

Painted Turtle

Chrysemys picta



Photo source: www.urbantreefrog.com

This reptile is named for its ornate red, orange and yellow colouring. It is the most widespread species of turtle in North America that can be found hiding in the foliage and muddy soils of freshwater ponds, or basking on a log in the warm afternoon sun.

Scientific Name: *Chrysemys picta*

Family: Emydidae (pond turtles)

Characteristics

The average length of a painted turtle is between 90 and 250 mm (3.5 - 9.8 inches). They can grow up to 25cm long, about the size of a dinner plate. Females are typically larger than males, while the males tend to have longer front claws.

The head, neck and limbs are distinguished by decorative yellow stripes. Their plastron (the interior shell on its stomach) has bright red marking and the carapace (the superior shell on its back) is usually a dark, olive green colour. Their head, limbs and tail can be drawn into the shell for protection against predators.

While the painted turtle is often confused with the red-eared slider, the slider's plastron is distinguished by its yellow colouring. The slider also has a distinct red ear marking behind its eye which is not found on the painted turtle. The slider is an introduced species, once pets that were released into the wild.

Life Cycle

Breeding begins after the winter season, once the ice has melted. In a 5-15 minute courting ritual, male turtles will swim after a mature female. The first to intercept her path wins the mating privilege. The pair will then mate in the soils of a pond basin. The male turtle will gently stroke his

partner's face with his front claws to encourage mating. In some cases, female turtles will pursue the male first.

The female lays her eggs between June and July, using her hind legs to excavate a 12cm deep hole in the ground. Painted turtles require very precise nesting sites, usually located above ground, on southern-facing slopes as far as 150m from water. The nests are made in loose soils with ample vegetation. The turtle will lay anywhere from 6 to 18 eggs, but will only lay one "clutch," or group of eggs, each year. Each of these eggs is about 3cm long and will be concealed with soil and vegetation.

The eggs typically hatch in September, but the hatchlings (baby turtles) can wait in the nest until the following spring to avoid exposure to the cold winter climate. This is a period of high risk for the hatchlings. They are extremely vulnerable to freezing winter temperatures and predation by raccoons and skunks.

The painted turtle can live up to 30 years.

Habitat

They inhabit the shallow waters of lakes, ponds, streams, rivers and ditches. They require wetlands with slow-moving water, muddy terrain and ample vegetation to provide shelter from predators. They are found in the southern-most regions of Canada, throughout the United States and as far south as Mexico.

Behaviour

The painted turtle has an omnivorous diet than includes a vast range of food sources, from insects, tadpoles, frogs and worms to plants and algae, as well as some carrion. The turtles must feed underwater and are not adapted for swallowing dry food.

Their active period begins in April (or when water temperatures reach 10 degrees Celsius) and lasts until September. During this active period they spend their time foraging for food, mating and basking in the warm afternoon sun. They demonstrate diurnal behaviour, usually feeding in the morning and resting underwater at night.

Rocks and fallen trees are their preferred basking locations, providing a surface for them to stretch out their limbs. The painted turtle is an "ectotherm" and does not generate its own body heat. Basking behaviour is an adaptation that allows them to absorb heat from their environment and aids in digestion.

During the winter season the turtle enters a period of hibernation. They hibernate in the muddy soils of shallow ponds and lakes which may freeze over in cold temperatures. They can remain in these waters by absorbing oxygen through the surface of their skin and relying on anaerobic respiration. Once the ice melts, the turtles can resume their mating practices.

Threats

The painted turtle is listed on the Blue List of species at risk in Canada. The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) has designated the south-western population of painted turtles in British Columbia as endangered. The total B.C. population is estimated to be somewhere around 3,000 individuals.

Declining populations in British Columbia are largely due to the impacts of human activity, particularly infrastructures such as roadways, shoreline development as well as soil compacting, recreational activity and hydroelectric dams. Much of the painted turtle's critical wetland habitat is

drained and re-purposed for human use. The close proximity of human communities is hazardous to the turtle. Traffic strikes and road kills are major threat to female turtles in particular, as they travel to and from nesting sites.

Their natural predators include raccoons, snakes, opossums, coyotes, feral cats, rodents, crows and other predatory birds, which tend to feed upon the vulnerable nest eggs. Herons, large species of fish and other turtles may also prey upon them.

What We Can Do To Help

In British Columbia, the painted turtle is protected under the *Wildlife Act* from persecution, human cultivation and possession. The most important conservation measures involve habitat protection, and greater education and awareness about the turtle's habitat.

Conservation guidelines recommend:

- not to capture wild turtles; as they rarely survive when kept as pets.
- avoiding disturbing turtles sighted near trails, parks, beaches and campgrounds, and keeping your pets on leash in these areas.
- keeping a generous distance when observing turtles at basking sites
- support sustainable planning and development to minimize impacts on wetland and riparian habitat
- support habitat restoration projects and help remove invasive species

In 2008, a group of researchers established the HAT Turtle Research and Conservation Project on Vancouver Island and the Gulf Islands, to gain greater knowledge about local turtle populations and to launch habitat restoration projects with the help of landowners. For more information on their stewardship project visit:

<http://hat.bc.ca/index.php/western-painted-turtle-stewardship>

Other Interesting Facts

- ⤴ It is the official reptile of four American States.
- ⤴ It is the only freshwater turtle native to B.C. and Alberta.
- ⤴ At Kikomun Creek Provincial Park in the B.C. Interior, as many as 60 turtles have been spotted basking together on one single log.
- ⤴ The gender of the turtle's hatchlings is determined by the temperature of the nest during the summer season. Warm temperatures trigger female hatchlings, where cooler temperatures produce male hatchlings.
- ⤴ Their shell serves as a kind of ear drum, enabling the turtle to hear sounds with low frequency vibrations.

Where & When to view the Painted Turtle

From April or May through to September, the painted turtle can be observed in British Columbia's southern interior. They are best viewed when basking on a sunny afternoon, typically on logs surrounded by water. It is not uncommon to see two or more turtles piled atop one another at these basking sites.

Written by Julie Whittet

Bibliography

The Reptiles of British Columbia: Western Painted Turtle. Retrieved from:
<http://www.bcreptiles.ca/turtles/westernpaint.htm>

Poff, S. (2011). "Trying times for the Western Painted Turtle." In *Canadian Wildlife Federation*. Retrieved from: <http://www.cwf-fcf.org/en/resources/online-articles/news/funding-stories/trying-times-for-the-western.html>

HAT: The Western Painted Turtle. Retrieved from: <http://hat.bc.ca/index.php/western-painted-turtle-stewardship>

Bartels, A.J. (2010). The Turtles of Nebraska in *the Prairie Fire Newspaper*. Retrieved from: <http://www.prairiefirenewspaper.com/2010/10/the-turtles-of-nebraska>

Web Resources:

Western Painted Turtle Identification Guide. Retrieved from:
<http://hat.bc.ca/attachments/Turtle-IDGuide-May2008.pdf>

BC Frogwatch Program: Painted Turtle. Retrieved from:
<http://www.env.gov.bc.ca/wld/frogwatch/publications/factsheets/turtles/painted.htm>