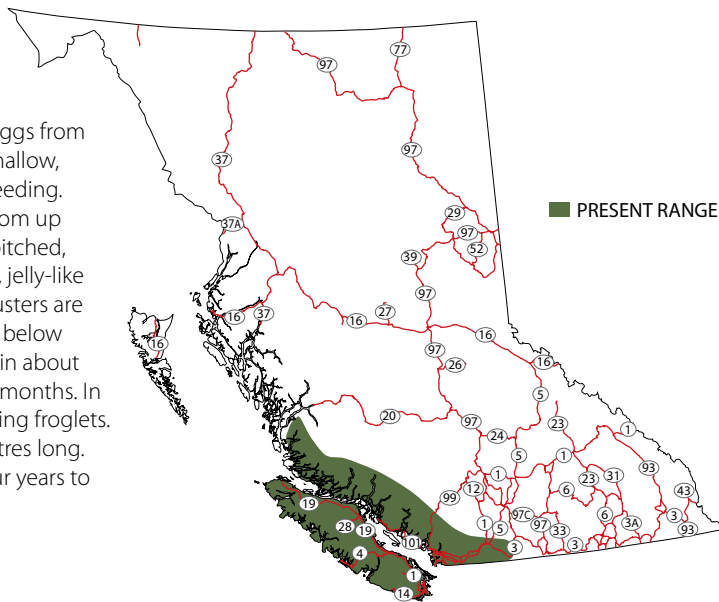
Red-legged Frogs live in moist, cool coastal forests and wetlands with trees. They breed in well shaded, shallow ponds or slow streams. Adult frogs spend much of their time on land. They can travel quite a distance from the water in rainy or damp conditions. They will often take shelter under logs or other objects to stay cool and damp.



Photo © G. Nafis

Lifecycle Stages

Red-legged Frogs begin to mate and lay their eggs from late winter to very early in spring. They prefer shallow, slow-moving streams, ponds or marshes for breeding. Male Red-legged Frogs call to attract females from up to a metre underwater. The call is a quiet, low-pitched, and stuttering sound. Females lay eggs in large, jelly-like clusters ranging from 750 to 1,300 eggs. The clusters are attached loosely to stems of aquatic plants just below the water surface. Embryos develop and hatch in about four weeks. The tadpole phase lasts four to five months. In midsummer, tadpoles transform into tiny hopping froglets. At this stage, they are only a couple of centimetres long. It is thought Red-legged Frogs take three or four years to reach sexually mature.



Rocky Mountain Tailed Frog (*Ascaphus montanus*) – Amphibian

Red Listed

Description

The Rocky Mountain Tailed Frog is a little frog, unique to British Columbia in Canada. It ranges in length from 2.5 to three centimetres from nose to rump. Adults are usually tan or brown in colour although some may be shaded green or red, or even entirely black. The skin has a rather grainy appearance. The frogs have vertical pupils, no external ear and are voiceless. The toes on the hind feet are flat and wide, especially the outer toes. The most remarkable feature is their “tail” which gives the species its common name. The tadpoles are easily identifiable because they have a very large sucker-like mouth. Hatchlings are almost



transparent, while older tadpoles are dark mottled brown or black, often with a white spot on the tip of the tail. Tadpoles are found clinging to stones in streambeds.

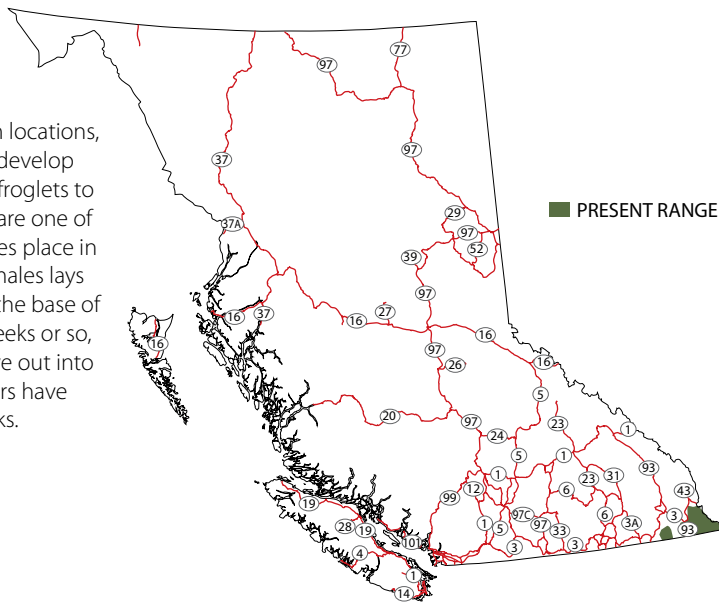
Habitat

Tailed Frogs like clear, cool coastal mountain streams that contain water year round. They are usually found in streams with large stones, cobbles, and stable boulders. Eggs and hatchlings can be found in side pools. Adult frogs often hide and hunt on the stream banks, but need to stay moist. They are much less able to withstand drying than other frogs. Although young frogs disperse from their hatching sites, once they reach adulthood they usually not move far from their chosen stream.

Photo © G. Nafis

Lifecycle Stages

Tailed Frogs grow very slowly. In high mountain locations, it may take up to four years for the tadpoles to develop into froglets. It takes several more years for the froglets to mature. The frogs may live 15 to 20 years. They are one of the longest-lived frogs in the world. Mating takes place in streams in the fall. In the following summer, females lay strings of eggs underwater, attaching them to the base of large stones. Hatchlings emerge in about six weeks or so, and overwinter in the quieter waters. They move out into the stronger current areas once their oral suckers have developed enough to let them cling to the rocks.



Great Basin Spadefoot (*Spea intermontana*) – Amphibian Blue Listed

Description

The Great Basin Spadefoot is a small, fat toad. It can be grey or olive green in colour. It has very large, golden yellow eyes with vertical pupils, set on the sides of its head. The toad has a bump between its eyes which gives its head a distinctive shape. Adult toads range in length from four to 6.5 centimetres. Their limbs are short and stubby. They have bumpy skin, with small and dark brown or reddish coloured bumps. The skin also has other spots and patches of colour that are not raised. There are light-coloured stripes down the sides of their back, and the skin on its stomach is pale. The toad's most distinctive feature is its small, black "spade" on the first toe of each hind



Photo © istockphoto

foot. Male Spadefoots have a call that sounds like "gwaa, gwaa" that can be heard several hundred metres away.

Habitat

The Spadefoot likes drier habitats than most toads and frogs. Adults live in dry grasslands and open woodlands. They need ponds for breeding, so their habitat is limited by the availability of water. They are rarely seen because during the day, they burrow in loose soil or occupy rodent burrows. They are especially active on rainy or damp nights. They may travel long distances between feeding, breeding, and hibernation sites. Little is known about their movement patterns.

Lifecycle Stages

Spadefoots hibernate in burrows from October to early April. They remain dormant until warm weather and rain return. When they emerge they gather at small ponds to breed. The females lay hundreds of eggs, attaching them to sticks and pebbles underwater. The eggs hatch within a week in cool weather, or as quickly as two days if it is warm. The tadpoles transform into toadlets within six to eight weeks after hatching. The toads become mature in their second or third year, and live up to ten years.

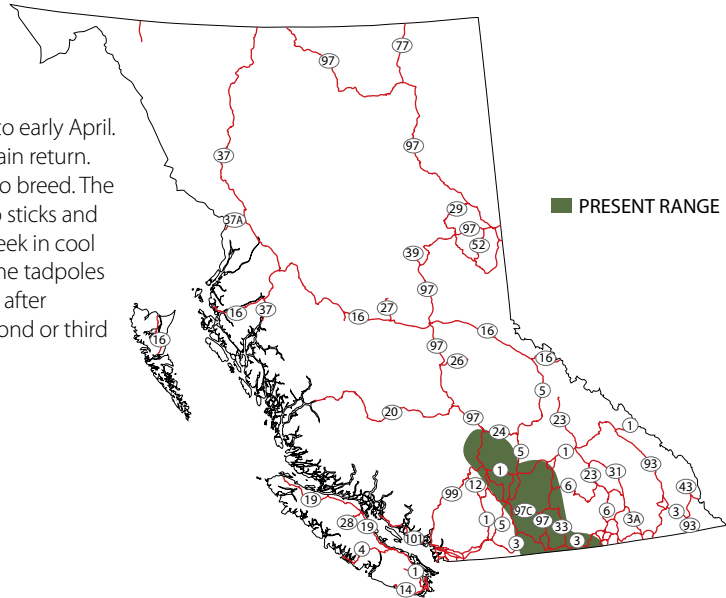




Photo © G. Nafis

PYGMY SHORT-HORNED LIZARD



Photo © P. Ryan, Ph.D.

TIGER SALAMANDER



Photo © G. Nafis

PACIFIC GIANT SALAMANDER

Lizards and Salamanders III



Photo © W. Flaxington

PACIFIC GIANT SALAMANDER



Photo © G. Nafis

COEUR d'ALENE SALAMANDER



Photo © James Bettaso

WESTERN SKINK

Pigmy Short-horned Lizard (*Phrynosoma douglasii*) – Reptile

Red Listed

Description

The Pigmy Short-horned Lizard is a squat lizard. It has a flattened body, short legs and a short tail. The maximum size of a Pigmy Short-horned Lizard is 12 centimetres from tip of the nose to tip of the tail. It is easily identified by the many spines on its back and side, the row of spines between each front and hind leg, and its short, stout horns. It is brownish-beige in colour, with various dark markings and a pale belly. This lizard blends into its desert environment well. If approached, it will inflate its body and open its mouth wide.

Habitat

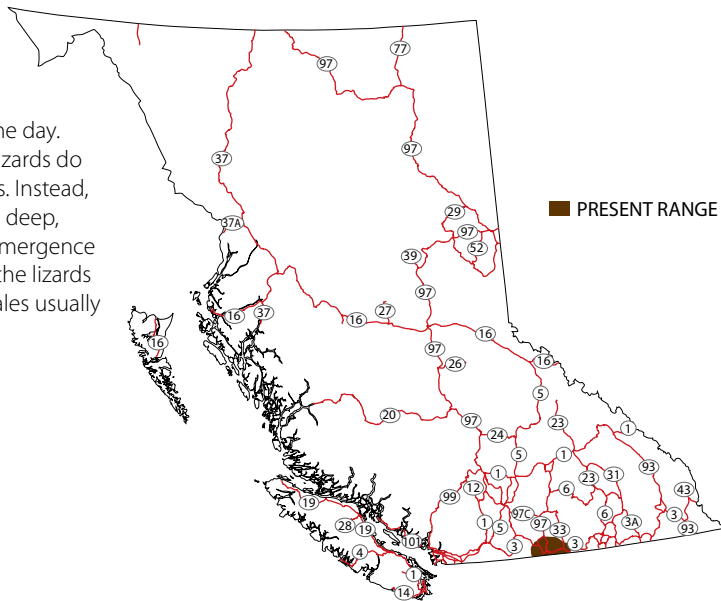
Pigmy Short-horned Lizards prefer grassy and dry forested locations. They like open habitats where the soil is loose and sandy. These lizards appear to be quite cold tolerant. They are found in parts of the Cascade Mountains right up to the timberline.



Photo © G. Nafis

Lifecycle Stages

Pigmy Short-horned Lizards are active during the day. Unlike most reptiles in British Columbia, these lizards do not appear to rely on rocky over-wintering dens. Instead, they appear to dig burrows opportunistically in deep, sandy soils. Mating occurs in the spring upon emergence from their dens. Between July and September, the lizards bear their young live and fully developed. Females usually produce between five and 10 offspring.



Western Skink (*Eumeces skiltonianus*) – Reptile

Red Listed

Description

Western Skinks are exquisitely coloured lizards. Skinks have a long, narrow pointed head, long body, and short legs. They grow to up to 20 centimetres in length. Juvenile Skinks are most striking. They have smooth, shiny scales, with brown back and grey sides contrasting with the four creamy stripes running from head to tail. Two stripes run along the back and one stripe

runs along each side. Their most noticeable feature is their bright blue tail, which normally is longer than the body. As Skinks age, these markings fade. However, some Skinks, in particular males in breeding season, develop reddish patches on the chin and sides of the head.

Habitat

Western Skinks live in Douglas-fir and Hemlock forests. Western Skinks need abundant plant cover, as well as rocks, logs, stumps, and bark for foraging and cover, sunny openings for basking, and south facing slopes and rocks for nesting and dens. During winter, Western Skinks hibernate in communal dens. During the summer, both male and female Skinks will excavate burrows with their snouts.

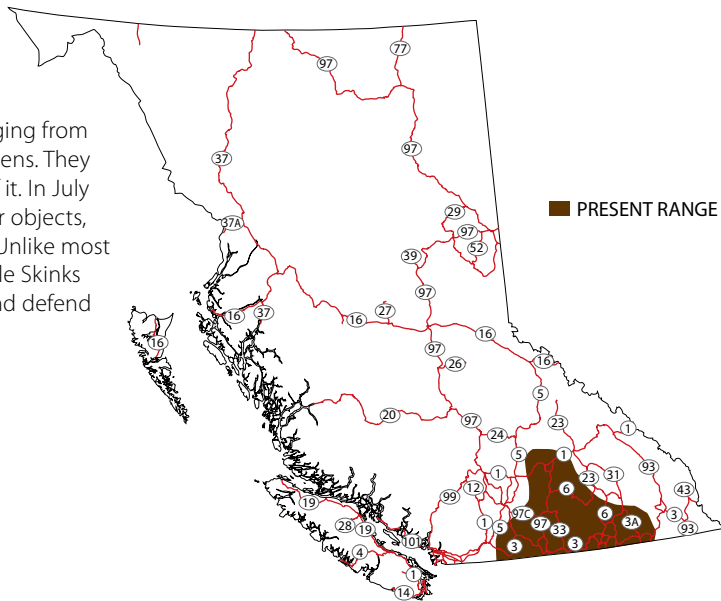
When not hunting or basking, Western Skinks stay under cover, either in their burrows, or under debris such as leaf litter, to avoid predators. Skinks are active during the day.



Photo © James Bessato

Lifecycle Stages

Western Skinks mate in the spring, after emerging from their dens. Skinks do not travel far from their dens. They tend to mate and feed within a small radius of it. In July or August, female Skinks dig nests under cover objects, where they lay an average of two to six eggs. Unlike most lizards, female Skinks care for their eggs. Female Skinks are often territorial in the area of their nests and defend their eggs aggressively.



Coeur d'Alene Salamander (*Plethodon idahoensis*) – Amphibian

Red Listed

Description

The Coeur d'Alene Salamander has a long, narrow body with bulbous eyes that project above its head like those of a frog. Adults range in length from 10 to 12 centimetres. At the end of their long legs, they have short, slightly webbed toes. They have black bodies with a distinctive yellowish throat patch and a wide stripe with serrated edges running down the back. The characteristic stripe can green, orange, red or yellow in colour.

Habitat

The Coeur d'Alene Salamander lives in very wet, cool areas, with deeply fragmented or fractured rock, near running water, that are heavily shaded by trees and shrubs. They require moist underground rocky

retreats to avoid dehydration in summer and freezing in winter. Its favourite locations are rocky seepage areas and river banks continually misted by spray from waterfalls. Flat stones, crack rocks and fallen logs provide essential refuge for these salamanders. The salamanders do not travel far and remain in the same location year round.

They come out at night to feed on insects at the water's edge and in other damp locations. They hibernate during the winter. Throughout the year, they remain underground when the temperature is less than 4°C.

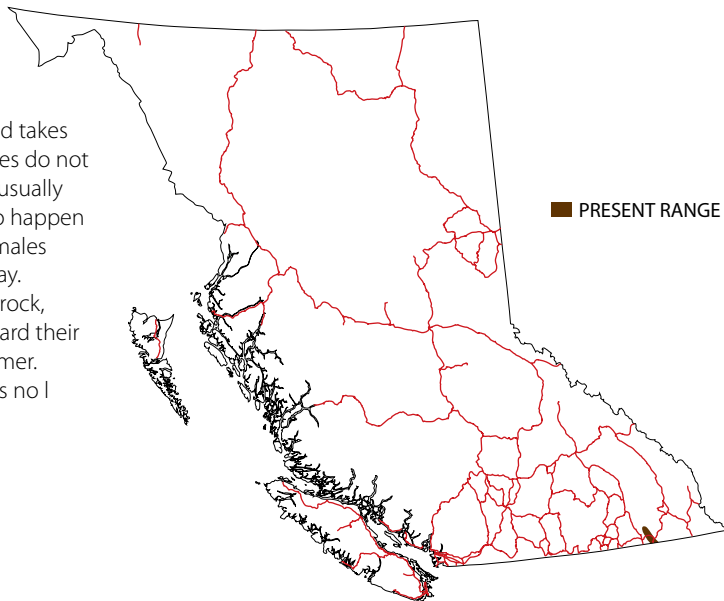
They also remain underground during very dry weather in summer. They are active above ground during the spring and fall or during wet periods in the summer. During this time they forage, breed, and disperse.



Photo © W. Leonard

Lifecycle

The Coeur d'Alene Salamander grows slowly and takes several years to reach breeding maturity. Females do not reproduce until they are four years old. Mating usually occurs in the late summer and fall, but may also happen in the spring. Every two to three years, adult females lay between four and twelve eggs in April or May. The eggs are stuck to a piece of wood, under a rock, or in an underground crevice. Adult females guard their eggs until their young hatch at the end of summer. The young hatch directly from eggs and there is no larval stage.



Pacific Giant Salamander (*Dicamptodon tenebrosus*) – Amphibian

Red Listed

Description

Pacific Giant Salamanders, the largest terrestrial salamander in North America, can reach up to 35 centimetres in total length. Like all salamanders, the salamander has four toes on its front feet and five toes on its back feet. Its flat tail is constitutes around 40 percent of the total length of the animal. The head, back, and sides of the salamander have a marbled or reticulated pattern of dark blotches on a light brown or gold-colored background. They have a wide head, with a shovel-shaped nose and a fold of skin across the throat. The eyes are medium in size, with a brass-flecked iris and a large black pupil. This species is one of the few salamanders capable of making vocal sounds.

Habitat

Pacific Giant Salamanders are found in wet forests, rivers, mountain lakes, and ponds. They shelter under rocks, logs, in logs, and in burrows and root channels. Population densities are highest in creeks with many large stones. Larvae frequent clear cold streams, creeks, and lakes and can be found under rocks and leaf litter in slowly moving water near the banks or exposed in the water at night. Although they can be found from sea level to 2,000 metres, they live mostly at elevations below 1,000 metres. Terrestrial adults often remain underground, emerging to feed on the forest floor on rainy nights. Sometimes they are found crossing roads on rainy nights.

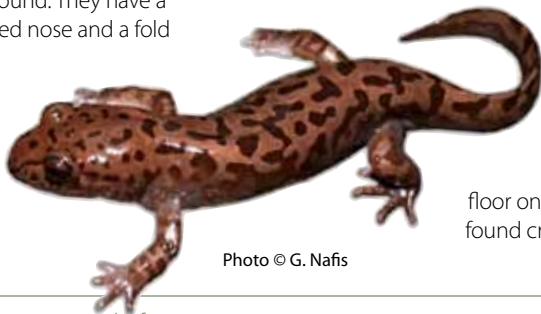


Photo © G. Nafis

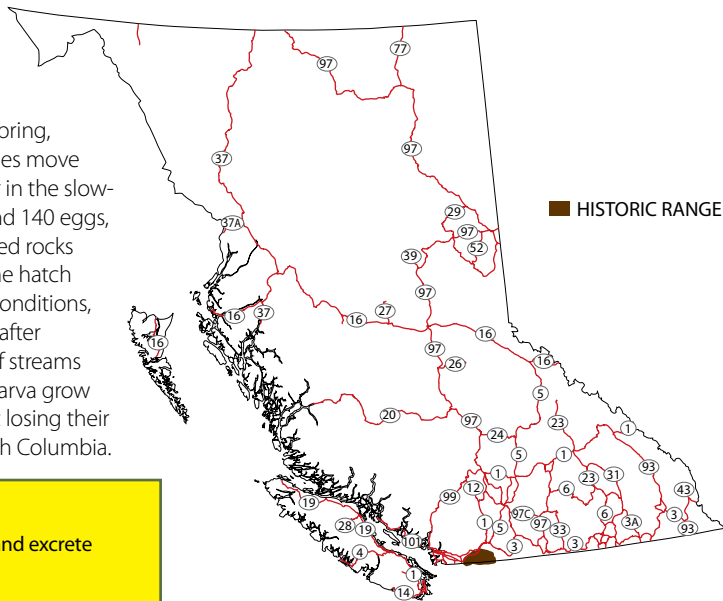
Salamanders

Lifecycle Stages

Pacific Giant Salamanders breed mostly in mid-spring, usually in May, but later at high elevations. Females move from upland habitats to lay their eggs in pools or in the slow-moving parts of streams. They lay between 80 and 140 eggs, attaching the eggs to the underside of submerged rocks or wood. The females will guard the eggs until the hatch in June and July. Depending on environmental conditions, salamander larvae transform in 18 to 24 months after hatching. Metamorphosed juveniles move out of streams to the surrounding habitat during wet periods. Larva grow into adults and become sexually mature without losing their external gills. This is particularly common in British Columbia.

Safety Advisory

Pacific Giant Salamanders can give painful bites and excrete noxious skin secretions.



Tiger Salamander (*Ambystoma tigrinum*) – Amphibian

Red Listed

Description

Tiger Salamanders range in length from 15 to 25 centimetres. Their skin is olive green or golden yellow in colour and covered with black or dark grey stripes or blotches, sometimes producing a tiger pattern. Their eyes are small and widely spaced. Light and dark patches cover the tail and legs, and the belly may be grey or patterned. Thirteen rib-like vertical furrows appear as folds down each side of the body. Two projections on the bottom of each hind foot help in digging burrows. Newly hatched salamanders are silver-grey in colour, with large tail fins and long, feathery

gills. Some salamanders do not transform into terrestrial adults, but reach reproductive status while retaining larval characteristics and remaining aquatic. These “neotenic” salamanders can grow much larger than terrestrial ones, to lengths over 30 centimetres.

Habitat

Tiger Salamanders are found in the hot, dry grasslands of the southern Okanagan. Grasslands and aspen groves provide summer habitat.

Adults and juveniles salamanders seek shelter underground, often in rodent burrows. Terrestrial adults are rarely seen outside the breeding season, appearing only at night or after rains. In summer, larvae and neotenic salamanders can be found in shallow lakes and ponds. During winter Tiger Salamanders escape the frost by moving into rodent burrows or



Photo © Shutterstock

rotten logs. Neotenic salamanders spend their winters near the bottom of their ponds, below the ice.

Lifecycle

Tiger Salamanders gather at breeding ponds in early spring. Females lay upwards of 120 eggs. The eggs are attached singly or in small clumps to stones, twigs and plants in shallow water. After about three weeks, hatchlings emerge. They quickly develop into four-legged larvae. The larvae develop their front legs first and stay close to shore and hide in aquatic plants and algae. After three to four months, larvae transform into juveniles, losing their gills. During wet weather, juveniles leave their ponds at night to live on land. After four to five years, when they are mature, they return to the pond to breed. The salamanders probably rarely live more than five or six years in the wild.

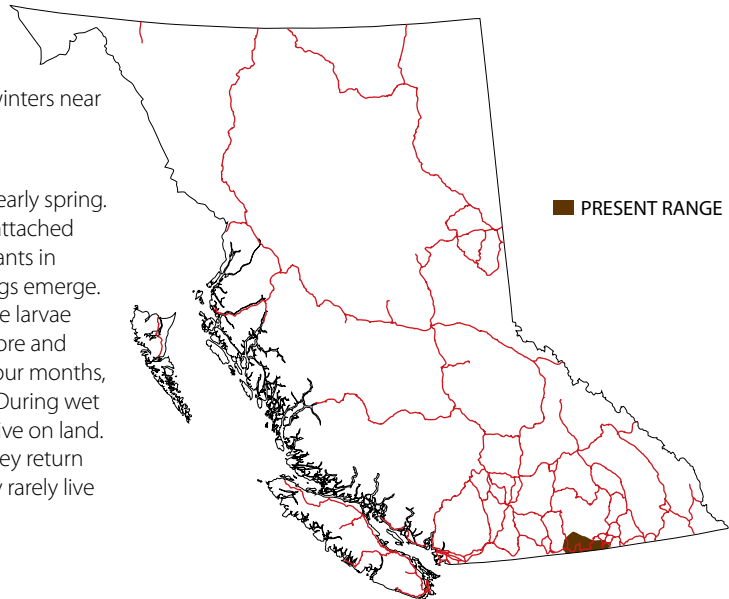


Photo © J. Bettaso



WESTERN RATTLESNAKE

Photo © J. Bettaso



SHARP-TAILED SNAKE

Photo © B. Norman



WESTERN RATTLESNAKE

Snakes III

Photo © G. Nafis



SHARP-TAILED SNAKE

Photo © K. Bell



PACIFIC GOPHER SNAKE

Photo © J. Bettaso



WESTERN YELLOW-BELLIED RACER

Photo © University of Georgia



GOPHER SNAKE

Know Your Snakes

In British Columbia, you may encounter two common snakes: the Western Rattlesnake and the Gopher Snake. Here are some recognizable characteristics.

Rattlesnake – triangular head, larger than neck; thick, dull, non-glossy body; tail is blunt with one or more rattles.

Gopher Snake – head slightly larger than neck; slender, glossy body; pointed tail.

Snakes are an important members of the natural community. If disturbed or threatened, they will defend themselves. Give them distance and respect.

You may hear the rattlesnake before you see it. A rapid vibration of its tail makes a buzz. This is how the snake warns you when it feels threatened by your presence. A Gopher Snake makes a similar sound by hissing and rapidly moving its tail in dry grass.

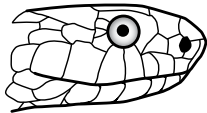
Safety Advisory

All snakes can bite. The rattlesnake is the most poisonous native snake in the province. Rattlesnake bites require immediate medical attention and may result in permanent tissue damage or death. If you are bitten by a snake immediately call 911 for medical attention.



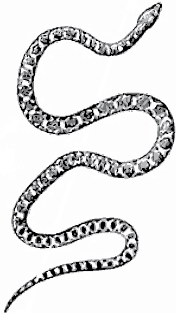
KNOW THE DIFFERENCE

Gopher Snake



Scales – may be smoothed or ridged (keeled)

Eyes – may have rounded or elliptical pupils

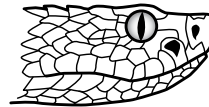


Head – at rest, narrow, barely distinguishable from neck

Body – relatively slim or narrow

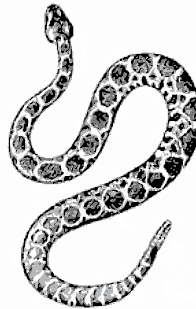
Tail – tapers to a long, thin point (usually); never with rattles

Rattlesnake



Scales – keeled (with a raised ridge in center of each)

Eyes – with vertical, cat-like pupils



Head – at rest, broad, triangular shaped

Body – heavy or relatively fat in appearance

Tail – blunt, ending in a rounded scale (baby snakes) or in a cluster of modified scales (the rattle); never tapers to a thin point

Gopher Snake (*Pituophis catenifer deserticola*) – Reptile

Pacific Gopher Snake (*Pituophis catenifer catenifer*) **Red Listed**

Great Basin Gopher Snake (*Pituophis catenifer deserticola*) **Blue Listed**

Description

The Pacific Gopher Snake has blotches on its back, towards its head, that are separated from one another and from the secondary blotches on the side of its neck. The Great Basin Gopher Snake has blotches on its back, towards its head, that are usually connected to one another and with the secondary blotches to form a longitudinal stripe on the side of its neck.

The Great Basin Gopher Snake is B.C.'s largest snake. Adults range in total length from 90 centimetres to 2.4 metres. The snakes are creamy yellow to greyish yellow with a series of dark, square-shaped blotches

running down the back. They may also have a series of smaller blotches running along each side. The snakes have a band of black running from one corner of the mouth to the other and around the eyes, and smaller vertical bands from the bottom of each eye to the mouth.

Habitat

Gopher Snakes are commonly found in dry, open fields and pine forests in the Southern Interior. The snakes can have very large home ranges, upwards of 25 hectares in size. Their dens are typically

found in rocky outcrops or at the base of loose rocky slopes. Snakes burrow down into the earth through the cracks and



Photo © G. Nafis

Lifecycle Stages

Night Snake (*Hypsiglena chlorophaea*) – Reptile Red Listed

Description

The Night Snake ranges in length from 30 to 90 centimetres. They may be tan, grey, light brown or pinkish grey in colour, with dark brown squarish blotches running down their backs. A smaller series of blotches often marks each side of the body. They are rear-fanged snakes, having enlarged grooved teeth in the back of their mouths. Their eyes have vertical pupils, similar to Rattlesnakes.

Although Night Snakes may look like Rattlesnakes, they lack a rattle and have other distinguishing features.

They have smaller markings, a less distinct neck, and smooth scales. Rattlesnakes have a ridge running down the middle of each scale. Night Snakes have a dark band across each eye and a dark collar-like marking around the neck that often runs into the eye bands. This combination of markings unique amongst British Columbia's snakes.

Habitat

Night Snakes live in hot, dry areas, typically with Sagebrush and Juniper vegetation, rock outcrops, and south-facing talus slopes. The snakes need suitable dens, egg-laying sites, and productive summer hunting grounds to survive.



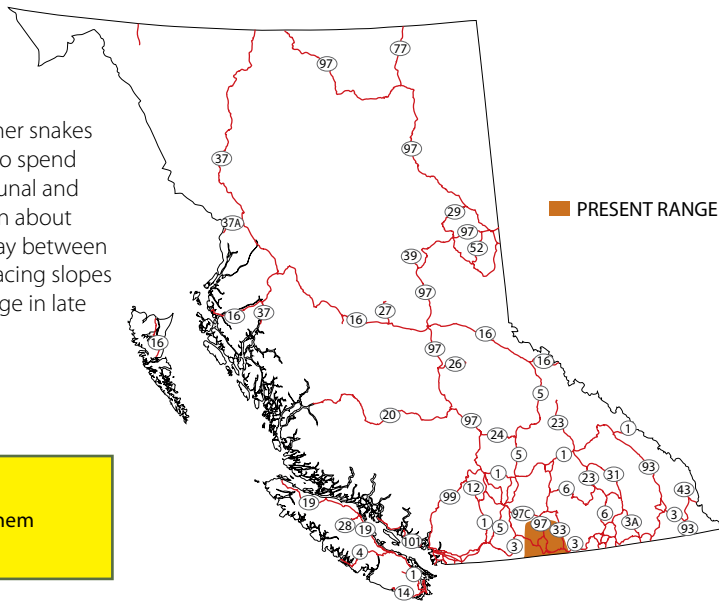
Photo © G. Nafis

Lifecycle Stages

Very little is known about Night snakes. Like other snakes in British Columbia, Night Snakes are believed to spend their winters in dens. The dens likely are communal and may be shared with Rattlesnakes. Little is known about their breeding habits. Females are believed to lay between three to six eggs. Eggs likely are laid on south-facing slopes in June or July. Hatchlings are believed to emerge in late August to September.

Safety Advisory

Night snakes are venomous and contact with them should be avoided.



Sharp-tailed Snake (*Contia tenuis*) – Reptile

Red Listed

Description

The Sharp-tailed Snake is a small snake, ranging in length from 20 to 45 centimetres. They have a distinctive sharply pointed scale at the tip of the short tail. Adults range in colour from grey, yellowish brown, or red, often with a wide yellowish stripe running along each side of their bodies. Some individuals may also have a fine dusting of black dots over their body. Their bellies are pale with dark bars along the bottom of each scale. Their head is wider than the neck, with their nose rounded or squared off. They usually have a black mask over their

eyes. Juveniles tend to be more vividly coloured with their entire backs being completely orange or red.

Habitat

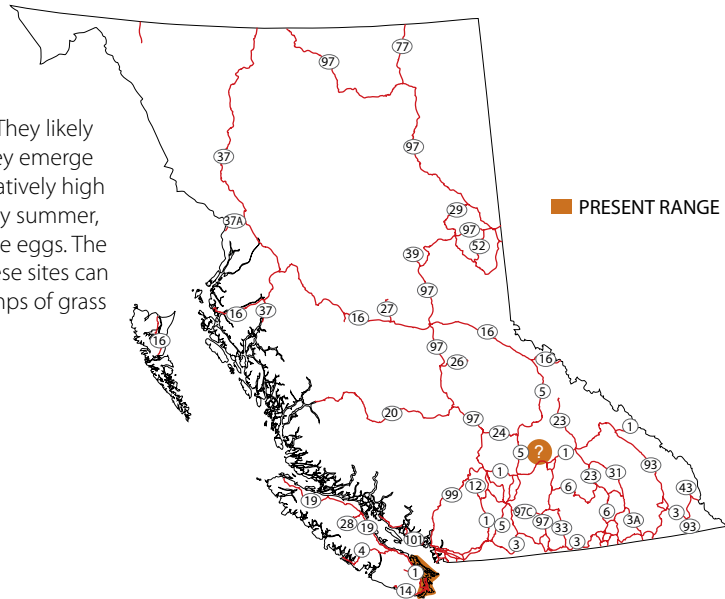
Sharp-tailed Snakes are almost always found in relatively open, damp woodlands and forests, especially near streams. Individuals spend much of their time under rocks and rotting woody material. They often are found near secluded, rocky, south facing slopes. This appears to be critical habitat, probably because it provides both den and egg-laying sites.



Photo © G. Nafis

Lifecycle Stages

Very little is known about Sharp-tailed Snakes. They likely hibernate during the winter, and mate after they emerge from their dens in the fall. They are found in relatively high numbers in spring and fall. In late spring to early summer, females are believed to lay between two to nine eggs. The eggs are laid in communal egg laying sites. These sites can be cracks between rocks, underground, or clumps of grass roots. The young hatch sometime in autumn.



Western Rattlesnake (*Crotalus viridis*) – Reptile Blue Listed

Description

The Western Rattlesnake is a medium to large snake, ranging in length from 60 to 150 centimetres. It has a broad head, which is triangle shaped and much wider than the neck, and a rattle on the end of its tail. There is a deep pit on each side of the face, between the eye and the nose. A broad, dark stripe runs down each side of the face, from below the eye to the corner of the jaw. The body colour of the body is brown, tan, olive or grey, overlaid by large dark-brown blotches along the back and smaller blotches along the sides. In older snakes,



Photo © G. Nafis

the blotches may be surrounded by a white or cream coloured ring. Towards the tail, the blotches appear more like bands around the body. The stomach is normally yellowish-white, but sometimes brownish-white.

Habitat

Western Rattlesnakes live in warm, dry areas of desert-scrub, grassland, and open pine forests.

They are most common in rocky habitats, including stream and river canyons.

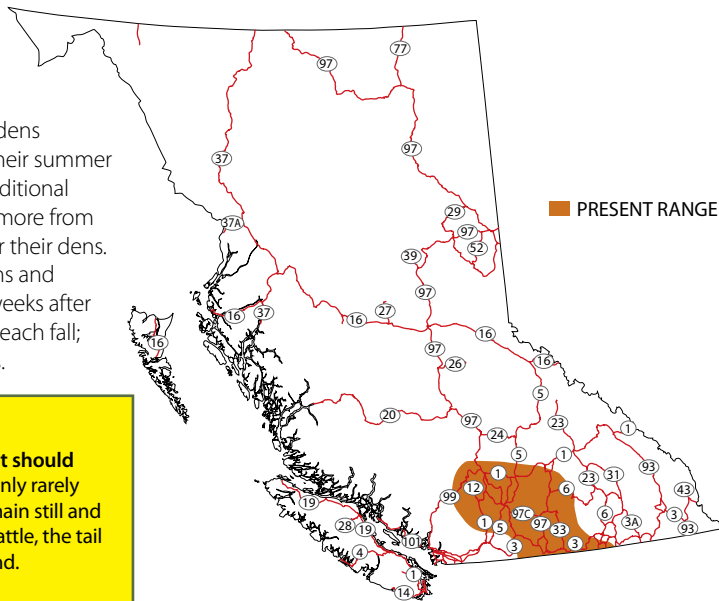
The snakes often hibernate in large numbers in rock crevices on south-facing slopes.

Lifecycle Stages

Western Rattlesnakes emerge from hibernation dens between March and May and then disperse to their summer habitats. Most snakes follow regular routes to traditional foraging and basking areas up to a kilometre or more from the den. Pregnant females, however, remain near their dens. Females may give birth near the hibernation dens and may guard their young for the first few days or weeks after birth. The snakes usually return to the same den each fall; however, a few juveniles sometimes switch dens.

Safety Advisory

Western rattlesnakes are venomous and contact should be avoided. They are typically calm snakes that only rarely rattle, even when approached. They prefer to remain still and avoid being seen or heard. When the snakes do rattle, the tail vibrations are very fast, up to 100 times per second.



Western Yellow-bellied Racer (*Coluber constrictor*) – Reptile Blue Listed

Description

Western Yellow-bellied Racers are long, sleek, often fast-moving snakes with large, smooth scales. They range from 50 centimetres to two metres in length. They have uniformly grey to olive-green coloured backs, and white to yellow coloured bellies. Young snakes resemble Gopher Snakes because they have a series of saddle-shaped markings along the back. This pattern of markings gradually fades from the tail toward the head during their first year. Western Yellow-bellied Racers seldom exceed one metre in length.

Habitat

Western Yellow-bellied Racers occur in the South and Central Interior. They are found along the southern Columbia, Kettle, Okanagan, Similkameen, Nicola, Thompson, and Fraser river systems. The snakes usually feed in shrub-steppes and grasslands, although open forests and riparian areas may also be used. Overwintering dens are usually found on southern sides of rock outcroppings or loose slopes in grasslands or open forest habitats.

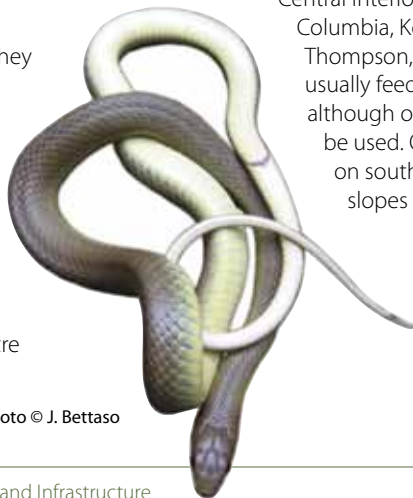


Photo © J. Bettaso

Lifecycle Stages

Western Yellow-bellied Racers emerge from their dens in late March and early April and travel before mating in May. They travel upwards of 1.8 kilometres to reach summer range. In June or July, females lay between three to seven eggs in sandy holes or among rocks on south facing slopes. Eggs hatch usually hatch in late August or early September. With the onset of autumn, adult and juvenile snakes begin migrating back to their overwintering dens.

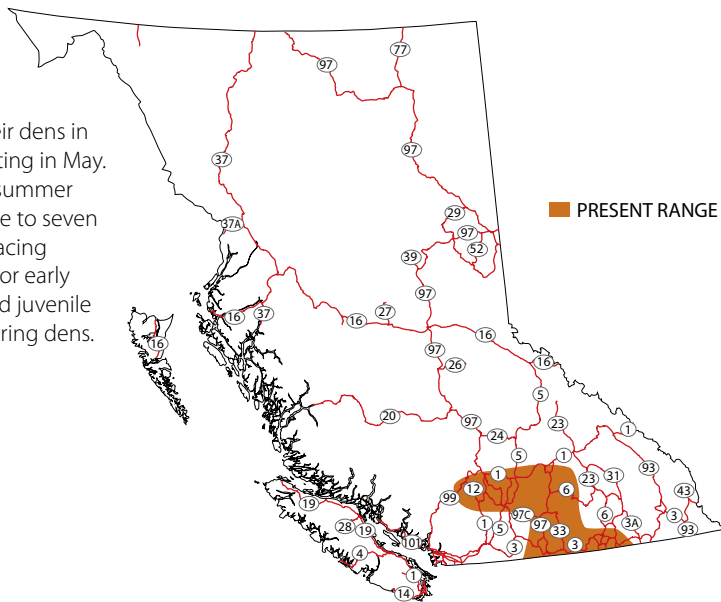


Photo © C. Engelstoft



WESTERN PAINTED TURTLE

Photo © J. Bettaso



WESTERN POND TURTLE

Photo © C. Engelstoft



WESTERN PAINTED TURTLE (JUVENILE)

Turtles III



Photo © Georgia Sea Turtle Center

LEATHERBACK SEA TURTLE



Photo © G. Nafis

WESTERN POND TURTLE



Photo © J. Shedd

WESTERN POND TURTLE



Photo © S. Benson

LEATHERBACK SEA TURTLE

Leatherback Sea Turtle (*Dermochelys coriacea*) – Reptile

Red Listed

Description

The Leatherback turtle is the largest reptile in the world. They reach upwards of 680 kilograms in weight with back shells lengths up to 2.4 metres. Unlike other turtles, Leatherbacks do not have scales covering their shell. Their narrow back shell and belly shell are covered with leathery skin. All the skin is olive-green, black, or grey, sometimes with light cream or yellow spots. Seven long ridges run along the back shell and five ridges run along the belly shell. The front and back legs are modified into flippers with the hind legs joined to the tail with webbing.

Habitat

Leatherback Turtles nest on tropical and subtropical beaches. After living a few years in warm ocean waters, turtles may travel to the colder waters of the Pacific Oceans off the British Columbian coast. Leatherback Turtles can generate body heat through muscle activity, an ability rare among other species of turtles and reptiles.

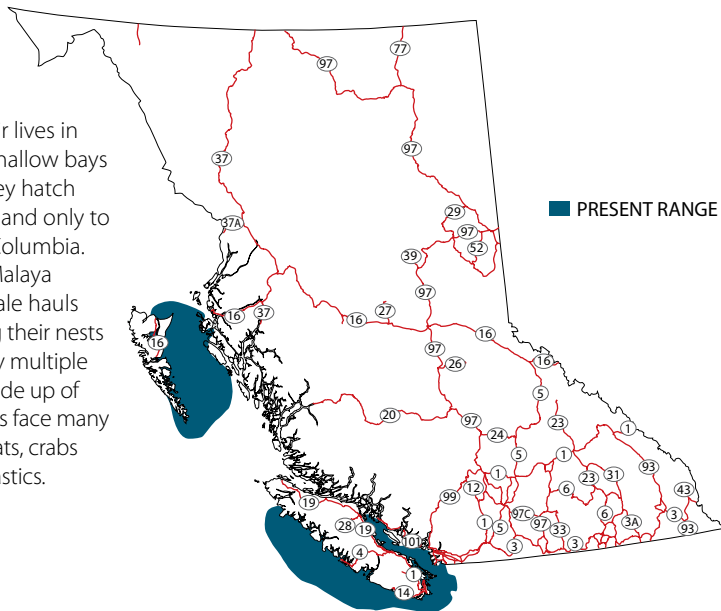
Their large body mass and relatively small surface area enable them to retain heat and maintain warm body temperature in colder waters



Photo © Georgia Sea Turtle Centre

Lifecycle Stages

Leatherbacks are entirely marine, spending their lives in the open sea, but occasionally venturing into shallow bays and estuaries. Males do not touch land after they hatch from their sandy nests, while females return to land only to lay eggs. There are no breeding sites in British Columbia. Leatherbacks breed mainly off of the coast of Malaya and French Guiana. Soon after mating, the female hauls herself up on land to lay her first clutch. They dig their nests and lay their eggs on sandy beaches. Females lay multiple batches of eggs in a season, with each batch made up of between 90 and 150 eggs. Newly hatched turtles face many predators during their first hours of life such as rats, crabs and gulls. Adults are susceptible to discarded plastics.



Western Painted Turtle – Reptile

Intermountain-Rocky Mountain Population (*Chrysemys picta* pop. 2) **Blue Listed**

Pacific Coast Population (*Chrysemys picta* pop. 1) **Red Listed**

Description

The Western Painted Turtle has bright yellow stripes on its head, neck, tail and legs, and glowing red on the shell covering its belly and under-edge of the shell covering its back. Sometimes, the back shell also has a light yellow pattern or worm-like markings. The red and yellow patterns contrast boldly with the olive-green of the skin and the dark colouring of the back shell. The turtles have webbed hind feet and slender claws on their front feet. Painted turtles can grow to over a 30 centimetres in length, with the back shell measuring up to 25 centimetres long.

Photo © istockphoto



Photo © G. Nafis

Habitat

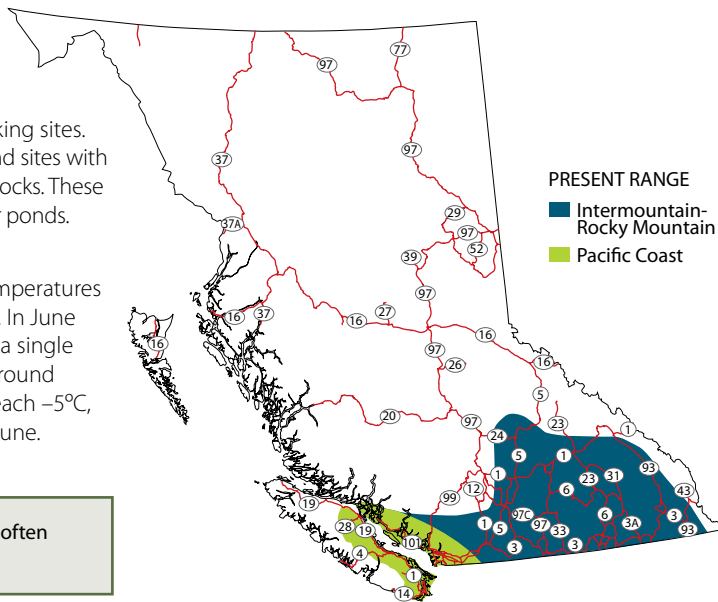
Western Painted Turtles are the most northerly occurring turtle in North America, with British Columbia being their northern limit of range. They live in the margins and shallows of lakes and ponds, ditches and sluggish streams with muddy bottoms and lots of aquatic plants. Most adult turtles spend the winter hibernating in the mud at the bottom of ponds and lakes. They can survive under water in ponds and lakes that are 2°C and covered with up to half a metre of ice. In summer, the turtles like to bask on vegetation mats and logs completely surrounded by water. They can be found

stacked on each other at particularly good basking sites. Nesting females select open, south-facing, upland sites with loose soil and without a lot of plants, roots, and rocks. These sites can be up to 350 metres away from lakes or ponds.

Lifecycle Stages

Painted Turtles breed in the late winter after temperatures warm up and the ice on ponds and lakes melts. In June or July, females turtles lay six to 18 oval eggs in a single nest. Turtle hatchlings break out of their eggs around September. Although their shallow nests can reach -5°C , most hatchlings emerge the following May or June.

NOTE: The non-native Red-eared Slider Turtle is often misidentified as a Western Painted Turtle.



Western Pond Turtle (*Actinemys marmorata*) – Reptile

Red Listed

Description

The Western Pond Turtle is easily identified because of its drab colouration has a low, smooth shell on its back that is brown to black in colour. The shell can be 18 centimetres long. Sometimes the shell has mottling, marbling, or a series of fine lines. The shell on the turtle's stomach is yellowish with dark blotches. The skin is grey and the scales covering the skin are large and noticeable.

Habitat

Western Pond Turtles like riparian areas such as slow-moving streams, large rivers, sloughs, and even brackish water. Western Pond Turtles hibernate over winter at the bottom of ponds or in nearby

woodland areas. They have been found in a wide variety of habitats however, including agricultural ditches and sewage treatment ponds. The turtles need deep water and vegetation to help them avoid predators. They also need basking areas or large basking objects to help them thermoregulate. While both sexes come onto land, terrestrial habitats are most important to nesting females.

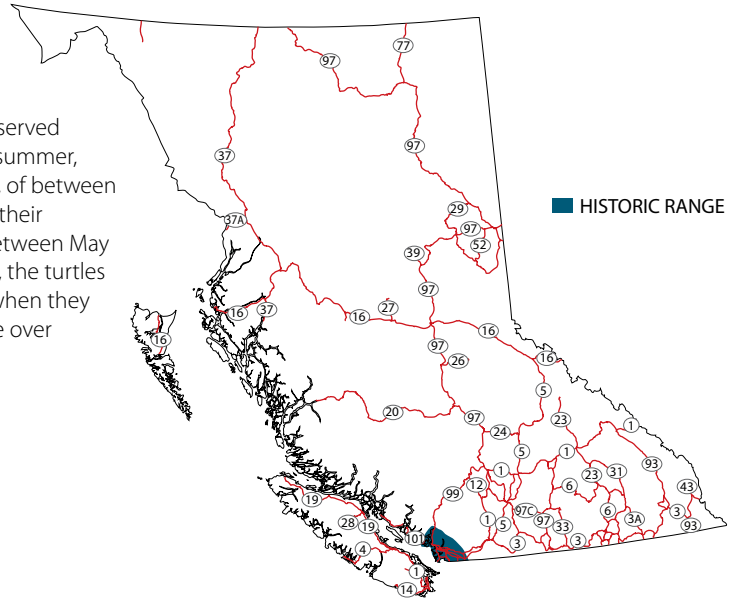
Females need open, south-facing locations to dig their nests and lay their eggs. The south-facing slope helps provide the eggs with enough heat to develop. Most nests are with 90 metres of water. The turtles are quite territorial about their basking sites. Large turtles may aggressively bully smaller, younger turtles into giving up a log or mat of vegetation.



Photo © J. Shedd

Lifecycle Stages

Most Western Pond Turtle mating has been observed during most summer months. During a single summer, female turtles can lay multiple batches of eggs, of between three to 11 eggs in each batch. Depending on their geographic location, females appear to nest between May and August. In the northern part of their range, the turtles grow slowly and reach reproductive maturity when they are 10 to 12 years old. The turtles may live to be over 30 years old.



British Columbia Ministry of Environment, 2008, Recovery Strategy for the Gopher Snake, deserticola Subspecies (*Pituophis catenifer deserticola*) in British Columbia, Victoria, British Columbia, 20 pp.

British Columbia Ministry of Environment, 2008, Recovery Strategy for the Sharp-tailed Snake (*Contia tenuis*) in British Columbia, Victoria, British Columbia, 27 pp.

British Columbia Ministry of Environment, 2008, Recovery Strategy for the Western Rattlesnake (*Crotalus oregonus*) in British Columbia, Victoria, British Columbia, 21 pp.

British Columbia Ministry of Environment, Coastal Giant Salamander, www.env.gov.bc.ca/wld/frogwatch/whoswho/factshts/cgsal.htm, accessed June 28, 2010.

British Columbia Ministry of Environment, Lands and Parks, Coeur d'Alene Salamander (*Plethodon idahoensis*), British Columbia' Wildlife at Risk, Victoria, British Columbia, 2 pp.

British Columbia Ministry of Environment, Lands and Parks, 1994, Northern Leopard Frog, *Rana pipiens*, Fact Sheet 1, Victoria, British Columbia, 2 pp.

British Columbia Ministry of Environment, Lands and Parks, Great Basin Spadefoot, *Spea intermontana*, Fact Sheet 6, Victoria, British Columbia, 2 pp.

British Columbia Ministry of Environment, Lands and Parks, Oregon Spotted Frog, *Rana pretiosa*, Fact Sheet 3, Victoria, British Columbia, 2 pp.

British Columbia Ministry of Environment, Lands and Parks, Red-legged Frog, *Rana aurora*, Fact Sheet 5, Victoria, British Columbia, 2 pp.

British Columbia Ministry of Environment, Lands and Parks, Tailed Frog, *Ascaphus truei*, Fact Sheet 2, Victoria, British Columbia, 2 pp.

British Columbia Ministry of Environment, Northern Leopard Frog, www.env.gov.bc.ca/wld/frogwatch/whoswho/factshts/northlep.htm, accessed June 28, 2010.

British Columbia Ministry of Environment, Oregon Spotted Frog, www.env.gov.bc.ca/wld/frogwatch/whoswho/factshts/orspot.htm, accessed June 28, 2010.

British Columbia Ministry of Environment, Painted Turtle, www.env.gov.bc.ca/wld/frogwatch/whoswho/factshts/painted.htm, accessed June 28, 2010.

British Columbia Ministry of Environment, Red-legged Frog, www.env.gov.bc.ca/wld/frogwatch/whoswho/factshts/redleg.htm, accessed June 28, 2010.

References III

British Columbia Ministry of Environment, Tailed Frog, www.env.gov.bc.ca/wld/frogwatch/whoswho/factshts/tailed.htm, accessed June 28, 2010.

British Columbia Ministry of Environment, Tiger Salamander Fact Sheet, www.env.gov.bc.ca/wld/frogwatch/whoswho/factshts/tigersal.htm, accessed June 28, 2010.

British Columbia Ministry of Water, Land and Air Protection. 2004. Coeur d'Alene Salamander (*Plethodon idahoensis*) in Accounts and Measures for Managing Identified Wildlife – Accounts V. 2004. B.C. Ministry of Water, Land and Air Protection, Victoria, B.C. www.env.gov.bc.ca/wld/frpa/iwms/accounts.html (accessed August 17, 2010).

Cameron, M.A. and R. St. Clair, 2002, COSEWIC Assessment and Status Report on the Pacific Pond Turtle *Clemmys marmorata* in Canada, Ottawa, 17 pp.

Canadian Amphibian and Reptile Conservation Network (CARCNET), Western Skink, www.carcnet.ca/english/reptiles/species_accounts/lizards/Pl_skiltonianus/skiltonianus2.php, accessed June 28, 2010.

COSEWIC, 2001, COSEWIC Assessment and Update Status Report on the Leatherback Turtle *Dermochelys coriacea* in Canada, Ottawa, 25 pp.

COSEWIC, 2002, COSEWIC assessment and status report on the Red-legged Frog *Rana aurora* in Canada. Ottawa. 22 pp.

COSEWIC, 2004, COSEWIC Assessment and Update Status Report on the Eastern and Western Yellow-bellied Racers *Coluber constrictor flaviventris* and *Coluber constrictor mormon* in Canada, Ottawa, 35 pp.

COSEWIC, 2006, COSEWIC Assessment and Status Report on the Western Painted Turtle *Chrysemys picta bellii* Pacific Coast population Intermountain – Rocky Mountain population Prairie/Western Boreal – Canadian Shield population in Canada, Ottawa, 40 pp.

COSEWIC, 2007, COSEWIC Update and Status Report on the Pygmy Short-horned Lizard, *Phrynosoma douglassii douglassii*, in Canada, Ottawa, 24 pp.

COSEWIC, 2009, Canadian Wildlife Species at Risk, www.cosewic.gc.ca/eng/sct0/rpt/rpt_csar_e.pdf, accessed June 28, 2010.

Gregory, P.T. and R.W. Campbell, 1984. The reptiles of British Columbia. British Columbia Provincial Museum Handbook No. 44. Victoria, British Columbia, 122 pp.

Matsuda, B.M., D.M. Green and P.T. Gregory, 2006, *Amphibians and Reptiles of British Columbia*, Royal BC Museum, Victoria, British Columbia, 266 pp.

Orchard, S.A., 1988, *Special Notes for Reptiles*, Volume 3 in A.P. Harcombe (tech. ed.) *Wildlife habitat handbooks for the Southern Interior Ecoprovince*, British Columbia Ministry of Environment and British Columbia Ministry of Forests. Victoria, British Columbia, 41 pp.



Photo © istockphoto

For More Information III

For more information, please visit these Web sites:

Government of British Columbia Ministry of Environment

Ecosystems Branch
www.env.gov.bc.ca/wld

Endangered Species and Ecosystems
www.env.gov.bc.ca/atrisk

British Columbia Conservation Data Centre (BC CDC)
www.env.gov.bc.ca/cdc

Identified Wildlife Management Strategy (IWMS)
www.env.gov.bc.ca/wld/frpa/iwms

**Government of Canada
Committee on the Status of Endangered Wildlife in Canada (COSEWIC)**
www.cosewic.gc.ca/index.htm

Wildlife Identification Field Guide

Red and Blue Listed Amphibians and Reptiles
in British Columbia



Ministry of
Transportation
and Infrastructure



Photo © G. Nafis