**Weather:** prec. 1 mm; N < 20; sun/haze; LM 8 C; FCF 8 C **Purpose:** to birdwatch, sow seed, and collect Fairy Shrimp

Participants: Pat, Kee

The property is now becoming waterlogged, although the ground remains frozen below an inch or two of the surface. On the road, we cleaned out two bluebird boxes, with an unhatched BB egg falling from the nesting material. Just inside the gate, I checked the trees in the "Lorne Group," noting that mice had not only nibbled the bark from one of them (Crab Apple?), but had eaten right through the stem, so the tree lay limply on its side.

We stopped at the TS, so Pat could watch the UM, while I made my way over to the ploughed area in the WM. I crossed the East Ravine, noting that there was a good flow of water from the uplands down to the BCF, about 20-30 litres per min. Up in the ploughed strip I sowed Redbud and Cottonwood seeds westward, until I ran out about 2/3 of the way to the West Ravine.

Meanwhile back in the UM, Pat watched a Northern Harrier hunt over the meadow. It passed quite close to her on one occasion. Apparently, the van works very well as a "blind" under these circumstances - just as Pat claimed it would.

Down at the trailer, we filled the feeders, including the one by ET. Although the UM is 100 % snow free, the LM is about 95% snow free.

Pat went birdwatching down toward the river, while I went on a vernal pond mapping expedition. Today was the day I had decided to make my first attempt to collect Fairy Shrimp, although it seemed a little early in our season to attempt it. Moving from east to west and starting at the mouth of Fleming Creek, I worked my way along the ancient creek bed, noting the vernal "ponds" as long stretches of rotting ice, some covered with a skin of water, some with a small open part. Between each pair of such stretches, there was always a landmark that would serve to identify it, usually a bit of higher ground (usually with a tree or two) or a large obstacle, such as a tree that had fallen over the old creek bed. The list on the next page holds the results of the survey.

## Vernal Ponds at Newport Forest and their Locations

VPA: 40 m long; between a large Black Walnut and a double Bitternut Hickory

(healthy!), this pond is closest to the creek mouth and starts a bare 60 m away from it.

VPB: 25 m long; between the double Bitternut tree and the downed Black Willow with two stems (trunks) across the old creek bed. This pond flanks ET as it enters the BCF.

VPC: 15 m long; between the downed willow and the bend in ET, where the ground is higher. This completes the set of three vernal ponds that lie to the east of ET. (These are "upstream" in terms of the old FC.)

VPD: 130 m long; flanks the old LM bank from the large Slippery elm at the east end to the large White Elm log lying across the bed. This pond had about 5 m of open water at the east end.

VPE: 20 m long; flanks old LM bank and runs from the elm log to a standing White Elm.

VPF: 50 m long; flanks the TRT; the intervening portion of creek bed, from the previous pond, crosses the BCF floor and is too high to retain much water. This pond ends at the Wood Duck box at the giant Black Willow.

VPG: 40 m long; back on the other side of the BCF, this pond starts in the woods and ends at another giant willow, one that has broken its trunk over the old creek bed. This pond is very wide and curves to the west.

VPH: 50 m long; just east of VPF, this shallow (and therefore ephemeral) pond curves back into the woods.

VPI: 80 m long; back on the TRT side, this pond extends from the recently crashed Black Walnut to the west, flanking the trail. Probably ephemeral.

VPJ: 100 m long: It starts at m 380 and has a V shape, bending abruptly away from the trail. This pond, like most of those above, had rotting ice.

After a brief lunch in the trailer, I went back to the ponds, while Pat stayed close to the camp. Armed with a child's butterfly net (ideal for collecting small aquatic invertebrates), a large coffee tin and an empty 15-lit cooler jug, I went to pond D, where I had seen open water earlier, and began to sweep the water with the net. Nothing. I searched fruitlessly for nearly half an hour until I recalled something

about vernal pond animals staying under the ice. So I bent over and fished the net horizontally under the ice and sweeping back and forth close to the surface. "Bingo!" (as it says in my field notes) The net came out full of half-grown pink/orange fairy shrimp. I collected until I had about a hundred.

We brought the jug of shrimp home with us and I put them in an aquarium where they could easily be seen. Based on the little I know about distribution of these animals, I would guess that the common species hereabouts is *Eubranchipus vernalis*.

**Birds:** American Crow (FCF); American Robin (GF); Black-capped Chickadee (Tr); Blue Jay (BCF); Canada Goose (TR); Common Grackle (LM); Dark-eyed Junco (ET); Downy Woodpecker (Tr); Hairy Woodpecker (Tr); Kildeer (UM); Mallard (TR); Mourning Dove (HP); Northern Cardinal (Tr); Northern Harrier (UM); Red-bellied Woodpecker (Tr); White-breasted Nuthatch (Tr)

## **New species:**

fairy shrimp Eubranchipus vernalis VPD KD (ID confirmed)

**Phenology:** first Kildeer; first Turkey Vultures in "area" (Longwoods Road); UM snow free