

Wildlife Surveys at Selected Locations within the Tankerhoosen Watershed

Surveys conducted by
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Wildlife Surveys

In 2004, bird, reptile, amphibian and invertebrate surveys were conducted at sites within the Tankerhoosen River watershed. Suggested parcels for study were Tancanhoosen LLC, known as the Mason property, Town of Vernon, including property around Walker Reservoir East, and on the CLP power line site. Additional bird counts were conducted within Valley Falls Park in April and May and reptile and amphibian searches were conducted within the park in April, May and October.

Bird Counts

Eighty bird species were detected during this study. Seventy four species were counted during standardized bird counts at 24 count points (Figure 1) and 6 more were detected as incidental observations. The count point with the greatest number of species was at Walkers Reservoir. This count point contains open water, emergent vegetation and forest habitat. Thirty-four species were counted at this point. Count points at the former gravel pit on the Tancanhoosen LLC property contained the most uncommon birds. Prairie warbler, field sparrow, brown thrasher and eastern towhee were detected at these points throughout the breeding season. Populations of these species are declining and brown thrasher is on Connecticut's list of Species of Special Concern. These birds are dependent on early successional habitats such as grassland and shrubland. These habitat types have been lost to reforestation and human development. The gravel pit is at an early successional stage with open, grassy habitat and short, scattered pine trees (Figures 2 and 3). This site will eventually revert to a forested habitat unless actively managed to maintain early successional habitat. Once the site is reforested, early successional species will disappear from this site.

Bird counts were conducted at the Belding Wildlife Management Area (WMA) in 2003. Birds that were detected during this study that were not detected during the Belding survey are italicized in Table 1. These birds include wood duck, willow flycatcher, hermit thrush, black-throated blue warbler, European starling and house sparrow. House sparrow and European starling are introduced invasive species. House sparrows typically occur near developed areas and starlings are often found in developed and agricultural areas. The greatest number of starlings detected during this study was at the leaf composting area near Walker's Reservoir West.

Birds that were detected at the Belding WMA that were not detected during this study include broad-winged hawk, hairy woodpecker, pileated woodpecker, olive-sided flycatcher, yellow-throated vireo, red-breasted nuthatch, blue-gray gnatcatcher, Nashville warbler, pine warbler, blackpoll warbler, blackburnian warbler cerulean warbler, worm-eating warbler and Canada warbler.

Figure 1. Bird count points.

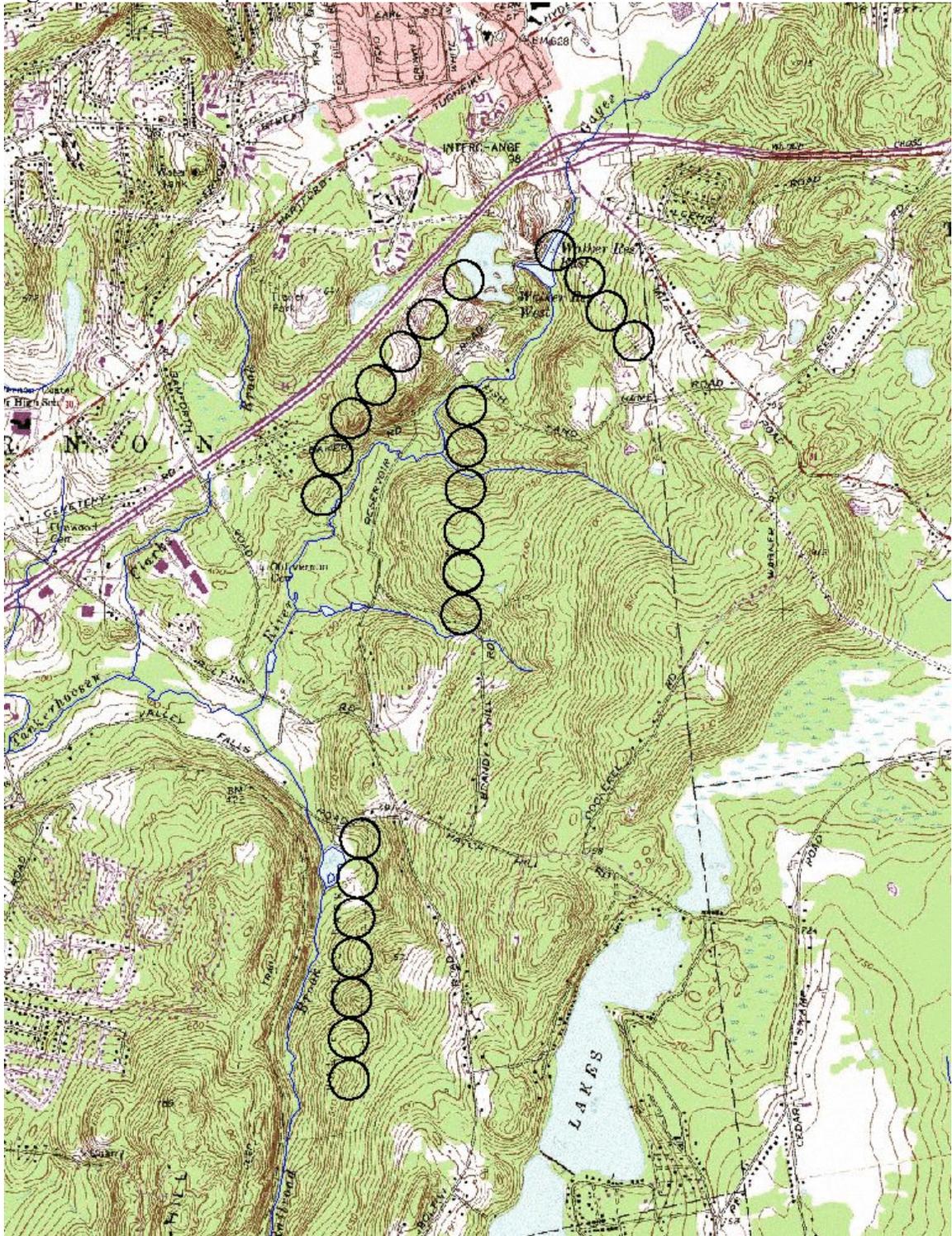


Figure 2. Early successional habitat within Tancanhoosen LLC parcel.



Figure 3. Location of former gravel pit

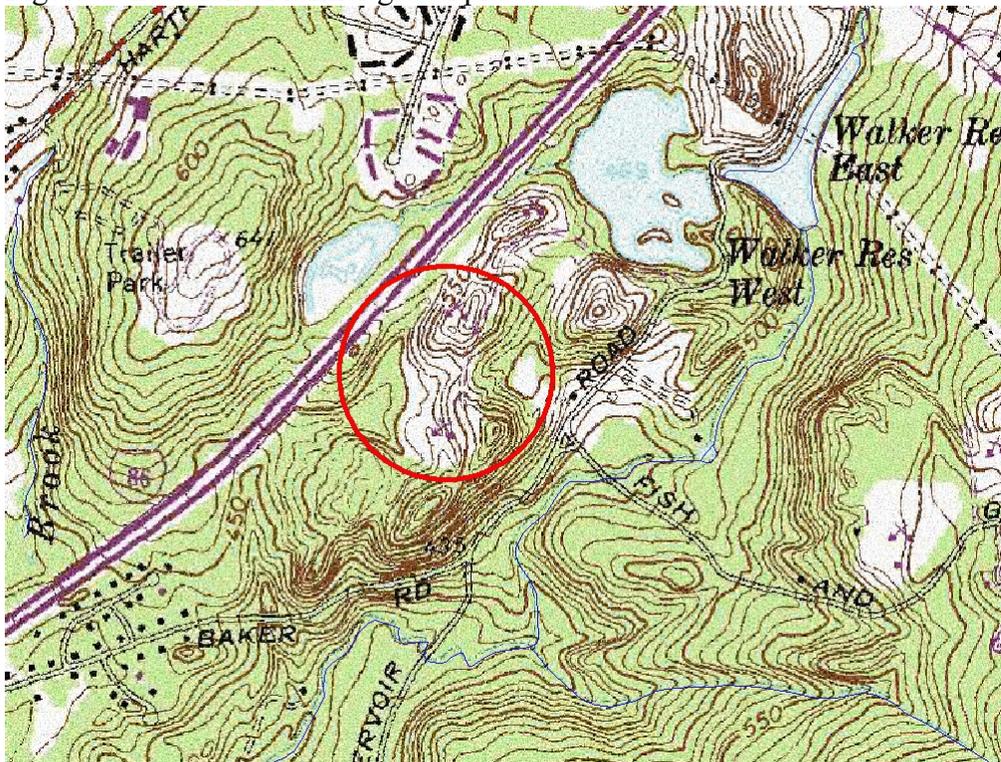


Table 1. List of bird species identified at study locations.

CICONIIFORMES	PASSERIFORMES	Turdidae	Thraupidae
Great Blue Heron	Tyrannidae	Eastern Bluebird	Scarlet Tanager
Turkey Vulture	Eastern Wood-Pewee	Swainson's thrush	Emberizidae
ANSERIFORMES	Eastern Phoebe	Veery	Eastern Towhee
Canada goose	<i>Willow flycatcher</i>	<i>Hermit thrush</i>	Chipping Sparrow
Mallard	Great Crested Flycatcher	Wood Thrush	Field sparrow
<i>Wood duck</i>	Eastern Kingbird	American Robin	White-throated sparrow
FALCONIFORMES	Vireonidae	Mimidae	Song Sparrow
Red-tailed Hawk	Red-eyed Vireo	Gray Catbird	Dark-eyed junco
Sharp-shinned hawk	Warbling Vireo	Northern Mockingbird	Cardinalidae
Cooper's hawk	Corvidae	Brown Thrasher	Northern Cardinal
GALLIFORMES	American Crow	Sturnidae	Rose-breasted Grosbeak
Wild Turkey	Common raven	<i>European starling</i>	Indigo Bunting
CHARADRIIFORMES	Blue Jay	Bombycillidae	Icteridae
American woodcock	Hirundidae	Cedar Waxwing	Red-winged Blackbird
Killdeer	Tree Swallow	Parulidae	Common Grackle
COLUMBIFORMES	Barn Swallow	Blue-winged Warbler	Brown-headed Cowbird
Mourning Dove	Paridae	Northern parula	Baltimore Oriole
CUCULIFORMES	Black-capped Chickadee	Yellow Warbler	Fringillidae
Yellow-billed cuckoo	Tufted Titmouse	Chestnut-sided warbler	American Goldfinch
STRIGIFORMES	Sittidae	Yellow-rumped warbler	House Finch
Barred Owl	White-breasted Nuthatch	Black-throated green warbler	Passeridae
Great horned owl	Certhiidae	<i>Black-throated blue warbler</i>	<i>House Sparrow</i>
APODIFORMES	Brown creeper	Prairie warbler*	
Chimney Swift	Troglodytidae	Palm warbler	
Ruby-throated hummingbird	Carolina Wren	Black-and-white warbler	
CORACIIFORMES	House Wren	American redstart	
Belted Kingfisher		Ovenbird	
PICIFORMES		Louisiana waterthrush	
Downy Woodpecker		Common Yellowthroat	
Red-bellied Woodpecker			
Yellow-shafted Flicker			

*Although prairie warbler was detected at Belding WMA, it was not detected throughout the breeding season as it was on the Tancanhoosen LLC property.

Amphibians and reptiles

Amphibian and reptile surveys were conducted along bird count routes using stone turning and log rolling. Additional surveys were conducted along the Tankerhoosen River, Barrows Brook and Railroad Brook. Reptile searches were conducted throughout the Tancanhoosen LLC property and throughout Valley Falls Park with intensive searches conducted at the former gravel pit on the Tancanhoosen property and in Valley Falls Park around the pond and field and along the Hop River State Park Trail. Historic records of spotted, wood and box turtles, hognose snake and black racer within Valley Falls Park prompted intensive searches for these species.

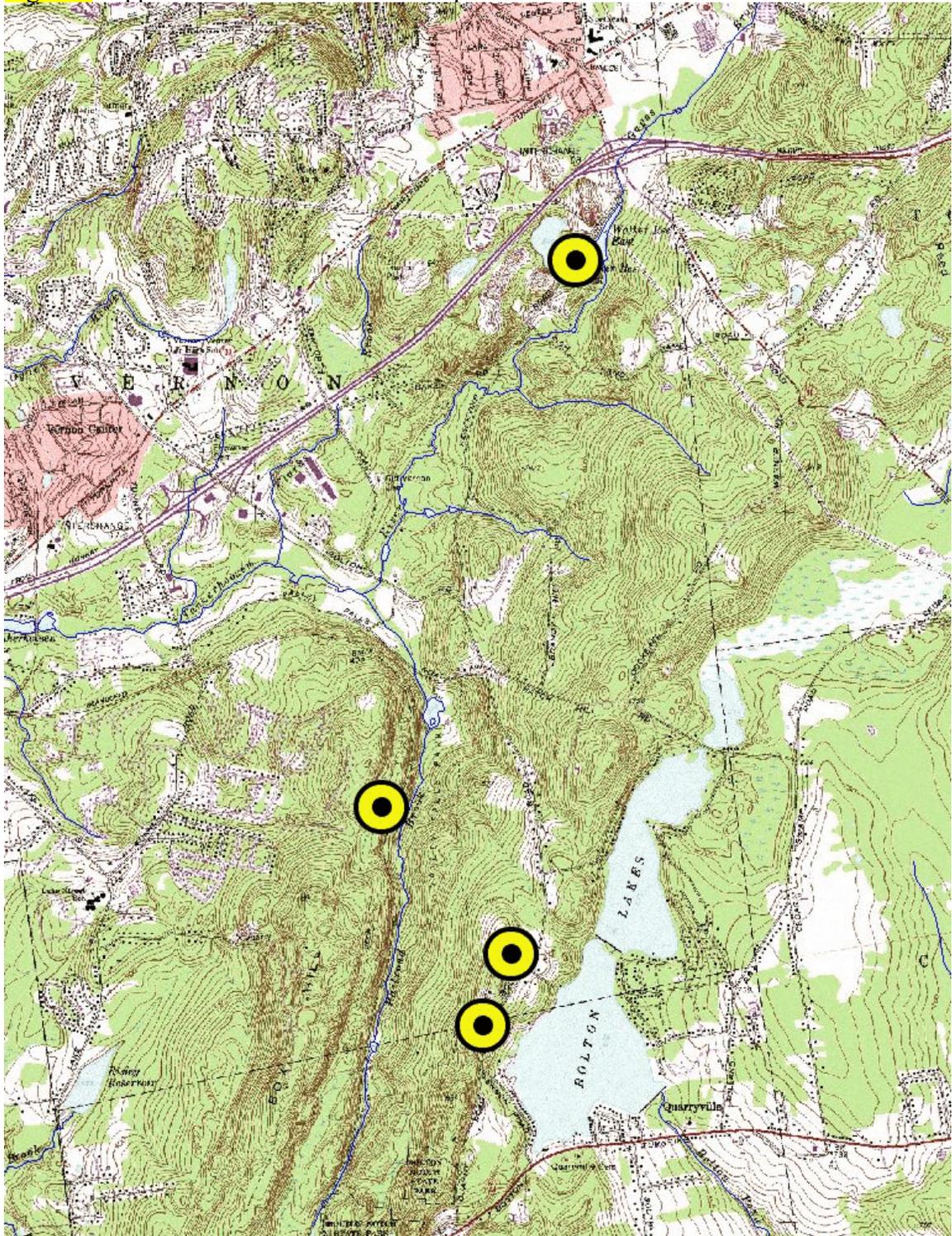
Ten species of amphibians were detected (Table 2). The most abundant amphibian found during this study was northern redback salamander, which was found on all parcels surveyed. Northern two-lined salamanders were found along the Tankerhoosen River and Railroad Brook. Spotted salamanders were found during night-time road surveys on Reservoir Road. A previously undocumented vernal pool was discovered between Reservoir Road and Walker Reservoir West as a result of road surveys. Additional vernal pools were verified on Bolton Road and on the Jeep Trail above Valley Falls Park (Figure 4).

Two species of reptiles (painted turtle and garter snake) were found. The shell of a box turtle was found at one bird count point. Box turtles have been documented within the Belding Wildlife Management Area in 2003 and 2004. Painted turtles were found at the pond in Valley Falls Park and at Walker Reservoir. Northern water snake has been reported at Valley Falls Park and is also likely to occur at Walker's Reservoir. The former gravel pit on the Tancanhoosen LLC provides habitat that may be suitable for hognose and smooth green snakes. These species were not detected despite intensive searches and use of artificial covers in this area.

Table 2. List of amphibians and reptiles.

Northern redback salamander
Northern two-lined salamander
Spotted salamander
American toad
Northern spring peeper
Gray treefrog
Wood frog
Green frog
Bull frog
Pickerel frog
Painted turtle
Garter snake

Figure 4. Approximate locations of vernal pools.



Invertebrates

Odonates

Tankerhoosen River and Walker's Reservoir were surveyed for dragonflies and damselflies. Ebony jewelwing, River jewelwing and brown darner were found along the Tankerhoosen River. Common green darner, brown darner and eastern pondhawk were found along Walker' Reservoir. Common green darner and cherry-faced meadowhawk were found in the former gravel pit on the Tancanhoosen LLC property.

Mussels

A search was conducted for freshwater mussels by walking up the Tankerhoosen River and Barrows Brook through the Tancanhoosen LLC property. Freshwater mussels were not found within these sections of the streams.

Stream invertebrates

Riffle dwelling stream invertebrates were collected to assess stream quality. Invertebrates were collected in the upper Tankerhoosen River on the Tancanhoosen LLC property, in Barrows Brook and in the unnamed tributary that drains into Gages Brook just upstream from Walker's Reservoir East. Invertebrates were grouped into three categories – Most Wanted (pollution intolerant species), Moderately Wanted (somewhat pollution intolerant species) and Least Wanted (pollution tolerant species).

Three of the Most Wanted invertebrates were collected at Barrow's Brook (Peltoperlidae, Perlidae and Stonefly), two Moderately Wanted (Chimarra and Stenonema) and one of the Least Wanted (Simuliidae). Additional invertebrates were collected that indicate high water quality at this site.

Three of the Most Wanted invertebrates (Peltoperlidae, Glossosoma and Rhyacophila) were collected at the Tankerhoosen River, just upstream from Fish and Game Road. Five Moderately Wanted (Hydropsychidae, Chimarra, Stenonema, Psephenus and Nigronia) were collected at this site. No Least Wanted invertebrates were collected.

At the third site, the unnamed tributary of Gages Brook, no most wanted invertebrates were collected. Two Moderately wanted (Hydropsychidae and Chimarra) and two Least Wanted invertebrates were collected. This site contained appropriate riffle habitat and the organisms collected here are indicative of riffle habitat. The sampling location is just downstream of Interstate 84. The lack of Most Wanted invertebrates at this site may be a result of negative impacts from Interstate 84. Additional sites upstream of the highway should be sampled to determine impacts of roads across this stream.

Dredging of Valley Falls Pond

During the draining of Valley Falls Pond for dredging, two bird species were encountered that are not listed in Table 1. Spotted sandpiper and green heron appeared as lower water levels exposed prey items for these species. Fish became more accessible for green heron and spotted sandpiper preyed on exposed mud dwelling invertebrates. These species were present only during the draining of the pond.