

U.S. Fish & Wildlife Service

Conboy Lake

*National Wildlife
Refuge*





A Hidden Treasure

Picture a rustic cabin in a grassy meadow bursting with colorful blooms. The smell of tall, ruddy-barked ponderosa pines fills the air. The distinctive trumpeting of sandhill cranes echoes throughout the Refuge as they descend to their valley home. Calm water reflects the rich and varied greens of meadows and forested hills. Dancing glints of sunlight catch the eye as a stream winds its way from hill to lake.



Elk in the spring on Conboy Lake National Wildlife Refuge.

Left: Camas with Mt. Adams in the background.

©Darryl Lloyd

This, in part, is the experience of Conboy Lake National Wildlife Refuge, and you are welcome here. In fact, people have been coming here for millennia. Native Americans found life-sustaining resources in abundance, and nineteenth century settlers could see its tremendous potential as a place to call home. All the while, the wildlife lived here, too.



This blue goose has become the symbol for the National Wildlife Refuge System.



A Diversity Of Communities



©Dr. Lloyd Glenn Ingles



Although much of the refuge is open meadowland, it does contain forested areas of lodgepole (bottom) and ponderosa pine — essential habitat for animals like the Steller's jay (top).

Precious homes are found on Conboy Lake National Wildlife Refuge. Many are in stream, lake or wetland areas. Others are in the uplands, where ponderosa and lodgepole pines, bitterbrush, snowberry or sagebrush grow. Some homes are in the grassy prairie that sweeps in and out of the trees and up to the water's edge.

Rainbow and brook trout live in the streams. Tundra swans, pintail, teal and mallard ducks need the lake for food and rest. Frogs, salamanders and toads grow in the adjacent calm pools. A rich variety of meadow plants host colorful dragonflies and butterflies. The prairie grasses feed both elk and cranes. Jays, grouse and squirrels find homes in the forest.

Some animals rely on only one habitat. For example, woodpeckers nest, forage and rest in the trees. In contrast, some wildlife need more than a single habitat type. Although they nest in tree cavities like woodpeckers, wood ducks also rely on nearby streams or canals. This need for two habitat types just begins to show the complex network of life on a refuge.

The habitats protected and managed at this Refuge are home to so much life that it is difficult to identify it all. There are 7 amphibian, 10 reptile, 40 mammal and 165 bird species known here. This does not include a myriad of invertebrates and the many plants, fungi, lichens and other organisms.

Now, consider this diversity. Suppose the streams all vanished. How much life depends on a stream? How many species are homeless in its absence? Some effects are obvious — the trout would disappear. Others are more subtle — the wood duck would go as well. In many ways our knowledge of the interaction of habitats just scratches the surface. The value both for us and for wildlife, of this complexity, seems to increase with each new discovery.



©Jim Cruce



©Dr. Lloyd Glenn Ingles



A few refuge residents (from top to bottom): marsh wren, yellow-bellied racer, deer mouse, American kestrel, snowshoe hare and coyote.



There's No Place Like Home



Imagine returning from a trip to find your home has vanished. Year after year, migrating pairs of greater sandhill cranes faithfully return to the same nesting sites, sites found suitable by untold generations of cranes. The problem for cranes is that suitable nesting sites are scarce.

Greater sandhill cranes need isolated, open, wet meadows or shallow marshes on the edges of rivers or lakes. Open meadows allow them to see predators from a distance, but there is some indication they select nest sites near interspersed groves — perhaps for wind and storm protection. Each family — parents and young called “colts” — may actively defend a territory of as much as 250 acres.



For centuries, the Conboy Lake region has provided homes for cranes, but what is an ideal home for wildlife is often desired by people, too. Early settlers found the “Camas Prairie,” as they called it, ideal for farming and cattle. To increase hay production and pasture land, Conboy Lake was partially drained. Loss of habitat to such activities, along with hunting, took its toll on wildlife. By the end of the 19th century, journal entries indicate a scarcity of game — ducks, geese and swans — in this area.

Easily disturbed, cranes also did not tolerate the increasing human population. Eventually, nesting pairs disappeared.

In 1972, Conboy Lake National Wildlife Refuge was established to preserve and restore habitats. Ironically, the Refuge was not created for cranes. Yet, in 1979 one pair returned. Today there over twenty nesting pairs. The return of nesting cranes is significant. It means the habitat, to some extent, is again suitable — and not just for cranes.

From egg to adolescence cranes are vulnerable, but a flighted adult has few enemies — loss of habitat is the biggest concern for greater sandhill cranes. Because of this, they are listed as endangered in the state of Washington.

*Left:
Crane parents and one foraging crane
©Jim Cruce*

Look What Else Showed Up



Oregon spotted frog
3-4 inches

In 1992 a particular frog was “noticed” on the Refuge. It wasn’t discovered, it wasn’t new, it was simply identified. Biologists took a closer look. They found the Oregon spotted frog here in healthy numbers, making Conboy Lake one of only four such populations in the state of Washington.

Why is it here? Perhaps refuge management efforts for other species, like cranes, saved or enhanced this frog’s unique habitat. Like many frogs, the Oregon spotted frog needs a permanent water source — lakes, ponds, or slow-moving streams. In addition, these frogs must also have emergent wetlands, which are shallow pockets of water that occur in flood zones. In most areas these shallow floodplain pools were drained, diked and filled to accommodate people. However, drainage efforts on Conboy Lake were not entirely successful. Rain and snowmelt overflowed drainage ditch banks even in settlement days, so frog habitat persisted.

Still, like sandhill crane habitat, spotted frog habitat is scarce. Spotted frogs occur in only a small fraction of their historic range in Washington. It is listed as a state endangered species and proposed for federal listing.

Spotted frogs are food for many predators, including this predaceous water beetle (right) and mink, common garter snakes, and great blue herons (opposite page). Of these, the garter snake is the least finicky about also eating bullfrogs.



Beetle. ©Gerard Visser

It’s a Frog-Eat-Frog World



Bullfrog, 7-8 inches
©Jane Abel

At Conboy Lake, bullfrogs and spotted frogs exist side by side. This doesn’t occur at the other spotted frog sites in Washington.

Non-native bullfrogs usually crowd other frogs out of their habitats. Because it “tastes” bad, the bullfrog has few natural enemies. Predators actually prefer other frogs, leaving even bullfrog tadpoles as a meal of last resort. So, the bullfrog is free to thrive, even eating spotted frogs — tadpoles to adults — in the process.

Why the Oregon spotted frog persists here, in spite of the bullfrog, is a good question.

Right: Garter snake
©William Leonard

Below: Mink
©Gerald & Buff Corsi



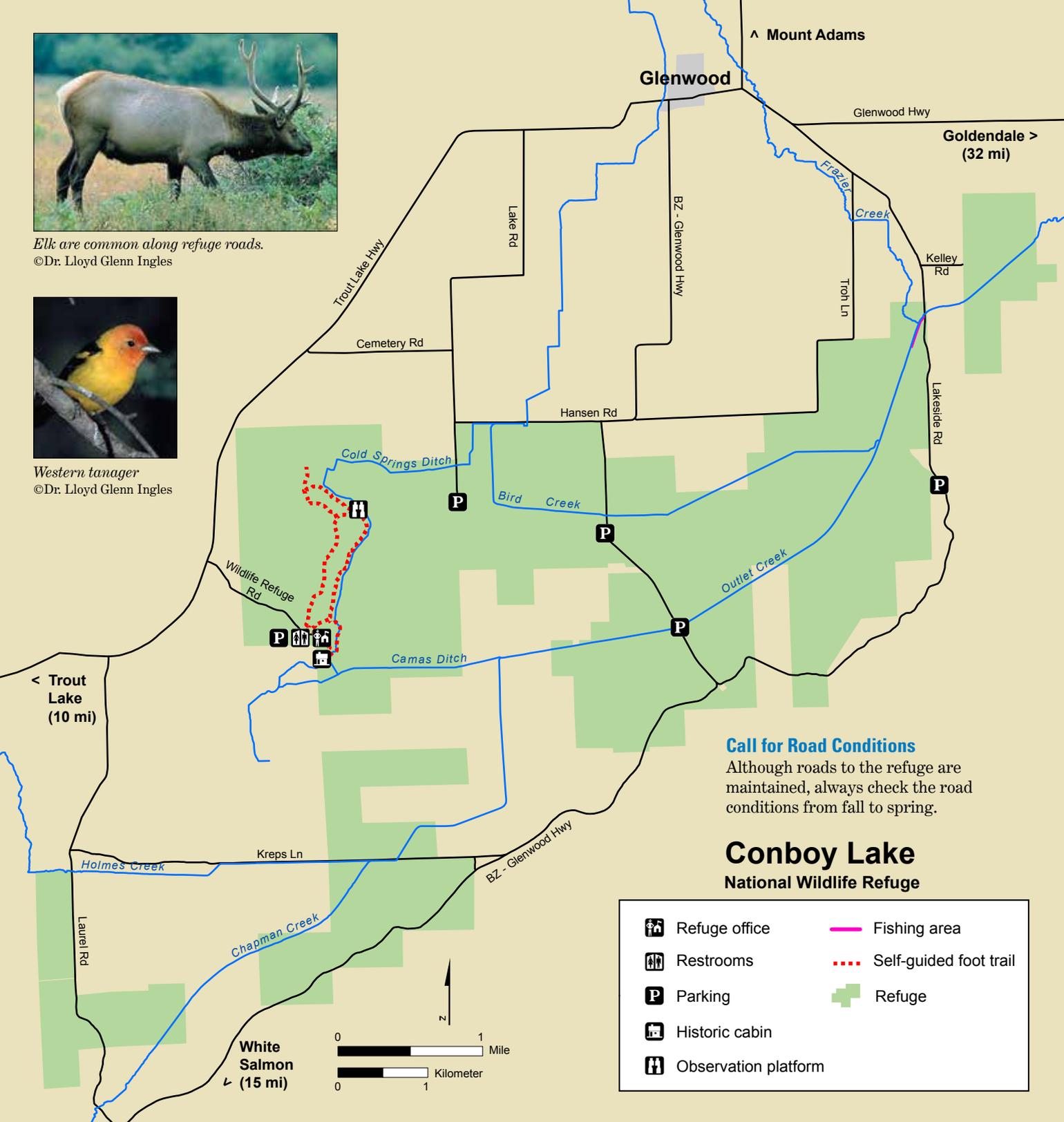
Great blue heron. ©Jim Cruce



Elk are common along refuge roads.
©Dr. Lloyd Glenn Ingles



Western tanager
©Dr. Lloyd Glenn Ingles



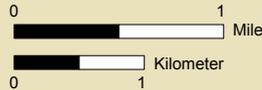
Call for Road Conditions

Although roads to the refuge are maintained, always check the road conditions from fall to spring.

Conboy Lake National Wildlife Refuge

- | | | | |
|---|----------------------|---|------------------------|
|  | Refuge office |  | Fishing area |
|  | Restrooms |  | Self-guided foot trail |
|  | Parking |  | Refuge |
|  | Historic cabin | | |
|  | Observation platform | | |

White Salmon
↙ (15 mi)



Homemaking



Heavy equipment, like this backhoe, is used to maintain refuge waterways.

Is it pure coincidence that Conboy Lake has the Oregon spotted frog, or that sandhill cranes nest here in ever increasing numbers? No. The Refuge actively manages the land and its resources to improve habitat for wildlife.

One resource that is carefully managed is water. Balancing human and agricultural water demand with wildlife requires cooperation between the Refuge and its neighbors. Water management on the Refuge mimics the natural cycle of flooding and drying that existed prior to attempts to drain Conboy Lake. The main goal is to hold enough winter water for late summer wildlife needs in the following year.

The location, depth and timing of water distribution is important. Migrating swans and mallard, pintail and teal ducks need shallow and deep water for rest, food and safety. Receding water creates mud margins used by killdeer, spotted sandpipers and other shorebirds. Wading birds, like great blue herons, work the shallow waters for young fish and invertebrates. Irrigated meadows stimulate new plant growth, or browse, for migrating Canada geese.



Tundra swans need deep water.



Sometimes a nuisance, beavers have their own water control agenda. However, there is some indication that spotted frogs benefit from beaver-made waterways.



Common snipe prefer to forage in shallow water and mud.

©Dr Lloyd Glenn Ingles

Water management is combined with other habitat management practices. A combination of haying and then flooding provides foraging for cranes, especially colts. Flooding previously hayed fields also looks promising for enhancing spotted frog breeding habitat.

There are many other management practices used by the Refuge. Prescribed burning improves soil conditions and checks the spread of pines into the meadowlands. Planting native plants supports animals by making the plant community more diverse. Sometimes, sensitive habitats are made inaccessible in order to minimize disturbance or promote natural recovery.



Management begins with observation.

The decision to adopt any management activity depends on many factors, but in the end it is based on observable benefits to wildlife. The key question is: What is best for this habitat and the wildlife that depend upon it?



The Conboy Lake area could host even greater numbers of nesting sandhill cranes. Future habitat management practices will continue to create conditions favorable to the cranes. ©Don Baccus

Important To Native Peoples



Camas root is a traditional food of native peoples.

The Klickitat people knew this prairie as “Tahk” and found it a consistently reliable source for game and vegetable foods — often with a surplus for storage. Here they congregated, as did the Yakama, to collect camas in the spring. While the women dug and dried the camas roots the men would hunt and fish. Because plants mature later at higher elevations these camps followed the harvest up the mountain. In late summer huckleberries and strawberries were gathered, as well as cedar roots for basket making.

This pattern of seasonal use at Conboy Lake has a long history. Archeological evidence shows encampments on the lakeshore dating between 7,000 and 11,000 years ago — possibly while ice age glaciers from Mt. Adams still reached into the valley.



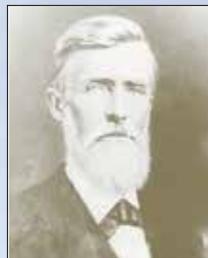
Klickitat and Yakama hunting parties camped at Camas Prairie, pursued game such as elk and ruffed grouse.

©Gerald & Buff Corsi



©Jim Cruce

A Chance Meeting Of Northwest Notables



Francis A. Chenoweth, First Speaker of the Washington State Legislature.

Photo courtesy of the Oregon Historical Society

In the 1850s Francis A. Chenoweth, first Speaker of the Washington Territorial Legislature, wrote letters to *The Oregonian* newspaper describing his travels in the region. One such trip took him to Camas Prairie, where he met Chief Kamiakin of the Yakama Tribe.

While the exact location of the meeting between these Northwest notables is unknown, it certainly took place on or near the present Refuge. The open prairie would have lent itself to gatherings and games. Imagine the sound of pounding hooves racing around a well-worn track in these fields 150 years ago.

“The chiefs and wealthy ones from the surrounding tribe always meet here when the camas is ripe, and while the women are harvesting the camas, these ‘lords of creation’ amuse themselves by trying the speed of their splendid animals. ... Comican [sic] the principal chief invited us to his tent, and treated us with politeness and hospitality, giving us camas, bread, sugar and tea. He showed us with an air of satisfaction the pile of blankets and other articles he had won at the races.”



Chief Kamiakin of the Yakama
Sketch by Gustav Shoni, courtesy of the Oregon Historical Society

Chief Kamiakin was one of the principle signers of the Treaty of 1855, which established the Yakama Indian Reservation. When the treaty was violated by gold prospectors, he led the Yakama, Palouse and Klickitat against the U.S. Army. He was forced into exile in Canada but eventually returned, renouncing his leadership role. Chief Kamiakin died in 1877 in the Palouse country.

Still Standing



A visitor peeks into the past through a window of the Whitcomb-Cole Hewn Log House.

The Richard Kreps family lived in the house as tenants of John Cole from about 1897 until 1900 (below).

Drawn by accounts of the valley's abundant resources, settlers like Peter Conboy, for whom the lake is named, began arriving in the area during the 1870s. The Whitcomb-Cole Hewn Log House near the Refuge headquarters is an example of the homes they built and is one of only a few pioneer log homes still standing in Klickitat County.

This log house originally stood two miles across the lake on land settled by Stephen Whitcomb, who ran the first post office in the area out of his cabin. In 1891 John Cole acquired the land from Whitcomb and built the main structure of the house from hand-hewn logs. The large downstairs room served many purposes, including kitchen, dining, sitting and family room. Imagine a family of seven living in such cozy conditions.

The Coles sold the property in 1911. Later residents added the kitchen in 1914. Inhabited for another 40 years, the house was finally abandoned in the late 1950s.



Hand shaping timbers with a broad axe



Fine tuning a window opening the old-fashioned way

Lacking a proper foundation, the home fell into disrepair. Logs began rotting away and floors buckled. In 1987 the entire structure was put on a truck and moved to its current location where it could be protected and enjoyed by Refuge visitors. Great care was

taken to restore the house, not just with similar materials, but by also using traditional methods. The replacement timbers were harvested by hand, delivered by horse-drawn wagon and hand hewn to fit. A rock and concrete footing now supports the house, the only concession to modern construction practices.

Today, the house is listed on the National Register of Historic Places. Visitors are invited to wander through its rooms and listen for the echoes of life on Camas Prairie over a century ago.



Enjoying The Refuge



Pintail pair
©Don Baccus

Where's The Lake? — Because of past efforts to drain it, Conboy Lake is now a seasonal marsh. Early in the year the lake is more apparent, complete with swans, geese and ducks.

Hours — The Whitcomb-Cole Hewn Log House, public restrooms and the Willard Springs Trail are all near the Refuge office. These areas are open to the public everyday during daylight hours. The Refuge office is intermittently open weekdays from 7:30 a.m. to 4:00 p.m.

The rest of the refuge is closed for public entry, except for hunting (see Hunting and Fishing).

Viewing Tips — Wildlife viewing is at its best in the spring when flocks of migrating birds are present. Visit the Refuge at first light or just before sunset; animals are more active at these times. To get a closer look, bring binoculars or a spotting scope. Move quietly so as not to disturb wildlife. A field guide is helpful for identifying species.

Willard Springs Trail — This two-mile loop is a pleasant walk along the edge of the open marsh and into the pines. The terrain has some gentle grades. Blackbirds, swallows and hawks can be seen in the fields.

Look for wood ducks and cinnamon teal in the canals near the trail. Cranes can sometimes be seen in the early spring just prior to nesting. Spring is also good for viewing snipe, elk, deer and, of course, wildflowers. Listen for woodpeckers and look for them on standing dead trees. Northern flickers, nuthatches, chickadees, towhees and flycatchers all frequent the forest. In addition to these, look for such colorful migrants



Elk calf



©C. Kofoed



*Cinnamon teal (top)
and common snipe
(below)*

as tanagers, orioles, warblers, grosbeaks and crossbills. Watch the trail for elk and deer or their tracks. Signs of beaver and porcupine activity are also visible.

Road Views — The Willard Springs Trail is a good representation of the whole Refuge. Roads adjacent to or through the Refuge complement the trail. Elk can be seen along the roads. In early fall it is possible to watch both cranes and elk in the same field. Please be cautious and courteous when pulling off the road. Parking is available west of BZ/Glenwood Road (see map).

Hunting and Fishing — Hunting and fishing are permitted on the Refuge in designated areas (see the Refuge's hunt sheet with designated hunt zones) and in accordance with state and federal regulations. Hunting geese, ducks, coots and common snipe is allowed. **All other species are protected.** Trained dogs are recommended for retrieving downed birds. Always get permission prior to entering private land. Please contact the Refuge for further details.

Camping — The Refuge is open only for day use. Camping is available at Glenwood and Trout Lake.

Pets — Pets must be leashed.

Education — The Refuge offers outdoor education programs and/or the opportunity for staging your own activity. Please call the Refuge Manager in advance for information.

Volunteers — Volunteering at a wildlife refuge is a rewarding experience. There are many opportunities for a variety of talents and expertise. For example, volunteers help with Oregon spotted frog studies. Contact the Refuge Manager at Conboy Lake to find out more.



*Binoculars are handy
for viewing wildlife.*



*Visitors set out on
the Willard Springs
Trail.*



Jayne Levy/USFWS

U.S. Fish & Wildlife Service

Conboy Lake
National Wildlife Refuge
100 Wildlife Refuge Road
Glenwood, WA 98619
509/364 3667
www.fws.gov/refuge/conboy_lake/

Conboy Lake is one of eight refuges
comprising the:

Mid-Columbia River
National Wildlife Refuge Complex
64 Maple Street
Burbank, WA 99323
509/546 8300

Washington Relay Service
Voice 1 800/833 6384
TTY 1 800/833 6388
Telebraille 1 800/833 6385

U.S. Fish & Wildlife Service
www.fws.gov

For Refuge information
1 800/344 WILD

This brochure is available in an
alternative format upon request.



February 2014

Conboy Lake

National Wildlife Refuge

Cover photo: Oregon spotted frog.
©William Leonard