

**Date & time:** Thursday January 30 2:15 - 3:40 pm

**Weather:** Pr 37 mm; RH 55%; BP 102.1 kPa; SW 10 - 40 kmh; T -4C°

**Activity:** Recording conditions on site & emergency food drop

After weeks of blistering cold and fierce winds over southern Ontario, I drove down to Newport Forest in the company of paid help Will Cable. He would help distribute some animal food while I took various measurements under overcast skies. Last year I would have called the air “cold”, but this year it seems balmy!



Snow was heavy enough at the gate to discourage digging it out. Once past that however, we could have driven in, as strong winds had scoured much of the road.

Hauling in our supplies by sled, we set up at the trailer and made two food drops, one in the Nook and the other under the trailer -- which was entirely snow free, as above. (Will scatters kibble behind the deck.) Two trails filled with small mammal tracks led under the trailer, illustrating its popularity as a winter refuge. We also made drops at the Hole and at the Elbow, both places in the Blind Creek Forest.

Meanwhile, I took the weather on site and did some snow gauging. To find the precipitation equivalent in water, I invented a new measurement. Instead of using a snow pail for passive accumulation, I used the “cookie cutter” technique in an area of median depth. An empty coffee can is inverted over the snow surface and pressed to the ground like a cookie cutter, compacting the snow inside. After the bottom is closed off the can is retrieved, re-inverted and capped for the trip home. After that, it’s just a matter of heating the snow to obtain the H<sub>2</sub>O equivalent -- something like 27 mm on this occasion. As for snow depths, I measured two extremes of 22 cm (min) and 45 cm (max) for the non-scoured areas.

That was the extent of today’s brief mission, except to see what animals were about. Gusting winds kept the bird away except for the three stalwarts: Blue Jays, Black-capped Chickadees, and White-breasted Nuthatches. Other animals included plentiful Coyotes, Virginia Deer, and an Eastern Cottontail or two. What did we expect, the Barnum & Bailey circus?

Having completed the day’s short mission, we walked out, pausing to look down at Fleming Creek from high on the bluffs in the Upper Meadow. Then out to the road and into the van. ”Crank it up and turn on that heater.”

**Note on feeding.** A food drop is a judgment call. Normally we wouldn’t do that, but in a winter like this one, we can’t rule out a substantial winterkill, particularly among the smaller mammals. The ratio of metabolic volume to surface area is much smaller for these critters and they tend to run out of fuel sooner than larger mammals. As for birds, I have no idea how they stay warm. Are feathers enough?.

### **Readers Write:**

Radio host Kevin Barret reflects on the cold weather in Wisconsin in December, commenting on my cold soaker while sampling a freezing creek:

“Wow - you're one brave researcher! If the weather there is anything like it is here, gathering creek bottom soil samples is pretty heroic. Kevin”

Charlene DeLeary of Oneida First Nation drops a note:

“Shekoli Kee . . .Yaw^ko (thank-you) we appreciate all the work that you are doing to protect our Mother Earth. And yaw^ko for the reports. They are most interesting. N^ki'wah Charlene”

### **IMAGES:**



Looking down the high Fleming Creek bluffs, I am reminded of the need to get back to the Fleming Creek Forest on the other side. We have been absent for some three years, since we removed the pipe bridge. Each pipe weighed 355 lb and it got to be just too much to set it up each spring and take it down each fall, A heavy flood would also take it out. This time we'll consider some kind of rope walkway that will be much easier to set up and take down. Hopefully the TTLT will approve the design.