The *red-eared slider* (*Trachemys scripta elegans*) is a medium-sized freshwater turtle native to the south-central United States. This opportunistic forager consumes small fish, crayfish, aquatic plants, and aquatic invertebrates (including insects, worms, shrimp, snails, and amphibians), as well as dead material. Hatchlings as shown in the photo (left) are about 1 inch (2.54 cm) in diameter, and a slider’s lifespan can exceed 20 years, with shell lengths reaching nearly 10 inches. The most noticeable features of the red-eared slider are the red stripes behind each eye. The top of the shell, called the carapace, is dark green, and the underbelly (called the plastron) is bright yellow and may have a pattern of large dark spots. There are yellow stripes along the neck and legs.

**Species in the news**

Jane Hartline shifts focus from the Oregon Zoo to discouraging ownership of exotic pets (2010); http://www.oregonlive.com/pets/index.ssf/2010/06/jane_hartline_shifts_focus_fro.html

**Learning extensions**

*Storyteller* activity available in Teacher Guide to Activities at MenaceToTheWest.org

**Resources**

Information from USGS about the red-eared slider: http://search.usa.gov/search?affiliate=usgs&utf8=%E2%9C%93&query=red-eared+slider&commit=Search

**Why you should care**

Released pet turtles, including the red-eared slider, could transmit diseases or parasites to turtles already in the habitat. The red-eared slider is also highly competitive with native turtles for food resources, basking sites, and nesting sites. Native western water turtles (in Oregon and Washington, the western pond turtle and the western painted turtle; in California, the western pond turtle) are listed as State Rank: California S3 (rare, uncommon, or threatened), Oregon S1 (imperiled), and Washington S1 (critically imperiled). This means that the species are in danger of extirpation, or local extinction from their native range in Oregon, due to small population sizes, habitat loss or degradation, and/or immediate threats.

**How they got here and spread**

This turtle is generally introduced to new areas by being “set free” by pet owners, which often occurs when the turtles outgrow their tanks or when owners grow tired of caring for them. It spreads through reproduction in the wild and dispersal among habitats. Red-eared sliders have a larger clutch size and are more aggressive than the native pond turtles.

**What you can do**

Think twice before buying a pet turtle. They grow extremely large and live for many years. If you do own a turtle that you no longer want as a pet, gather information on alternative options for unwanted pets in your state, then do your research and take it to a suitable home. In Oregon, it is illegal to have a pet red-eared slider, so you should call the office of the Oregon Department of Fish and Wildlife that is closest to you and ask them what to do. Sales of the red-eared slider continue, even though selling turtles less than four inches across was banned nationally in the 1970s to reduce the spread of salmonella. Therefore, if a red-eared slider is found in Washington or California, it should be reported to the state’s Department of Fish and Wildlife.

Even though they may be cute and small in the beginning, red-eared sliders often grow large and become more difficult to take care of than pet owners originally expect.
The red-eared slider is a medium-sized turtle with olive to brown skin and carapace, and yellow stripes or spots. The distinguishing feature is the red patch, or line, on each side of its head. Adult males have longer and thicker tails and longer claws than females. Turtles lay eggs that are ovoid in shape and about 1.5 inches in length and 1 inch wide. Green coloration of the carapace is much brighter in juveniles.

After introduction to a new habitat, the red-eared slider can grow quickly and soon outcompete native turtles for prime sunbathing locations and food supplies.

**NATIVE AND INVASIVE RANGE**

The red-eared slider is native to the south-central U.S., covering the Midwestern states and extending east to West Virginia and west to New Mexico, and as far south past the Rio Grande River into northeastern Mexico, and in much of the Mississippi River basin.

This species has been introduced across much of the globe, including Europe, Asia, Australia, South Africa, the Caribbean, and the Middle East.

**United States distribution**

In North America, the red-eared slider has been introduced to new waterways across much of New England and the Great Lakes region, and has been observed in a total of 23 states. It is well established in the western coastal states of California, Oregon, and Washington.

Large populations are found throughout the Willamette Valley and in other areas of Oregon as the...
Red-Eared Slider

result of illegally released pets. In Washington, the red-eared slider has been found in the Puget Sound area as well as in the southeastern portion of the state.

The species is invasive in many counties of California, particularly along the western coastal areas of the state. Recently, red-eared sliders were discovered in the San Francisco area, including Lone Mountain Lake and the Golden Gate National Recreation Area.

ECOLOGY

Habitat and diet

The red-eared slider prefers freshwater lakes, riparian zones, and wetlands with abundant basking spaces, such as logs, rocks, and bird nests. It is commonly found in ponds, lakes, and still backwaters of rivers. It has a wide-ranging diet including plants, insects, snails, tadpoles, crayfish, worms, and fish. Juveniles prefer more protein in their diets and consume more vegetation as they mature.

Courtship and reproduction

Mating begins in May, and egg-laying takes place between May and early July. A male will devote hours to maneuver the female so that she is face to face with him. He then stretches out his forelegs in front of his head and waves his claws in her face. This is followed by more activity and then mating. A female typically lays 10–15 eggs in a clutch.

COOL FACTS

Turtle shells are formed from fused ribs.

The lifespan of a red-eared slider can exceed 20 years, and its shell can reach lengths of nearly 10 inches, or the size of a large dinner plate.

The attractively patterned red-eared slider is the most extensively bred and distributed pet turtle species.

Releases of pet turtles reached a peak when the United States exported 52 million individuals during the “Teenage Mutant Ninja Turtle” television cartoon craze between 1989 and 1997.

The red-eared slider is number 93 on the Global Invasive Species Database’s list of 100 of the World’s Worst Invasive Alien Species (http://www.issg.org/database/species/search.asp?st=100ss).

In Idaho, current pet owners of the red-eared slider are able to obtain a permit if they possessed the turtle prior to February 29, 2012, when ownership of the reptile was prohibited.
HOW THIS SPECIES SPREADS
The red-eared slider is one of the most commonly owned pet reptiles, and the most commonly exported reptile species in the U.S. There is a large online market for the turtles, and they are often bought by pet enthusiasts across the country and around the world. When a pet turtle outgrows its tank or the interest of its owner, it is often released into a pond, lake, stream, or river in the local environment. They are also released into the environment as rescues from markets selling them for food.

ECOLOGICAL IMPACTS
When established out of their native range, red-eared sliders compete with smaller native turtle species for nesting areas, basking sites, and food sources. Native turtle populations are often reduced through these competitive actions.

Additionally, pet turtles often carry parasites or disease that can devastate native turtle populations. Parasites or disease can result from commercial breeding operations that take place in densely populated and unsanitary conditions.

RED-EARED SLIDERS IN JAPAN
The red-eared slider is invasive not only in the United States but also in many other parts of the world, including Japan. With an ecosystem similar to that of the Pacific Northwest, Japan deals with many of the same invasive plant and animal species. The red-eared slider was first introduced to Japan as a pet in the 1950s and has since become established throughout most of the country.

Another similarity between the United States and Japan in the fight against invasive species is that scientists have found that the release of pets can be harmful to the released individuals as well as the ecosystem. Researchers in Japan have discovered a total of seven species of foreign parasitic helminths in red-eared sliders from two separate locations. Of these seven, three helminths are alien to Japan and most are likely brought in by foreign trade of the red-eared slider. The parasites could potentially have a harmful effect on native turtle species due to cross-transmission, which makes this another example of the indirect damages an invasive species can have on a new ecosystem.

MANAGEMENT CURRENTLY IN PLACE
• It is illegal to release or move native or invasive turtles in the wild without a permit.
• In Oregon, it is prohibited to buy, sell, or possess many turtle species, including the red-eared slider.
• Since 1975, it has been illegal in the United States to sell or distribute turtles with shells that measure less than four inches in length. This is attributed to the potential transmission of salmonella to pet owners from the turtles. See the Centers for Disease Control and Prevention website for more information (http://www.cdc.gov/Features/SalmonellaFrogTurtle/).
• Washington is currently undergoing a statewide recovery effort of the western pond turtle due to the recent decline in numbers. The decline can be attributed to commercial exploitation for food, loss of habitat, and introduced predators.
• Sales of baby red-eared sliders continue in business districts of Los Angeles and other California cities, so the California Department of Fish and Wildlife...
Red-Eared Slider

Many classrooms have found creative ways to educate people about the red-eared slider problem. Left: Students in Japan illustrate a story of their classroom finding a home for their classroom red-eared slider pet. Center: Oregon Sea Grant Extension poster (Amanda Slade). Right: Entry in the Oregon Invasive Species Council’s 2015 “Don’t Let It Loose” poster contest (Chase Anderson, Milwaukie High School, Honorable Mention).

often does random inspections and confiscates all turtles with a carapace less than four inches long. Store owners can also be fined up to $1,000 for illegally selling animals.

• Under Idaho law, a person must apply for a permit to possess, cultivate, import, export, ship, or transport the red-eared slider, which is listed as an invasive species in the state.

WHAT YOU CAN DO

• Think twice before you buy a turtle as a pet. Turtles can live a long time and can grow to be very large.

• If you have a pet red-eared slider that you no longer want, you should find a suitable home for it rather than releasing it. Contact local turtle rescue centers or herpetology societies. Also, make sure that you are aware of the laws regarding red-eared sliders as pets in your state.

• When you find a red-eared slider in Oregon, call 1-866-INVADER or visit the website OregonInvasivesHotline.org

• Report native and nonnative turtle sightings on the Native Turtles of Oregon website.

• In Washington, observations should be submitted to Lori Salzer of the Washington Department of Fish and Wildlife, at salzeljs@dfw.wa.gov

• In California, report your finding to California Department of Fish and Wildlife by completing the report at https://www.wildlife.ca.gov/Conservation/Invasives/Report, by e-mail (Invasives@wildlife.ca.gov), or by calling 866-440-9530.
REFERENCES


ADDITIONAL RESOURCES

California Department of Fish and Wildlife Fact Sheet

Learn about the invasive red-eared slider and its impacts in California.

https://www.wildlife.ca.gov/Conservation/Invasives/Species/Redeared-Slider [last accessed August 2016]

California Turtles Range Maps

This site provides the ranges of native, invasive, and sea turtles of California.

http://www.californiaherps.com/turtles/turtlesmaps.html [last accessed August 2016]

Invasive Species 101

Created by Oregon Sea Grant Extension WISE Program,
Red-Eared Slider

this site is for those interested in invasive species education and awareness in their local watershed.
https://invasivespecies101.wordpress.com/ [last accessed August 2016]

Native Turtles of Oregon
Learn more about the native turtles of Oregon that the red-eared slider successfully displaces.
http://www.willametteturtles.com/ [last accessed August 2016]

Oregon Sea Grant: Watershed and Invasive Species Education
At this site, Oregon Sea Grant provides educational tools for teachers and students.
http://seagrant.oregonstate.edu/invasive-species/classroom-plants-and-animals [last accessed August 2016]

Oregon Zoo, Oregon Department of Fish and Wildlife, and Native Turtles of Oregon
These organizations have made identification cards for Oregon’s native and nonnative turtle species.
http://www.dfw.state.or.us/conservationstrategy/docs/TurtleIDCardFRONT.pdf [last accessed August 2016].

Oregon Public Broadcasting
OPB features an online program, “The Silent Invasion,” describing Oregon’s battle against invasive species.

USGS
A list of sources of information about the red-eared slider throughout the United States.
http://search.usa.gov/search?affiliate=usgs&utf8=%E2%9C%93&query=red-eared+slider&commit=Search [last accessed August 2016].

Washington Department of Fish and Wildlife
Current information on Washington’s conservation topics including the western pond turtle recovery plan.
http://wdfw.wa.gov/conservation/ [last accessed August 2016].

Washington Invasive Species Council
Learn more about the invasive species of Washington and report sightings on this website.
http://www.invasivespecies.wa.gov/ [last accessed September 2016].