

# Western Painted Turtle - Pacific Coast Population

## *Chrysemys picta pop.1*

A member of the family Emydidae (“pond or marsh turtles”), the *Chrysemys* genus is restricted to North America. In BC, *C. picta* occurs as two populations (Pacific Coast and Intermountain – Rocky Mountain).



Adult Ursula Easterbrook



Adult Deer Lake Burnaby A Gysin



Adult William P. Leonard



Adult male posterior Rocky Mnt. pop.  
(Creston BC) P. Zevit



Adult male anterior Rocky Mnt. pop.  
(Creston BC) P. Zevit



Adult plastron James H. Harding



Adult (plastron with scarring) Warren  
Wartigg



Hatchling Lower Mainland K. Welstead



Nest with egg Kristiina Ovaska



Preferrable habitat Scott Barrett

## Characteristics

*Size (shell diameter): Hatchlings 2-2.5 cm, Juveniles 10cm, Mature adults 25 cm (females larger than males).* The carapace (upper shell) of adults is smooth, olive-green to dark brown. Outer edges can be patterned with red lines. The head, neck and tail are olive to greenish-black and striped with yellow. The intricate black and yellow branching pattern on the plastron (lower shell) is not present on all individuals, though the plastron is always red or orange. Colour patterning can be variable between individuals and between populations. The upper jaw has a notch located just under the nostrils. Males have very long front claws and thicker tails with a cloacal (tail vent) opening that is closer to the end of the tail than to the carapace. Females have shorter front claws, and thinner tails with cloacal openings closer to the carapace than to the end of the tail. Hatchlings have rounder carapaces that are slightly keeled along the length and similar but more vibrant colouration than adults. \*In 2003, DNA studies suggested that the Eastern, Midland and Western North American subspecies of Painted Turtle should be merged to just a single species (*C. picta*), leaving only one other separate species in the southern US.

## Status

**Global Status:** G5T2

<b>Provincial Status:</b>	S2
<b>SARA Status:</b>	Endangered
<b>BC List Status:</b>	Red (Candidates for- Extirpated, Endangered, or Threatened status)

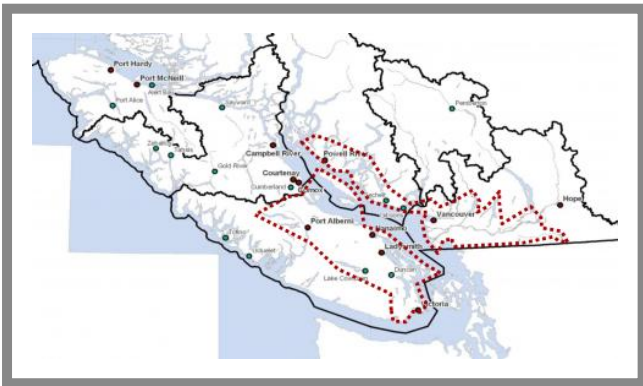
## Similar Species



Red-eared Slider Turtle Flickr ("Sea Turtle")

The non-native, introduced Slider (also known as “Red-eared Slider”) is commonly misidentified with Western Painted Turtle. Both have similar physiology, colouration, size and lifecycles. Slider has a red “ear” patch located behind the eye which can fade on older Slider’s, making identification more difficult as they mature. Slider turtles have a yellow plastron with dark circular blotch on each plastron scale. The carapace can have more visible colour patterning and splashes of colour than painted turtles. It is slightly more dome-shaped with a low ridge or keel (lacking in carapaces of mature Western Painted Turtle).

## Range



## Ecology

Elevation: 0-500 m (some US populations have been documented at 2100 m). Populations on South Coast BC are known from 0-200 m. Western Painted Turtle are the remaining native freshwater turtle species on the BC Coast. The Pacific Coast Population ranges from the Fraser Lowlands, Sunshine Coast, Squamish and southeast Vancouver Island area. The largest population of genetically intact individuals on the Lower Mainland occurs near Deroche (west of the Harrison River). A number of individuals and remnant populations can still be found in urban watersheds like the Brunette basin in Burnaby, watersheds in southwest Coquitlam, Langley, Surrey and Delta. Populations are also known from Vancouver Island in the Greater Victoria area to the Alberni Valley, Courtenay and Comox. Saltspring Island appears to be the only Gulf Island with populations, however surveys on Galliano and North Pender Island were inconclusive and the species could be more widely distributed where suitable habitat occurs.

## Habitat

This species is found in slow-moving, permanent waterbodies with soft bottom substrates, ample aquatic vegetation and adjacent areas of exposed sand or gravel soils suitable for nesting. There is a strong relationship between population viability, adequate riparian buffers and non-fragmented dispersal corridors (i.e. between aquatic habitats). Populations on the Sunshine Coast overwintered at depths >1 m. Deeper sites have lower probability of freezing and lower predation risk, but higher probability of oxygen depletion. Painted Turtles display very high tolerance to hypoxic and anoxic (oxygen depleted) conditions, but do not resist freezing and are susceptible to predation. Overwintering ends when water temperatures reaches about 6 °C. Nesting sites vary considerably in distance from the water (up to 150 m away). This species may seek out nest sites near buildings, fences or road verges. These sites are often disturbed, more vulnerable to predation, vehicular mortality, illegal collection, and result in lower nesting and hatchling success. Solar radiation is required to maintain metabolic rates and absorb vitamin D<sub>3</sub>, for calcium





objectives developed by the South Coast Western Painted Turtle Recovery Project and the Coastal Painted Turtle Project (see sources section for specific documents). Inventory and monitor using standardized methods (Resource Information Standards Committee) # 37 Inventory Methods for Pond-breeding Amphibians and Painted Turtle (Version 2.0) . Other recommended approaches to inventorying and monitoring include: “Measuring and Monitoring Biological Diversity - Standard Methods for Amphibians”, “Suitability of Amphibians and Reptiles for Translocation” and survey methodologies developed for the “Wetlandkeepers Handbook”. This species and its regional populations are listed under the Federal Species At Risk Act (SARA) and may be subject to protections and prohibitions under the BC Wildlife Act. Habitat for this species may also be governed under provincial and federal regulations including the Fish Protection Act and Federal Fisheries Act as well as Regional and local municipal bylaws.

## **Resources**

**[Guidance for Conserving Oregon’s Native Turtles Including Best Management Practices](#)**

**[Western Painted Turtle Surveys on Galiano, Pender, and Vancouver Island](#)**

**[Hibernating without oxygen: physiological adaptations of the painted turtle](#)**

**[Turtle Mortalities: The Deadly Reach of Invasive Plants](#)**

**[Habitat Connectivity and Restoration Potential Assessment of Deer Lake Brook in Burnaby, BC](#)**

## **For further information see**

**[The Reptiles of British Columbia](#)**

**[Species at Risk - Coastal BC Conservation Organizations Collaborating on Stewardship: Western Painted Turtle](#)**

**[BC Species and Ecosystems Explorer: Species and Ecosystems Search](#)**

A source for authoritative conservation information on thousands of plants and animals and hundreds of ecological communities in BC. From here connect to all provincial and federal recovery plans (including the SARA Registry), COSEWIC (Committee on the Status of Endangered Wildlife in Canada), Identified Wildlife guidance and conservation requirements for specific species and ecological communities of conservation concern impacted by forestry activities) and links to E-Flora and E-Fauna (the Electronic Atlas of the Plants and Wildlife of British Columbia).

**[British Columbia’s Coast Region Species & Ecosystems of Conservation Concern](#)**

A joint venture resource providing comprehensive information on a range of species and ecological communities specific to the Coast Region of BC (including the South, Central and North Coast, Vancouver Island and Haida Gwaii).

**[Develop With Care Guidelines \(see BMP's for Herptiles\)](#)**

Environmental guidelines for urban and rural land development in BC.

**[Species at Risk & Local Governments a Primer for BC](#)**

Learn what species are at risk in your area, search by name, habitat type, regional district and forest district.

## **Sources**

BC Conservation Data Centre. 2015. Species Summary: *Chrysemys picta* pop. 1. BC Ministry of Environment. - BC Ministry of Environment. The Western Painted Turtle Recovery Team. 2010. Draft Recovery Strategy for the Western Painted Turtle (Pacific Coast Population), *Chrysemys picta bellii*, in British Columbia (March 2010). Original version prepared by Vanessa Kilburn for the B.C. Ministry of Environment, Victoria, BC. 45 pp. - BC Ministry of Environment. [Internet] Western Painted turtle Identification Guide. BC Turtlewatch. - Bunnell, Cory G. Filed Survey of Red-eared Sliders (*Trachemys scripta elegans*) in the Lower Fraser Valley of British Columbia 2005. Wildlife Afield. - California Herps.com  
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## Credits

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## Links

[1] <http://www.bcreptiles.ca/snakes/sharptail.htm>

[2] <http://speciesatrisk.hat.bc.ca/western-painted-turtle>

[3] <http://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/conservation-data-centre/explore-cdc-data/species->

and-ecosystems-explorer

[4] <http://www.geog.ubc.ca/biodiversity/factsheets/>

[5] [http://www.env.gov.bc.ca/wld/documents/bmp/devwithcare2006/develop\\_with\\_care\\_intro.html](http://www.env.gov.bc.ca/wld/documents/bmp/devwithcare2006/develop_with_care_intro.html)

[6] <http://www.speciesatrisk.bc.ca/>

[7] <http://www.sfiprogram.org/>

[8] <mailto:info@sccp.ca>