

Western Painted Turtle (*Chrysemys picta bellii*)



Photo Credit: Keith Kohl

Species Description

Western painted turtles are one of Oregon's two native freshwater turtle species, named for their bright, colorful markings. Their plastron (the underside of their shell) is bright red or orange. Each individual has a unique black pattern on their plastron. Their smooth, relatively flat carapace (upper shell) is dark green, brown, or black overall. The margin of the shell is smooth, typically with bright red and yellow markings. Beneath their shell, western painted turtles are overall olive green to dark brown in color with contrasting bright yellow striping on the legs and neck. Female painted turtles have short, thin tails and can grow up to 10 inches in length. Males are smaller than females at their full adult size, growing up to 6 inches. Males have long tails with a wide base. Western painted turtles can often be seen in slow-moving, shallow water basking in large groups, sometimes with as many as 50 turtles on one log!

Similar species in Oregon are the western pond turtle and the red-eared slider (a non-native species). All three species can sometimes be found in the same body of water, or even on the same log. The coloration of the plastron of each of the three species is distinct, but sometimes may be difficult to see from a distance. Red-eared sliders are similar in size and carapace coloring to western painted turtles. They can be identified by the distinct red or orange stripe behind each eye, yellow plastron with dark blotchy markings, and a carapace that is more domed than either of Oregon's native freshwater turtle species.

Range and Distribution

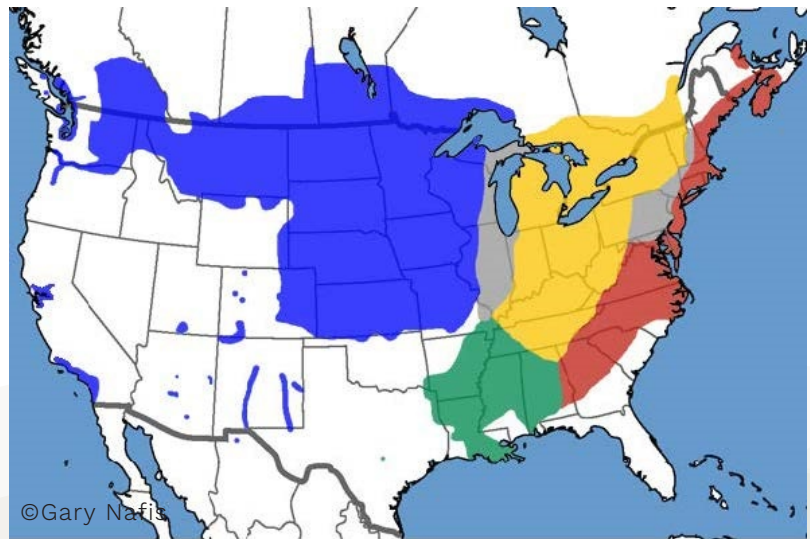
Painted turtles are the most widespread freshwater turtle species in North America, and can be found from coast to coast through the northern United States and southern Canada to northern Mexico. The western painted turtle subspecies, described here, is broadly distributed through southern Canada from western Ontario to British Columbia, and south into the central and western United States.

In Oregon, they are most abundant in the Columbia River Basin and the Willamette Valley. There are scattered occurrences in the Coast Range, the Cascades, the Klamath Mountains, and the Blue Mountains. These scattered locations may be from released pet turtles that have established breeding populations.

Habitat Characteristics

They are a highly aquatic species closely associated with slow-moving, shallow streams, lakes, and ponds with muddy bottoms and open banks. Submerged aquatic vegetation and emergent vegetation provide food and cover. Basking sites such as rocks and logs in or next to water are important habitat components.

They nest on land, usually on soft ground within 50 to 200 yards of water with direct sun exposure. They typically overwinter in the soft muddy bottom of shallow waterbodies, though overwintering on land has been documented.



Approximate Natural and Introduced Range of *Chrysemys picta* - Painted Turtle

- *C. p. bellii* - Western Painted Turtle
- *C. p. marginata* - Midland Painted Turtle
- *C. p. picta* - Eastern Painted Turtle
- Intergrade Zone
- Former subspecies *C. p. dorsalis* - Southern Painted Turtle

Diet and Foraging

Western painted turtles are omnivores and prey on a wide variety of fish, tadpoles, algae, crustaceans, and aquatic insects. They forage in shallow water along the bottom of the pond, chasing prey items they flush. They have horny ridges on their upper and lower jaw they can use to tear their food.

Life History and Ecology

The western painted turtle is a long-lived species that matures slowly and has relatively low reproductive output. Individuals can live 20 years or more, with some individuals documented to live to be more than 30 years old! Males reach sexual maturity at 4 to 10 years, and females attain sexual maturity from 6 to 15 years. They are highly aquatic and primarily move through aquatic habitats, though sometimes will move overland. Some individuals may use different waterbodies for overwintering and for breeding, and migrate between the two habitats in spring and fall.

Turtles are “cold-blooded” (*ectothermic*), which means that they rely on the environment to maintain their body temperature. To get warm, they bask on logs, rocks, or other objects warmed by the sun, sometimes in large groups. They will retreat into the water or the shade when they get too warm. Western painted turtles are diurnal, meaning they are active during the day. They spend the nights underwater at the bottom of the pond, emerging around sunrise to bask. In winter, they primarily hibernate underwater buried in mud or muck. They emerge from over-wintering sites in the spring, typically March and April, once temperatures are warm enough for foraging.

During the nesting season between May and July, females emerge from their aquatic habitat to find nest sites on land, typically within 200 yards of their aquatic habitat. Once they find a suitable site with good solar radiation, they empty their bladder on the soil and dig shallow nest cavities with their back legs. They deposit an average of eight eggs in a nest cavity. After laying the eggs, they use the moist soil to create a nest plug that they tamp down to seal the eggs in the nest chamber. The eggs receive no parental care. The eggs hatch in the fall, and typically overwinter in the nest cavity before emerging as hatchlings in spring. At hatch, young turtles are only about the size of a quarter.

Predators of adult western painted turtles include skunks, raccoons, and foxes. They avoid predators by diving down into the water, and retreating into their shell for protection. Nests are vulnerable to predation by skunks and raccoons. Hatchlings are prey for a variety of species including birds, skunks, bullfrogs, and bass.

Fun Facts

- The western painted turtle is approximately the size of a quarter when they hatch and can grow up to 10 inches.
- Western painted turtles are able to survive long periods of time without oxygen. They can survive several months in anoxic conditions, overwintering buried in mud or muck underwater.
- If there are no basking sites on logs or rocks available, western painted turtles sometimes conserve warmth by stacking on top of each other.
- Western painted turtles are well adapted to survive cold weather. Hatchlings can withstand exposure to temperatures below freezing, at least as low as 14°F!
- When threatened, painted turtles will retract their head and legs into the protection of their hard shell

Conservation

Population trends for western painted turtles are largely unknown. Key threats to western painted turtle population are habitat loss, fragmentation and alteration due to conversion and encroachment of invasive plants. Other threats include road mortality, increased predation of nests and hatchlings, competition with nonnative species and human disturbances. American bullfrogs, an invasive species in Oregon, are known to eat western painted turtle hatchlings and may contribute to a lower survival rate for young turtles. The release of pet turtles, including non-native red-eared sliders, is a threat as these introduced animals may out-compete native species for habitat.

During the breeding season, be on the lookout for turtles crossing the road. Female turtles especially are vulnerable to road mortality as they look for good nest sites to lay their eggs. If you choose to help a turtle cross the road, be sure to move it in the direction it was traveling and leave it on the side of the road; females are driven to get to nesting habitat and deposit their eggs, and they know where they want to go! Wash your hands after you handle any turtles. Otherwise, don't disturb turtles when you see them.

Many of Oregon's western painted turtle populations occur on private land. If you have western painted turtles or their habitat in your backyard, you can take simple steps to enhance the habitat to encourage more turtles to make their home there. You can create basking habitat in waterbodies by putting out logs or branches, remove invasive plants around ponds, and create sunny places for basking.

In Oregon, western painted turtles are a state Sensitive Species and an Oregon Conservation Strategy Species (Species of Greatest Conservation Need). For more information about the conservation status of western painted turtles including special needs, limiting factors, data gaps, and conservation actions, refer to the Oregon Conservation Strategy.