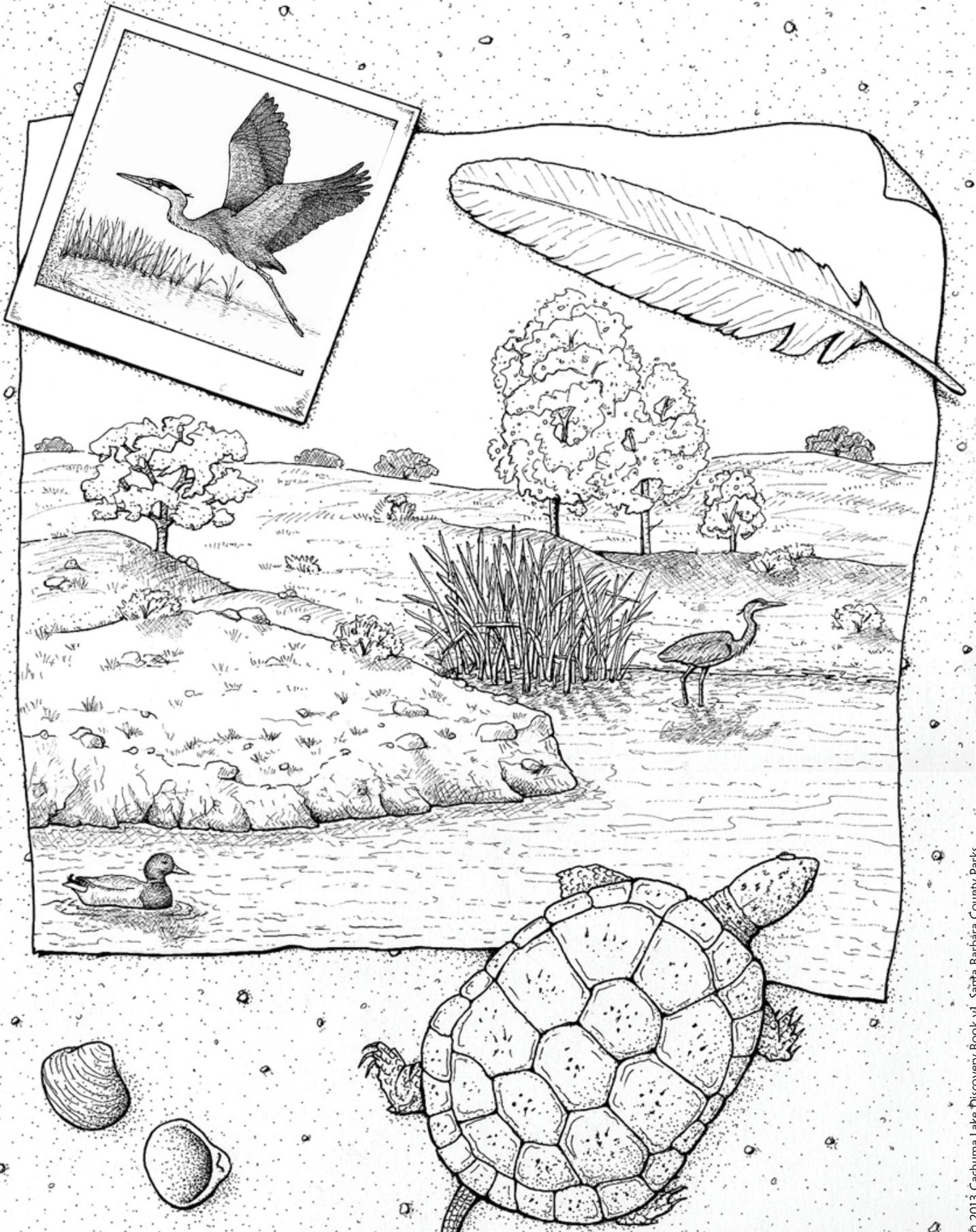


Freshwater Marsh Habitat



Freshwater Marsh Habitat

Marsh habitat is wet! A marsh has shallow water and a muddy bottom with plants growing in it. Animals find food and shelter in marshes. Many animals use the marsh above the water, below the water, or both.

Many kinds of birds use marsh plants above the water.

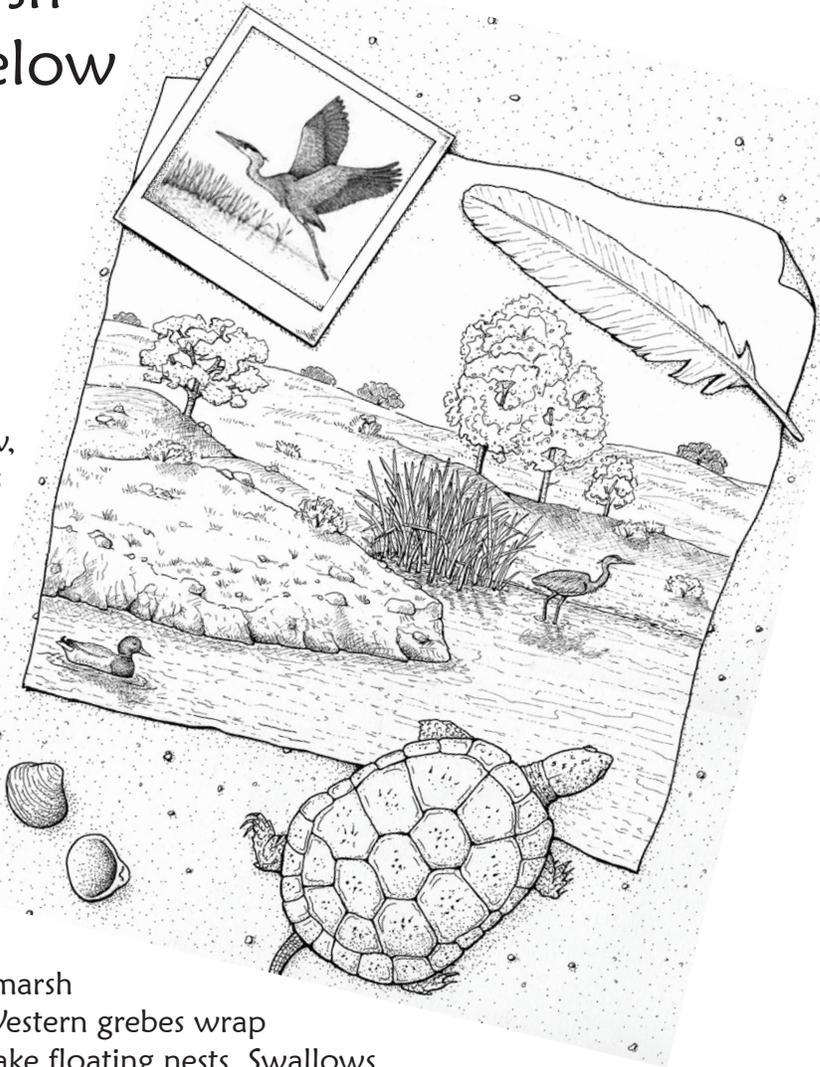
Red-winged Blackbirds, Black Phoebes, and other birds use tule, cattails, willow, and other tall marsh plants. These birds often build their nests here. If you wait quietly in a boat near the freshwater marsh, you can hear the songs and breeding calls of many different birds.

Animals use marsh plants at the water line for nests, food, and camouflage.

Mallard ducks, coots, and beavers use marsh plants for nesting, food, camouflage. Western grebes wrap plants around emergent branches to make floating nests. Swallows and eared grebes eat insects on the surface of the water. Great blue herons and turtles use tule for camouflage while they hunt for fish and frogs that hide among the underwater stems. Ducks dip below the surface to eat insects, algae, and plant stems and leaves.

Fish, frogs, and insects use marsh plants under the water.

Many aquatic animals lay eggs under water on the stems of plants. They also take cover from larger fish and other predators. Many species of fish feed on larvae, insects, and smaller fish. Crayfish and clams feed in the soft, muddy floor of the marsh.



- Marsh subjects in this book:
- Great blue heron
 - Mallard
 - Tule
 - Western pond turtle

Habitat:

Freshwater Marsh

Heron Facts

- Overall: Tall, gray, slender bird with a very long neck and legs and a short tail

- Length: Beak tip to tail, 46 inches

- Diet: fish, frogs, aquatic insects, rodents, snakes, lizards, etc.

- Wingspan: 72 inches

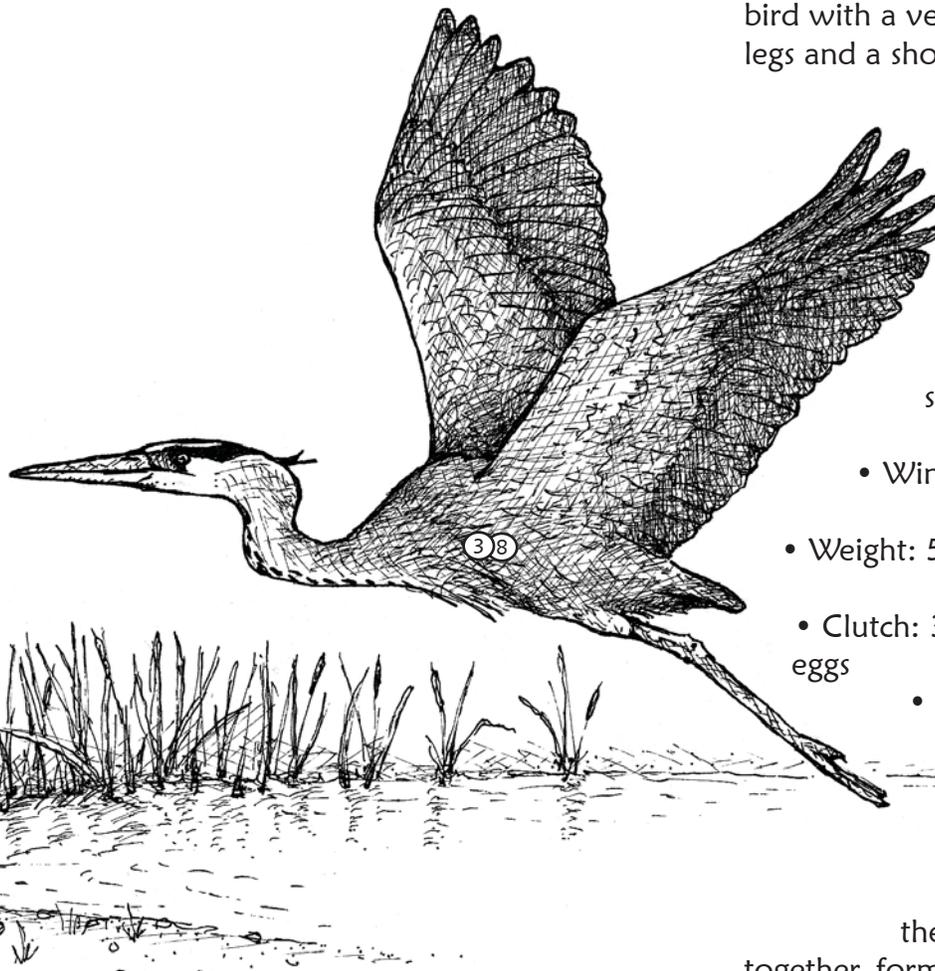
- Weight: 5.3 pounds

- Clutch: 3 to 7 pale blue eggs

- Nest: Platform nests are built in the tops of trees.

Heron build their nests close together, forming rookeries.

- Voice: If you get too close to a heron, it will often take flight and let out a few loud, harsh “Squaaks!”



Great Blue Heron

Ardea herodias

Great blue herons are large wading birds. They walk along the lake shore, hunting for fish, frogs, and other prey.

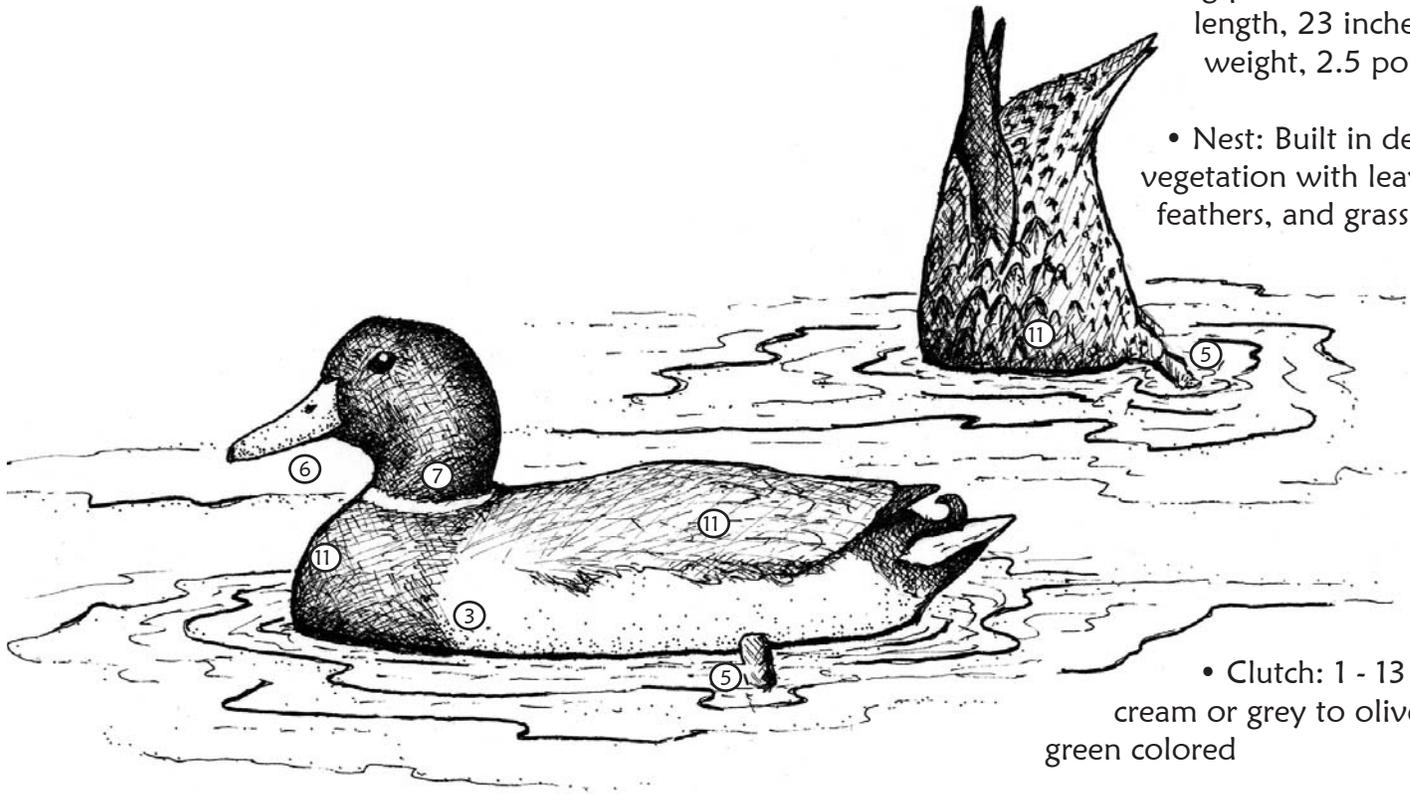
Great blue herons have excellent camouflage. You'll have to search carefully to spot them along the shore of Cachuma Lake. Their long, slender bodies and legs and grayish blue feathers help them blend into the shoreline. They look just like bare branches that stick out of the water. Great blue herons stand perfectly still or walk very slowly while waiting for prey. Then they lunge forward with their long necks, and snap up prey with their long, sharp bills. They swallow prey whole, without chewing. Don't try that at home!

Habitat:

Freshwater Marsh

Mallard Facts

- Mallards are the most abundant duck species in North America.
- Size: Wingspan, 35 inches; length, 23 inches; weight, 2.5 pounds
- Nest: Built in dense vegetation with leaves, feathers, and grass



- Clutch: 1 - 13 eggs, cream or grey to olive green colored
- Voice: most common is "Quack, Quack, Quack!"
- Top Speed: 60 miles per hour

Mallard

Anas platyrhynchos

Mallards are dabbling ducks. Their tails stick up in the air while they eat plants just under the water. They also eat seeds, insects, snails, and crawfish near the reeds of the shoreline.

Female mallards are called hens and males are called drakes. As with many kinds of ducks, male and female mallards look different from each other most of the year. Usually, drakes are easy to recognize with their bright green heads and curled black tail feathers. When they molt in summer, however, they become much more camouflaged like the females. Hens have brown and tan feathers. They can be very hard to see as they cling to the shoreline with ducklings in tow. Mallard ducklings are covered with dense down which keeps them warm and helps them float on the water. Adult mallards have a bright purple patch that shows on their wings when they stretch or fly.

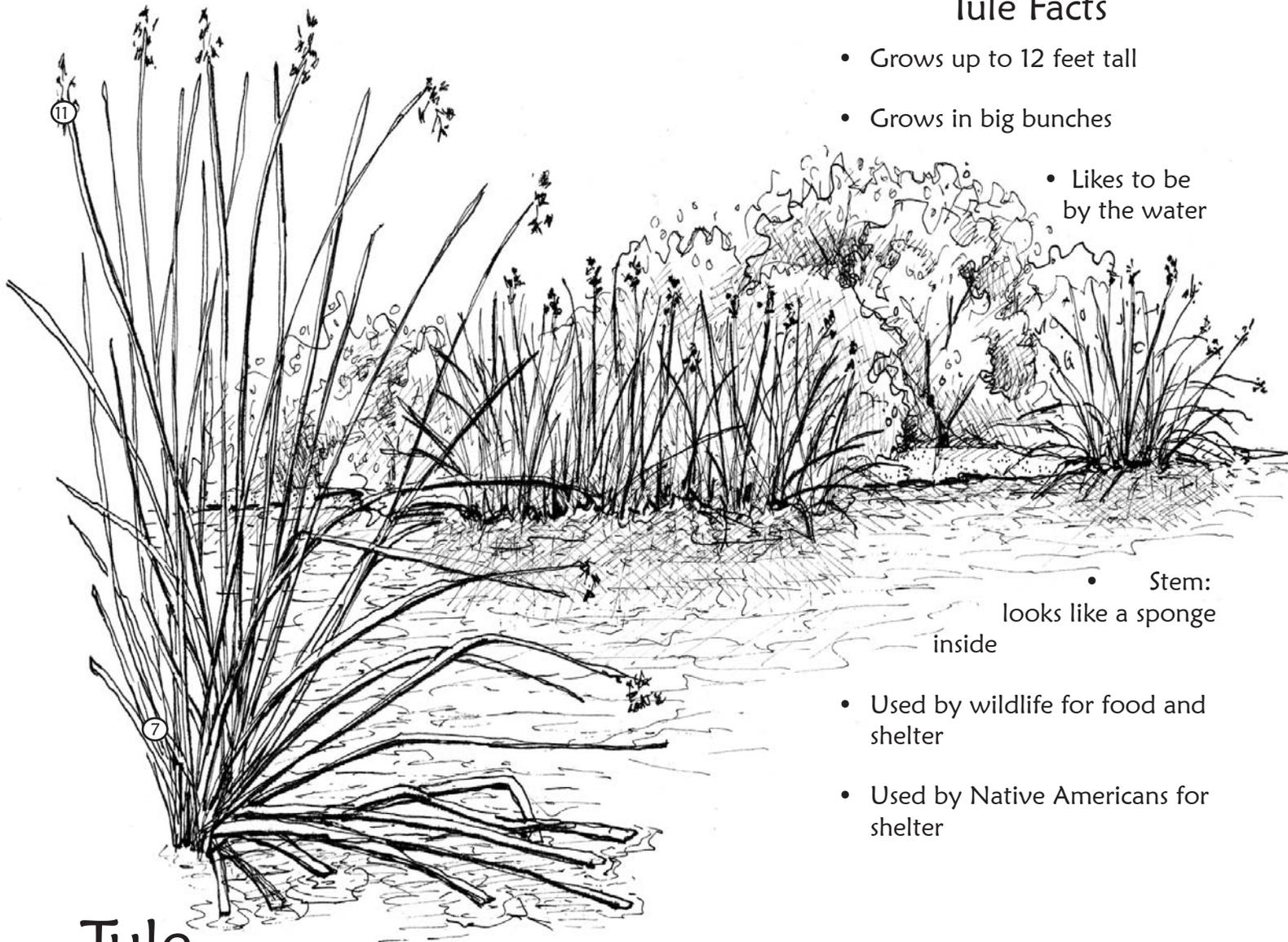
Colors: 1/Black, 2/White, 3/Gray, 4/Red, 5/Orange, 6/Yellow, 7/Green, 8/Blue, 9/Pink, 10/Purple, 11/Brown

Habitat:

Freshwater Marsh

Tule Facts

- Grows up to 12 feet tall
- Grows in big bunches
- Likes to be by the water



- Stem: looks like a sponge inside

- Used by wildlife for food and shelter
- Used by Native Americans for shelter

Tule

Schoenoplectus species

Tule is a very large plant. It grows in fresh water marshes. The leaves look like giant grass. Birds build nests with tule, and people built houses with it.

Tule was used by many Native Americans. Chumash people used tule to weave baskets, bowls, sleeping mats, hats and clothing. They used tule stems to thatch their houses. They also built balsa boats made from the round stem of the tule which could easily float. These canoes were ideal for fishing in calm waters of rivers, lakes and marshes. Many birds build nests with tule. Some wrens and red-winged blackbirds like to build their nests in the protective cover of the tall tule plants. Tule is often used for ecological purposes such as being planted in waterways to stop erosion.

Habitat:

Freshwater Marsh

Pond Turtle Facts

- Color: The carapace, or upper part of the shell, can be olive green or brown.

- Size: The carapace ranges from 4.5 to 8.25 inches

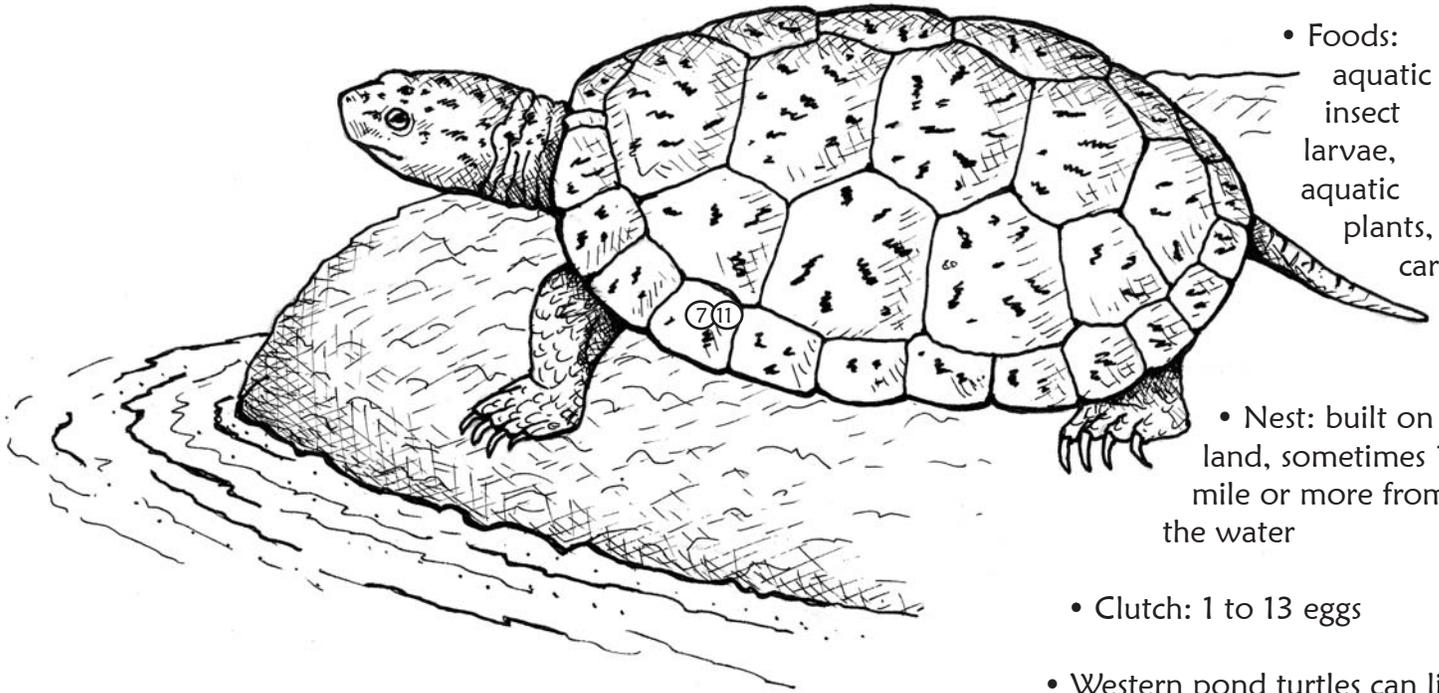
- Foods: aquatic insect larvae, aquatic plants, carrion

- Nest: built on land, sometimes 1/4 mile or more from the water

- Clutch: 1 to 13 eggs

- Western pond turtles can live more than 40 years

- They are the only turtle native to California.



Western Pond Turtle

Clemmys marmorata

Western pond turtles are freshwater turtles. They swim and feed in shallow water of marshes and streams. Look for them sitting on rocks by the lakeside.

Western pond turtles are reptiles. They are ectothermic. This means they use energy from outside their bodies, such as sunlight, to raise their body temperature. When turtles are warm, they become active. You can see western pond turtles at Cachuma Lake in late spring and summer. They bask together in the sun on rocks, logs, in shallow water, and along the shoreline.

Freshwater Marsh Habitat: Think About It

Great Blue Heron

Great blue herons are solitary hunters.

- Think about the way they capture their prey. Why wouldn't it work for them to hunt in groups?
- There are 42 miles of shoreline on Cachuma Lake. If there were one great blue heron on shore every 2 miles, how many would there be?

Mallard

- Mallards are found throughout North America in any type of wet habitat. Have you seen them in other habitats?
- Mallards can sleep with one eye open. Why would this be useful?
- Mallards spend time on land, at the shoreline, and in the water. What are some of their predators from these different habitats?

Tule

- Tule likes to have its feet wet, that is, it likes to grow in water. How could a warming climate affect tule?
- In some dry years, the level of Cachuma Lake drops below where tule grows. Can you name some wildlife that may be affected by this, and how?

Western Pond Turtle

The California Department of Fish and Wildlife listed the western pond turtle as a "Species of Special Concern".

How might the following affect Western Pond Turtles?

- Building and development
- Introduced species
- Taking turtles for food or pets
- Water pollution
- Habitat preservation