



When the cottonwoods succumb to water, erosion, or old age, the dying snags do not go to waste. Insects and fungus attack the weakened wood, and woodpeckers drill to reach the insects. As the wood falls away, cavity nesting birds such as chickadees, woodpeckers, and brown creepers move into the holes. When the tree falls, mice, snakes, raccoons, and foxes take their turns inside. At last, devoid of strength, the tree gives its last energy to support a new generation of forest trees and bushes.

belted kingfisher



Where the conditions needed to create a riparian woodland no longer exist, the forest cannot grow. A visible boundary may be seen where the forest gives way to open water, swamps, or willow groves. These "edges" between habitats are particularly favorite spots for many wildlife species, who have discovered that they can enjoy the best of both worlds. A bird may find a meal of insects in a swamp, but return to the forest for shelter. Watch the "edges" and forest openings along the trail for signs of wildlife.

common flicker

chickadee nest hole



As you leave, feel free to pause again to feel the currents of this woodland: the ebb and flow of the tides, the growth and death of a tree, the flick of a frog's tongue as it catches a fly. These treasures and more may be found by returning to the forest in different seasons and times of day, and by visiting similar forests growing along the rivers of western Washington.

Don't forget to check the water level in the slough when you re-cross the bridge.



Even the works of man fall to the passing of time. These pilings once stood strong when they were used, possibly for logging operations during the Brown Farm days of the early 1900's. Today, with weakened bases and rusting cables, they go the way of the cottonwood snags, feeding the worms and enriching the soil.

beaver trees

raccoon

tree frog

garter snake

By continuing out the Brown Farm Dike Trail, you may view the grasslands, freshwater marshes, salt marshes, and other habitats of Nisqually National Wildlife Refuge.

Enjoy your visit.

Nisqually National Wildlife Refuge
U.S. Fish and Wildlife Service
Department of the Interior

NISQUALLY
RIVER TRAIL

REC
1979

This trail may be closed to the public when red-tailed hawks are nesting in the spring. If the trail is closed during your visit, please feel free to visit other parts of the refuge.

Brown Farm
Dike

Nisqually River Trail runs for 1/2 mile (.8 km) through a riparian woodland. Those able to walk over slightly irregular ground should have little difficulty completing the loop. Look carefully around the symbol markers and you will find the features described in this guide. Come, the trail beckons you to discover the cool... damp... secrets... of a riparian woodland



Each member of this habitat is adapted to withstand the onslaught of these rapid changes.

Some may leap to high ground while others try to retain moisture until the waters return. As you cross the bridge, can you find other ways plants and animals are adapted to life in a riparian woodland?

stinging nettles

sword fern

Remember how high the water is now and measure it again when you return

jewelweed



A brief walk through the forest brings you to a dying slough. Silt and debris carried in by the tides have filled up this channel, creating a fertile soil for growing plants. As more plants grow, more soil is held until the tides can no longer flow through. When the slough fills, the forest will triumph.

red-legged frog

skunk cabbage

horse-tails

mallard

thimble-berry

salmon-berry

wild gooseberry

snowberry

black-berry



As you walk beneath the cottonwoods to the river, you will pass many kinds of bushes growing on the forest floor. Many have tasty berries and seeds that are an important source of food for wildlife. How many can you identify along the trail? DO NOT taste any berries unless you are sure what they are.

black cotton-wood

hawk nest



As the slough dies out, you will become surrounded by tall cottonwood trees. No, the wood doesn't look like cotton, but the seeds do. These fast growing trees serve as the high-rise apartments of the forest. The high canopy of leaves provides a safe nesting and perching spot for birds, including red-tailed hawks. Squirrels, songbirds, insects and tree frogs may be seen among the mossy trunks.



red-tailed hawk



Battered trees and sandy beaches lead you to the Nisqually River. Rising and falling, soothing and raging, it is the life's blood of the riparian woodland. Strong yet vulnerable, it may bring gifts of fresh water and rich sediments, or succumb to spilled pollutants and the restrictions of upstream dams.

great blue heron

hooded merganser

river otter

golden eye

muskrat



The damp bottomland between the river and the next bridge teems with insects. Although some may feed on you, the insects themselves are an important source of food for other forest animals. By feeding on plants, animals, and decaying organic matter, insects convert those materials into an abundant source of protein. Remember, the bug you squash may be someone's lunch!

mosquito larvae

millipede

sow bug

satyr anglewing