level of water in the ponds. By lifting the boards, water can be released into the ponds, or they can be put in place to hold back water during the summer to keep seasonal ponds dry, mimicking natural weather patterns.

To continue tour, turn left at next intersection.

10. Tule Marsh

Bulrush (tule) can be distinguished from cattail by the rounder and greener stems of the plant. Here, tules live alongside of cattails, also providing food and cover for wildlife. The stems of tules were often used by Native Americans to build canoes, decoys, and shelters. Tule elk, which have been reintroduced to some wetlands in recent years, were once abundant in the vast tule marshes in the Central Valley.

11. Marsh Wrens and Red-winged Blackbirds

As you walk by the permanent pond, listen for the calls of the Marsh Wrens and Red-winged Blackbirds. Marsh Wrens are small perching birds with a distinct call, but they are secretive and well camouflaged among the reeds that they are almost impossible to see. You can identify the Red-winged Blackbird by its brilliant red patch on the wings. Watch and listen to these birds as they fly in and out of the reeds. Both birds build nests that are anchored to cattail or tule stems. **At next trail junction, turn left.**

12. Wood Duck Boxes

If you look out into the permanent pond you will notice two boxes. These boxes may be used by Wood Ducks for nesting, and are used frequently along Putah Creek and other riparian areas. Because so much riparian habitat has been destroyed throughout the west, nest boxes like this one have been placed to compensate for lost nesting sites. After hatching, the ducklings are called from the nest by the hen within one day, and are immediately led to water.

13. Aquatic Organisms

From water striders to mosquitofish, the Demonstration Wetlands are home to a number of aquatic organisms. Students use the ponds to search for insects and fish to learn about habitat and ecology. In the wetland pond study activity, students learn about the importance of food chains and water quality.

Notice the small birds hunting insects around the pond.

14. Mosquitofish

While looking in the pond you may notice schools of tiny fish. These miniatures are actually full-grown mosquitofish. Mosquitofish, as their name implies, eat mos quitoes and other larval stage insects. The Sacramento/Yolo Mosquito and Vector Control District stocks these ponds as well as the ponds at the Yolo Bypass Wildlife Area with these small predators.

Wetlands working for you

Wetlands are important to both wildlife and you. They provide many benefits, including:

- flood control
- filtering sediments and agricultural runoff
- wildlife habitat
- recreation
- groundwater recharge
- research and educational opportunities

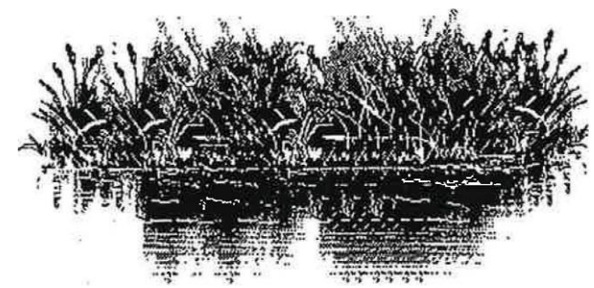
What can you do to protect wetlands?

If you have enjoyed the beauty and wonder of these wetlands today, you can help preserve them for tomorrow. Here are some things you can do to help protect our valuable wetlands:

- support legislation for wetland conservation
- join a wetland conservation group
- buy a Migratory Bird Hunting and Conservation Stamp (Duck Stamp)
- conserve water
- keep storm drains clean of pollutants
- become a volunteer for the Yolo Basin Foundation (call 530-758-1018)

Come back to these ponds and the Yolo Bypass Wildlife Area again and again. You will witness the ongoing transformation from cropland back to a thriving Central Valley wetlands.

Self-guided tour of the Yolo Bypass Wildlife Area Demonstration Wetlands



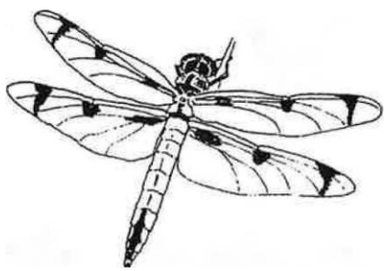
Produced by Yolo Basin Foundation & CA Department of Fish and Wildlife
www. yolobasin. org (530) 758-1018

special thanks:
Sacramento National Wildlife Refuge and the Thornton S. and Katrina D. Glide Foundation

Revised CDFW/WLB 4/2018

Welcome to the Yolo Bypass Wildlife Area Demonstration Wetlands at the Department of Fish and Wildlife headquarters. Created in the summer of 1998, this wetland is used for teaching people about different wetland habitats and their importance as an ecosystem in the Central Valley.

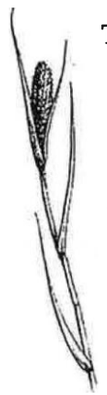
These wetlands are the result of a joint project of many partners led by the Yolo Basin Foundation and the Department of Fish and Wildlife. With the help of many groups, and volunteers, the area has grown to support more than 50 species of avian wildlife that pass through the area or take up residence.



What are wetlands?
As the word indicates, wetlands are where water and land meet. Wetlands can be any size or shape, and are found on all continents except Antarctica. There are many types of wetlands, including swamps, bogs, marshes, wet meadows, sloughs, playa lakes, estuaries, moors, prairie potholes, and vernal pools.

1. Seasonal Wetlands
Before the Sacramento Valley was inhabited by European settlers, the Sacramento River flooded the valley, creating vast, seasonal wetlands.

In California, over 95% of original wetlands have been lost to development and agriculture. Seasonal wetlands, like the one you see here, are shallow ponds that are filled with water from early fall to spring. During this time many birds that favor shallow ponds, such as Herons and Egrets, Mallards, Pintail and other dabbling ducks will come to feed here.

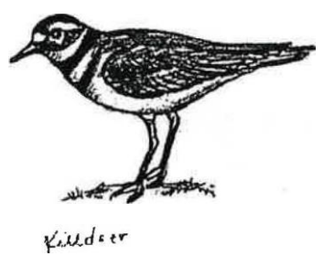


To follow tour, turn right from here.

2. Swamp Timothy
Swamp timothy, the slow growing, protein-filled plant that you see covering the bottom of the seasonal pond, provides an excellent source of food for waterfowl. Though non-native, It is cultivated by wildlife managers because of its high nutritional value for migrating waterfowl.

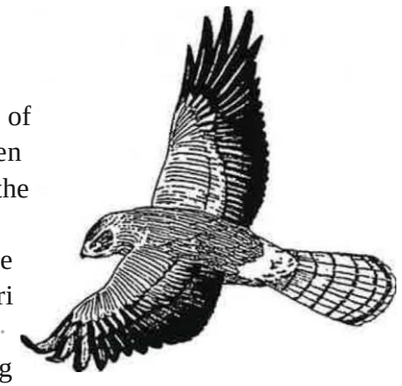
3. Shorebirds
Killdeer, Yellowlegs and Black-necked Stilts are the most common shorebirds seen at the Demonstration Wetlands. Shorebirds feed by scooping, probing, or picking bugs out of the mud.

Listen for the sharp trill of the killdeer as it feeds on the banks of the seasonal pond.



4. Oak Savanna
The oak savanna (or upland) habitat, located on the outside of all the ponds, is generally drier and higher in elevation than wetland ponds. Tall grasses provide nesting areas and refuge for birds, mammals, reptiles, and amphibians. Native grasses, such as meadow barley and blue wild rye, and shrubs like coyote brush are the dominant plants found here. Jackrabbits, ground squirrels, pheasants, red-tailed hawks and coyotes feed in this habitat.

As you walk, look and listen for signs of wildlife.



5. Raptors
A great number of raptors have been spotted around the Demonstration Wetlands. In the winter, an American kestrel can be seen perching in the trees, while Red-tailed hawks and Turkey vultures are often seen flying overhead year round. A Cooper's Hawk also frequents the area at certain times of the year.

6. Willow Riparian Forest
Riparian means "stream side" or near water. Several types of willows, along with cotton wood, box elder and white alder were planted in this area, in addition to elderberry and California sycamore. All are adapted to living in wet or damp soil and provide favorable habitat for wildlife species. **From here, go on left path.**

7. Permanent Wetlands
The permanent wetland pond, which is the largest of the three ponds here, is characterized by the presence of emergent vegetation that has underwater roots, stems, and leaves that rise above water. Students visiting the Demonstration Wetlands have contributed to the restoration process here by planting sedges and rushes, species that tolerate both the wet winters and hot, dry summers of the Central Valley.

During your walk you may notice a smell of rotten eggs or decomposition. This odor is from decaying plants and animal matter and bacteria that releases sulfur-containing gas as it breaks down.

8. Cattails
Cattails are the most common plant in the permanent ponds. When mature, the plant will grow a long dark fruit on the top of the stems. The stems provide cover to birds, such as Marsh Wrens and Red winged Blackbirds. Native Americans used cattails for food, bedding, diapers and other things.

Wetland plants have adapted to living in oxygen·poor soils. Air filled tubes run from the stems to their roots, forming a "snorkel" through which the plant can breathe. Cattail and tule have additional air filled cells and breathing tubes that provide structural support.

9. Water Structures
Water control structures are used in the Demonstration Wetlands as well as in the Yolo Bypass Wildlife Area to control the