

Mad River Biologists

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Lower Eel River Field Survey Habitat for Western Pond Turtle and Red-Legged Frog

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Introduction and Methods

Biological Field Surveys were conducted on June 23 and June 27, 1992 with the purpose of assessing the presence of appropriate habitat for Western Pond Turtle (*Clemmys marmorata*) and Red-legged Frog (*Rana aurora*). Both species are typically found in ponds and slow moving water with well-developed emergent vegetation.

The area surveyed was the lower Eel River between the mouth of the Van Dusen River and 1 mile downstream from Fernbridge. The survey was carried out by walking the length of the river concentrating especially on small side channels and ponds, as well as the slower reaches of the river.

Results

The Eel River in this vicinity is characterized by wide, gravel flats bordered by levees. Flooding over the levees is a rare event that probably does not contribute to water in nearby ponds. The source of pond-type habitat between the levees is small backwater embayments, side channels and channels that are deep enough to reach below the water table.

Small side-channels and embayments were common in the first mile below the mouth of the Van Dusen River. Both adult and larval western toads (*Bufo boreas*), yellow-legged frogs (*Rana boylei*), and Pacific treefrogs (*Hyla regilla*) were detected in these channels with the Yellow-legged frog being the most evident. The quietest waters at the upper reaches of these embayments and channels where aquatic and emergent vegetation had developed was the prime location for amphibians.

Further downstream the river has less of a meandering quality and is deeper and more channelized. In this region the only amphibians found were larval western toads in the quiet, shallow waters along the edge of the river.

At and below Fernbridge the river is mostly channelized with two large backwater embayments on the east (north) bank. Substantial aquatic and emergent vegetation is present in these embayments but they were not visited.

Approximately 3/4 mile downstream from Fernbridge and in the gravel section just downstream from the active gravel mining operation were a series of small ponds. These were well away from the main stem of the river near the western levee. One of these ponds was characterized by well-developed aquatic and emergent vegetation and the presence of four species of amphibians. Bullfrogs (*Rana catesbeiana*), and red-legged frogs were conspicuous and an adult Pacific Treefrog was seen. A dead adult western toad and larval toads were also present. The only reptile detected in the two days of surveying was a common garter snake (*Thamnophis sirtalis*) near this pond.

One of the nearby smaller ponds that lacked the vegetation nonetheless had numerous western toad larvae and hundreds of recently metamorphosed adults.

Discussion

The discovery of the pond with red-legged frogs confirms the presence of habitat suitable for this species along this section of the Eel River. It is indeed unfortunate that the pond was dominated by the introduced bullfrog.

Western pond turtles prefer mature ponds with well-developed vegetation and although adult pond turtles are known to be capable of traveling long distances from breeding sites, this species is probably not typical in this area.

Respectfully Submitted,

Ron LeValley

Ron LeValley, Consulting Biologist

Vertebrate Species Detected June 23 and 27, 1992

BIRDS

GREAT BLUE HERON
GREAT EGRET
CANADA GOOSE
HOODED MERGANSER
COMMON MERGANSER
TURKEY VULTURE
OSPREY
RED-TAILED HAWK
CALIFORNIA QUAIL
KILLDEER
SPOTTED SANDPIPER
CALIFORNIA GULL
CASPIAN TERN
MOURNING DOVE
Selasphorus HUMMINGBIRD
DOWNY WOODPECKER
NORTHERN FLICKER
"RED-SHAFTED" FLICKER
BLACK PHOEBE
TREE SWALLOW
N. ROUGH-WINGED SWALLOW
CLIFF SWALLOW
BARN SWALLOW
AMERICAN CROW
COMMON RAVEN
CHESTNUT-BACKED CHICKADEE
BUSHTIT
BEWICK'S WREN
SWAINSON'S THRUSH
AMERICAN ROBIN
WRENTIT
NORTHERN MOCKINGBIRD
CEDAR WAXWING
ORANGE-CROWNED WARBLER
YELLOW WARBLER
WILSON'S WARBLER
YELLOW-BREASTED CHAT
BLACK-HEADED GROSBEAK
SONG SPARROW
WHITE-CROWNED SPARROW
TRICOLORED BLACKBIRD
BREWER'S BLACKBIRD
BROWN-HEADED COWBIRD
"BULLOCK'S" ORIOLE
LESSER GOLDFINCH
AMERICAN GOLDFINCH

AMPHIBIANS

WESTERN TOAD
PACIFIC TREE FROG
RED-LEGGED FROG
FOOTHILL YELLOW-LEGGED FROG
BULLFROG

REPTILES

COMMON GARTER SNAKE

MAMMALS

BLACK-TAILED JACKRABBIT
RACCOON
BLACK-TAILED DEER
STRIPED SKUNK