

Results of the 30 Years Later Expedition (II): trip to Cochrane District, Ontario, 5-15 May 2010

suggested citation: Schueler, Frederick W., Aleta Karstad, & Adam Zieleman, 2010. **Results of the 30 Years Later Expedition (II): trip to Cochrane District, Ontario, 5-15 May 2010.** 80 pages, search engine identification string: plergsojiwoitjgdsrlkvndso'vndo;ivjs[rihogarpoihsafe

The 30 Years Later Expedition is a transCanada Biological Survey launched in the International Year of Biodiversity, in partnership with the Canadian Museum of Nature, primarily revisiting sites where Fred Schueler and Aleta Karstad have made observations and collections since 1970. The project involves databasing, up-grading, and revisiting observations recorded in their, and others', field notes, as well as sketching and painting on-site, and testing the hypotheses about possible ecological change that they had in mind when they made the initial observations, or that have arisen since. see <http://www.fragileinheritance.org/projects/thirty/thirtyintro.htm>

This report was composed by Frederick W. Schueler, the current draft and database output 15 July 2010. Figures are from Aleta Karstad's daily painting blog <http://karstaddailypaintings.blogspot.com/> Those not marked "SOLD" are available for purchase to help support the Expedition.

CONTENTS	
Introduction: Summary (p. 2) Party (p. 2); Route (p. 2); Methodology (p. 3).	pp 2-3
Herpetology: Amphibians on the road (p. 3); Distribution of Leopard & Mink frogs (<i>Lithobates pipiens</i> & <i>L. septentrionalis</i> ; p. 4); Effects of Earthworms on the Shaw Woods (pp 4-5); Rut-breeding by Wood Frogs (<i>Lithobates sylvaticus</i>) in El Nino springs (pp 5-7).	pp 3-7
Invasive Plants: Distribution of Canada Plum (<i>Prunus nigra</i> ; p. 8); Distribution of the Oldfield Dandelion, <i>Taraxacum palustre</i> (pp 8-9); <i>Euphorbia cf cyparissias</i> (Cypress Spurge) along highways in Renfrew County (p. 9); Distribution of <i>Phragmites</i> along highways (pp 9-11); Northern limit of Japanese Knotweed (p 12).	pp 8-11
Road Ecology: Road-killed Mammals.	pp 11
Malacology: Exotic roadside snails (pp 11-12); Zebra Mussel abundance in susceptible rivers (p. 12).	pp 11-12
General revisits: Ecological condition of site visited in 1977 for "Burn" chapter of <i>Canadian Nature Notebook</i> .	p. 13
EOBase Narrative of the 30-years-later trip to Cochrane District, 4-15 May 2010	pp 14-80

Results of the 30 Years Later Expedition (II): trip to Cochrane District, Ontario, 5-15 May 2010

Summary: This trip was a bit of a dash of 2696 km along TransCanada Ontario highways 416, (4)17 and 11, north and south, to and past places and projects we've worked on in the past, stopping at one place each day for Aleta to do a daily painting of a scene. We continue to experiment with improvements in getting data, together with GPS waypoints, into the computer, and made many driveby waypoints of invasive *Euphorbia cf cyparissias* (Cypress Spurge), and invasive & native *Phragmites*, as well as monitoring for *Taraxacum palustre* (Oldfield Dandelion), the “victim of invasives” *Prunus nigra* (Canada Plum), and finding a northernmost *Polygonum cuspidatum* (= *Fallopia japonica*, Japanese Knotweed). We also waypointed road-killed Mammals, and began sampling for sites which the invasive roadside snail *Xerolenta obvia* hasn't reached. Our herpetological projects included waypointing of on-road Amphibians, which was thwarted by dry weather, monitoring the distribution of Leopard & Mink frogs at sites where we've known of them before, a beginning investigation of the effects of Earthworms on the Shaw Woods, and documenting spectacular egg mortality among Wood Frogs in this El Nino spring. We also checked in on Zebra Mussel abundance in the Muskrat and Mississippi rivers, and revisited the site visited in 1977 for the “Burn” chapter of *Canadian Nature Notebook*. This report concludes with all the field notes, as output in an EOBase Narrative of 600 database records.

Party: Aleta Karstad, Adam Zieleman, Frederick W. Schueler. Our contacts along the way included Jennifer Tanner in Ottawa, the Brisson family in Cochrane, and Wanda & Jamie Johnston in new Liskeard. Bob & Joan Lougheed provided us with gasoline when we exercised our talent for running out of that commodity in Matheson, and with their usual informed discussion of local biota. Corey Wood, Adam Craig-Ried, and Lorraine Leader looked after domestic symbionts at home. Joyce Cook identified Coleoptera from a beetle-rich sample of drift. We were driving the Chrysler Town & Country van, pulling Jennifer & Rory's little Boler trailer.

Route: The two exceptions to basically following the TransCanada Ontario highways 416, (4)17 and 11 routes north and south, was looping through Quebec on Hwy 101 from New Liskeard to Temiskaming, and coming home along the Dwyer Hill Road on our return trip

4 May 2010: **Bishops Mills General Store.** (44.87282N 75.70097W). TIME: 1532. 213651 km, to Kemptville for banking & provisioning.

5 May 2010: **Bishops Mills Store:** TIME: 2030. 213783 km, departure for northward 30-yr-later trip, CoRds 18 & 20, Hwys 416 & 417 to March Road (in error for Panmure Road) and tacked up to Breezy Heights, where we camped.

6 May 2010: Ontario: Ottawa-Carleton Region: **Breezy Heights Road, 5.6 km S Kinburn.** (45.34140N 76.19486W). TIME: 1021. 213874 km, to Shaw Woodlot & North Bay.

7 May 2010: Ontario: Nipissing District: **Hwy17, 1.7kmW Kaibuskong River** (46.27121N 79.16440W) TIME: 1005. 214182km, to North Bay and Cochrane.

9 May 2010: Ontario: Cochrane District: **Brissons, Commando Lake, Cochrane.** (49.06274N

81.02415W) 214604 km, to Matheson for Sunday morning meeting & drift survey

10 May 2010: **Brissons, Commando Lake, Cochrane** 214775 km, to Long Lake for painting & survey.

11 May 2010: **Brissons, Commando Lake, Cochrane.** 214817 km, to Opatatika 1977 burn site, Highway 11, McCowan Road, Wakatike Road & return.

12 May 2010: **Brissons, Commando Lake, Cochrane.** 215229 km, to Long Lake Camp.

14 May 2010: **Long Lake 2010 camp, 12.8 km NW Tunis.** (48.91606N 80.97202W) 215259 km, to Cochrane & then back & south to New Liskeard.

15 May 2010: Ontario: Timiskaming District: Casey: **Casey Marsh/12.3 km NE New Liskeard.** (47.58114N 79.54558W) 215511 km, to home via Quebec Highway 101, Ontario hwys 63, 533,17, Dwyer Hill Rd. (216347 km, upon return home)

Methodology: After having switched from Garmin eTrex to Magellan Triton GPS units last fall, because the Triton would time-stamp the waypoints (but frustrated by the Triton's habit of making waypoints, without giving any warning, of a previously waypointed location), this spring we switched back to the eTrex, and recorded times by hand. We'd hoped to have the GPS hooked up to the computer as it was running, in order to lay down both waypoints and their associated data as we drove along, but unimaginable deficiencies in the Magellan Vantage Point software, and questions about getting waypoints out of Google Earth (using the either GPS unit as a sensor) prevented this. What we did was to write procedures for extracting data fields from a text file into the database records made from the waypoints, and this proved pretty efficient both for driving-along recording, and for transcribing hand-written field notes into the database. This format, beginning with the waypoint and field number, as they're to appear in the database....

WAYPT/Y004,2010/084/c **TIME:**1057 **NAME:**Euphorbia **STYLE:**driveby
LOCAL:MadawaskaR/Hwy417 **REMARKS:**blooming stands scattered thru surrounding area - hwy being twinned thru here **HABITAT:**grassy fields&rdsides blw Hydro dam on rocky river
AIR:13,SNY,WDY

...allows the entry of those fields which vary from record to record (linked into the database by the waypoint number), while observers and invariant metadata, are inserted in the waypoint records in bulk. Details of the mode of observation are added from memory or other texts as the records are processed in the database, and the **STYLE:** field can be set to specify any value in any fields of the database. The virtue of this system is that it reduces eye- neck- and brain-strain for Fred when he's transcribing hand-written records to electronic form, so it may not have any more general application among individuals with different eyes, neck, and brains from his.

Projects: Herpetology

Amphibians on the road: In the original concept of this trip, we were going to drive on rainy nights, waypoint amphibians crossing the road, and record the calling heard where we stopped to identify on-road Animals, both for the sake of road-ecology modelling of habitat, and to improve knowledge of

species' ranges for the herp atlas. As it turns out, the only rainy night (or day) that we had was in Ottawa, on our way to the 5-6 May Breezy Heights camp, and we deemed these regions too familiar, and ourselves too confused, to make it worthwhile to stop.

Distribution of Leopard & Mink frogs (*Lithobates pipiens* & *L. septentrionalis*): Every time we visit northeastern Ontario, we're looking out for signs of surviving Leopard Frogs, and hoping to see Mink Frogs. This spring cold weather after extreme warmth had disrupted calling, so auditory surveys weren't possible, and nights were dry, so frogs weren't crossing the roads. We did confirm that leopard frogs persist in what seem to be fair numbers on at the **Casey Marsh, 3.1 km S Judge** (47.58174N 79.54628W), where we heard them calling from the central area of *Typha* mats in this artificial *Typha*-dominated waterfowl impoundment, 14 & 15 May. On 10 May at **Commando Lake** (49.0634N 81.021W) in Cochrane, Fred caught one Mink Frog in *Typha* along the northwest corner of the lake, and saw two additional jump-ins; his first record of this species here in repeated visits since 1972. It would be premature to say what this means for the status of the species in the area, but at least it means that they do persist.

Effects of Earthworms on the Shaw Woods: On 6 May we revisited the Shaw Woods, which is protected as a magnificent example of what's been lost in the otherwise complete clearing of the hardwood forests of the Ottawa Valley. In 1975, the then National Museum of Natural Sciences had been "given" the 50 hectares of this forest, **5 km SSW Micksburg**, in Renfrew County. A party of us went out from the museum, on 1 September 1975, to see what was there. From a herpetological point of view, the most interesting finding was 13 redback and 1 leadback, *Plethodon cinereus* (Eastern Redback Salamanders) under logs. There were also two big *Philomycus* slugs, the northernmost station where they're recorded in Fred's database.

The woods are evidently owned by the Shaw family, but now managed by the Nature Conservancy (Tanya Pulfer, e-mail 12 May 2010). The trees are still present: alive, standing dead, fallen, rotting away, and regenerating, and we expected to see all the diversity of forest-floor herbs in bloom or sprouting - Canada Ginger, Squirrel Corn, Twin Flower, Bunchberry, Star Flower, Bellworts and Canada Mayflower. White Trilliums bloomed here and there, in small groups of 4 or 5, there was one Bellwort, some single Red Trilliums at the bases of trees, and one clump of Jack-in-the-Pulpit, but the forest floor is dominated by an even sea of Trout Lily (*Erethronium americanum*) leaves, the flowers already past, and replaced by round green developing seed capsules. [see Aleta's blog](#)

As so often when the forest floor is dominated by *Erethronium*, tell-tale crumbles of soil peek from between last year's dry fallen leaves. Last year's leaves seems to be all there are.... the rest has been pulled underground and consumed by Earthworms. These invasive aliens have been in Ontario for as long as the Europeans who brought them, but increasingly we've noticed that they are



changing the ecology of forest floor, first in urban parks and now even in protected old growth forests.

Aleta remembers the deep layers of leaf litter Wayne Grimm sifted through in search of tiny snails on our 1975 visit, and Wayne found what he identified as 26 species of snails and five of slugs (Grimm *circa* 2001¹). This leaf litter was home to complex communities of everything from nematodes to Springtails to Centipedes, to Salamanders. In 2000, in the October rain relief after the summer droughts of 1999-2000, Wayne reported that “a series of nocturnal searches failed to locate any snails but the introduced *Arion subfuscus*.” *ca* 2001:2). Today we find no Salamanders, no snails, and of slugs, only a few shiny black *Deroceras laeve* and a juvenile *Arion cf sylvaticus*.

On Sunday, 13 June, the Macnamara Field Naturalists Club took a field trip to the Shaw Woods to have a look at the leaf litter fauna with Rob Lee, the flora with Eleanor Thomson, and forest bird ecology with Kathryn Lindsay. Unlike us they did find a *Philomycus* slug, and a few *Plethodon*. These were two of each of the colour phases, so we've got two samples separated by 30 years, and the observed ratio has changed from 1/13 (in 1975) to 2/2. Four is a small sample size, but Fisher's Exact test gives a probability of only 0.108 that's this is the same as the 1975 ratio.

[James Gibbs and Nancy Karraker](#) (2006. Effects of Warming Conditions in Eastern North American Forests on Redback Salamander Morphology, *Conservation Biology* 20(3):913-917) found that the leadback/redback ratio in this species had increased with, but faster than, increasing temperature over the course of the 20th century. Fred has mused about the possibility that the excess increase in the leadback morph, above that predicted by climatic warming, may be due to the effects of Earthworms in warming the soil, and in the Shaw Woods we find this result in an Earthworm-ravaged, but otherwise protected, oldgrowth woods, where reduction in litter depth by Earthworms is the main observed long-term disturbance. So, as always, we need bigger sample sizes, from here and from other sites where *Plethodon* were collected in the past!

Rut-breeding by Wood Frogs (*Lithobates sylvaticus*) in El Nino springs: In 1983, the first El Nino spring that we were aware of as such, cold and warmth alternated so abruptly that eggs were laid in flooded tire ruts all across Ontario, from the Niagara Peninsula to our study site at Long Lake, south of Cochrane (48.91606N 80.97202W; see *Weaving a fabric of sound*, FWS, 2001. *Trail and Landscape* 35(1):8-11). Again in the El Nino spring of 2002, on the James Bay Expedition, we found that “Most auditory records from 14-16 May around Cochrane, and at Moosonee, were index 3 choruses, but these were not actively breeding congresses, as the choruses could not be approached, and no concentrations of egg masses were laid at those chorus sites that could be visited during daylight. Scattered egg masses were laid in the ruts along the track at Long Lake. Most of the Québec records are sightings and captures of individuals rather than auditions, reflecting the later season when we visited this area. Eggs were found at 18 sites in Québec, ranging from 1 to 20 mass per site” (Jean-François Desroches, Frederick W. Schueler, Isabelle Picard and Louis-Philippe Gagnon, in revision).

On 19 & 20 May 2004 “It seemed that *Rana sylvatica* calling here was mostly over. . . . and that the onset of calling reported by local People was just an onset of *Pseudacris crucifer* (Spring Peeper) after heavy rain. The *Rana sylvatica* (Wood Frogs) seem to have bred earlier, perhaps in dispersed choruses or by rut-breeding. There was only a small chorus at the campsite area, and a small chorus from across

¹ Grimm, F. Wayne. 2001 (*circa*). **Shaw Forest Invertebrates**. unpublished report to Eastern Ontario Biodiversity Museum. 2 pp. http://pinicola.ca/FWG/shaw_woodlot.pdf

the Lake over the deafening Peepers. The deep North Pond was silent, though there was one male calling from the puddle/rut where we saw an eggmass in the afternoon. The middle (*Typha*) pond had a few males calling, but never very intensely. The South Pond, had a few males sometimes verging on index 2, but never very intensely. (2004/069/b) "I found substantial numbers of eggs along the track and in many ruts, increasingly abundantly away from the 'breeding ponds.' The older masses were generally in shallower water - but the water level seemed to have been dropping, as shown by some empty ruts with cracked mud bottoms. Most were in the longest central rut of a system, and about half were in clumps (clusters of adjacent masses) of 2-9 masses. There were very likely more masses than I found, since it was so dark that it was hard to see into the dark water. (2004/070/eb, tenses all changed to the simple past).

This spring (2010), temperatures in the first days of April reached 27°C around Cochrane, well before lakes, or ponds the size of those where Wood Frogs breed, were thawed. We presume that this led the frogs to move overland and lay eggs in tiny bodies of water such as tire ruts. Subsequent cold temperatures froze these eggs, which were in a granular tapioca-like condition, bright green with colonizing algae, when we surveyed them. Crystal marks on the bottoms of puddles in the road at Long Lake suggested that small waterbodies had frozen to a depth of 10cm. A few eggmasses, that presumably had been laid subsequently, had hatched, or developed towards hatching, though without a sufficient volume of water in the ruts there couldn't be much expectation that they'd persist through the summer to transformation.

We surveyed these rut eggs along the 1.5km rutted track that runs south, east of the lake, to the south end of the lake, which has been our main sampling transect here since 1983. Waypointed surveys of eggs in the ruts along the track were made in 2002, 2004, and 2010. Eggs were recorded from 32 ruts with a mean rectangular volume (recorded length x width x depth) of 6641 litres (ranging from 300L – 20000L; st.dev.=4953L). For simple ruts, the actual volume is probably something like 70% of the rectangular volume, while for some "rut complexes" it will be very much less than the rectangular volume.

Eighteen eggmasses (none hatching or dead) were recorded in 8 ruts on 16 May 2002, 68 eggmasses (22 hatching, none dead) were recorded in 10 ruts on 20 May 2004, and 57 eggmasses (5 hatching, 50 dead) were recorded in 17 ruts on 13 May 2010; on a scale of 20 m or so the eggmasses in the ruts in 2010 were always in the "best" spot for them to have developed.. Before 2010, we thought of the drying of ruts before metamorphosis as the main threat that this unco-ordinated oviposition posed to the Wood Frogs, but this spring the freezing of the eggs was added to these hazards, though the only large aggregation of eggmasses found, in one of the ponds near the campsite, were also completely killed by freezing, with only 20% of the eggs in an isolated mass that had escaped freezing and were hatching on 10 May.

Table 1: *Lithobates sylvaticus* eggmasses in ruts along the Long Lake track

The year of observation is indicated in the field number; the “dead” and “hatching” columns indicate the number of egg masses in those categories; “movement” indicates the distance and direction from the record above; and “Litres” is the rectangular volume of the rut.

Field Number	Masses		Movement	Latitude	Longitude	Litres	Habitat
	dead/	hatching					
2004/068/eb	1	0	0	main clearing	48.91659	-80.97252	- old hwy clearing in Populus/Picea woods near LongLake
2004/072/b	3	0	1		48.91659	-80.97252	- clayey rdway puddles in old hwy clearing in Populus/Picea woods
2002/096/a	1	0	0	174 m S	48.91252	-80.97435	2000 rutted grassy track in Populus/Picea woods
2004/070/bb	1	0	0	13 m WSW	48.91248	-80.97451	- wide system of ruts in a grassy trackway in Populus/Picea woods
2004/072/d	0	0	0	33 m W	48.91246	-80.97496	300 complex of ruts in track thru Alnus/Picea woods
2010/103/la	1	1	0	41 m ESE	48.91228	-80.97447	20000 ruts in clay acr grassy/Carex track thru Poplar/Abies/Picea forest
2004/070/gb	1	0	0	125 m SSE	48.91059	-80.97419	8000 rutted grassy track at edge of clearcut inPopulus/Picea woods
2004/070/hb	5	0	3	46 m SSE	48.91020	-80.97399	- rutted grassy track inside clearcut area inPopulus/Picea woods
2002/096/ba	3	0	0	47 m S	48.90978	-80.97398	10000 rutted grassy track at edge of clearcut/Populus/Picea woods
2010/104/a	1	1	0		48.90977	-80.97398	15000 ruts in Grass/Carex/Typha area in track thru Alnus-brush clearcut
2010/104/b	1	0	1	24 m SSE	48.90956	-80.97390	1000 ruts in Grass/Carex/Typha area in track thru Alnus-brush clearcut
2010/104/d	1	0	1	112 m SSE	48.90705	-80.97456	400 ruts in wide Grass/Carex area in track thru Alnus-brush clearcut
2004/070/j	12	0	0	18 m SW	48.90693	-80.97473	3000 25cm deep rut complex,w scatteredTypha latifolia,in clearcut
2010/104/e	14	14	0	17 m SSW	48.90680	-80.97486	10000 ruts in wide Grass/Carex area in track thru Alnus-brush clearcut
2002/096/ca	7	0	0	9 m ESE	48.90676	-80.97476	8000 rutted track thru clearcut of Populus/Picea woods
2010/104/fa	2	2	0	47 m SW	48.90641	-80.97512	10000 ruts in wide Grass/Carex track thru boggy Picea forest
2004/070/l	10	0	1	18 m SSW	48.90627	-80.97525	700 dark brownwater rut in track/Alnus/Picea scrub btwn clearcuts
2010/104/g	5	3	0		48.90618	-80.97525	10000 ruts in wide Grass/Carex track thru boggy Picea forest
2010/104/h	2	2	0	37 m SSW	48.90589	-80.97550	10000 ruts in wide Grass/Carex track thru boggy Picea forest
2002/096/d	3	0	0	8 m ESE	48.90587	-80.97539	8000 rutted track thru Alnus/Picea scrub
2004/070/m	7	0	3	34 m SSW	48.90561	-80.97564	300 brownwater ruts in track thru Alnus/Picea scrub btwn clearcuts
2002/096/e	1	0	0	15 m S	48.90548	-80.97562	5000 rutted track thru Alnus/Picea scrub
2010/104/ia	2	2	0	30 m SW	48.90528	-80.97589	8000 ruts in wide Grass/Carex track thru boggy Picea forest
2004/070/nb	27	0	14	38 m SSW	48.90495	-80.97604	10000 complex of ruts in track thru Alnus/Picea scrub btwn clearcuts
2010/105/aa	17	17	0	4 m SSE	48.90492	-80.97602	16000 ruts in wide Grass/Carex track thru boggy Aibes/Picea forest
2002/096/f	1	0	0	13 m S	48.90480	-80.97601	10000 rutted track thru Alnus/Picea scrub
2002/096/g	1	0	0	40 m SSW	48.90450	-80.97631	10000 rutted track thru Alnus/Picea scrub
2002/096/g	1	0	0		48.90450	-80.97631	900 rutted track thru Alnus/Picea scrub
2010/105/b	1	1	0	4 m SE	48.90447	-80.97627	10000 ruts in wide Grass/Carex track thru boggy Aibes/Picea forest
2010/105/c	3	3	0	16 m WSW	48.90439	-80.97646	3000 ruts in wide Grass/Carex track thru boggy Aibes/Picea forest
2010/105/d	1	1	0	35 m WSW	48.90422	-80.97687	3000 ruts in wide Grass/Carex track thru boggy Aibes/Picea forest
2010/105/ea	1	1	0	10 m WSW	48.90417	-80.97699	6000 ruts in wide Grass/Carex track thru boggy Aibes/Picea forest
2010/105/f	1	1	0	23 m SW	48.90405	-80.97724	3500 ruts in Grass/Carex track thru grassy clearcut
2010/105/ga	1	0	1	15 m WSW	48.90398	-80.97741	4000 ruts in Grass/Carex track thru grassy clearcut
2010/105/h	3	1	2	13 m WSW	48.90394	-80.97758	6000 ruts in Grass/Carex track thru grassy clearcut
2004/070/p	1	0	0	129 m SW	48.90309	-80.97878	400 clay-bottom ruts in track alg clearcut Populus/Picea forest

Projects: Invasive Plants The distribution of invasive plant species are one of the most easily recorded kinds of ecological change, and since many of them spread along roads, they can be noted in drive-by surveys.

Distribution of Canada Plum (*Prunus nigra*): The Canada Plums on our land in Bishops Mills are beset by “Plum Pockets” fungi of the genus *Taphrina* which deform the young fruit into hollow, bladder-like balloons, depriving the Plums of the benefit of seed dispersal and sexual reproduction. In the thirty years we've lived here, there's only been one or two years when the Plums matured fruit. We feel that the Plums would asexually compete adequately against the invasive Cathartic Buckthorn (*Rhamnus cathartica*) that's taking over so many fields and roadsides in eastern Ontario, but that their limiting factor is the failure to set seed. We've accordingly tried to map where there are clumps of this species, in order, some summer, to check for the prevalence of *Taphrina*, though diverse problems have prevented summer surveys so far. This spring the flowers persisted for a long while in the stalled low temperatures, so we waypointed clumps of this species, on a drive-by basis, as far north as Ontario: Renfrew County: Hwy 41, 3.3 km NNE Locksley (45.75583N 77.11556W), Timiskaming District: 9.2 km S Belle Vallee (47.56986N 79.58848W), and Quebec: Hwy 101, 10.0 km NW Lorraineville (47.41331N 79.44973W).



These are, however drive-by identifications, and we're made anxious by the idea of especially clumpy-bloomed *Amelanchier*. We hope to visit some of the more southerly drive-by Plums in July to see what their fruiting may be like.



Distribution of the Oldfield Dandelion, *Taraxacum palustre*: Ever since we learned of Dan Brunton's discovery of the introduction of *Taraxacum palustre*, the Oldfield Dandelion, to eastern Ontario, on trips north in Dandelion Time, we've been making records of the new species, and record places where it doesn't yet occur. This hasn't resulted in evidence of widespread northward spread.

On 13 May 2002 at the **Muskrat R at Hwy 17/0.6 km NW Meath**. (45.73568N 77.00063W), *T. palustre* made up 10% of Dandelions on a rough boatlaunch lawn, but we didn't see it on our 15 May 2010 stop there (though the 2010 season may have been past for the species on 15 May). Our northern record this year was **Shaw Woods, 4.6-4.9 km SSW Micksburg**. (45.62701N 77.06371W, 45.62599N 77.06820W, 45.62881N 77.07223W), where in a whole afternoon of searching, we found find only 3 plants of this species. North of here, the database contains 6 explicit records of the absence of *T. palustre*, and 56 of *T. officinale*, many of which are implicit statements of the absence of *T. palustre*. We were especially surprised, on this trip, not to see it in vacant lots and wet-barren places around shopping malls in North Bay.

***Euphorbia cf cyparissias* (Cypress Spurge) along highways in Renfrew County:** We've been recording the extent of this invasive *Euphorbia*, which yellows the roadsides with bloom at this time of year, for some years now. On 12 May 2002. there was an isolated stand along **Highway 17/1.7 km NNE Haley Station** (45.56982N 76.77262W) in sandy till on a roadside bank at edge of a White Pine grove. West of Arnprior patches of a low yellow *Euphorbia* had been the only flower along the roadsides - on moderately rich grassy slopes, though they stopped being abundant before Renfrew, and when we finally collected the sample near **Haley Station** the patch sampled was an isolated occurrence.

On 16 September 2009, during the Pilot Trip, we found scattered plants around a sandy parkinglot among residences & retail in brushy Red/White/Jack Pine woods in the **Chalk River Highway 17 commercial strip** (46.02042N 77.44964W), This spring our survey was much more thorough than previous runs, with the species recorded at 10 stations. Our northwesternmost stand along Highway 17 was Nipissing District: **1.0 km W Stonecliffe**. (46.21385N 77.90484W, 113.5 km NW Haley Station) with other stands seen at Renfrew County: **2.3 km WSW Petawawa** (45.88716N 77.30732W), **5.0 km S Petawawa** (45.85322N 77.28171W), **Muskrat River 0.6 km NW Meath** (45.73568N 77.00000W), **1.0 km SE Cobden** (45.62103N 76.86961W), and two specific records SE of the 2002 sample: **0.6 km ESE Bonnechere River bridge** (45.48402N 76.65019W), and **CoRd 6 at Renfrew exit** (45.46897N 76.62283W). The roadsides were yellow with this species past Arnprior. We saw none along the entire length of the Dwyer Hill Rd on 15 May, nor along Hwy 60 through Renfrew to Kelly's Corner on 6 May.

Distribution of *Phragmites* along highways: The Common Reed, *Phragmites australis*, is regarded as perhaps the most widespread plant species in the world, occurring on all vegetated continents, including each of the conterminous United States and Canadian provinces. While it's considered a native *species*, *Phragmites*' range has expanded dramatically in the past century in brackish wetlands of the eastern and Gulf USA, and more recently in other wetlands and uplands across the continent. The cause of this expansion



was initially poorly understood, but Kristin Saltonstall's discovery that in North America there are one exotic and several native strains, which she identified from chloroplast haplotypes in both contemporary samples and historic herbarium specimens. *Phragmites* was rare on the east coast in the 19th century, but it increased all through the 20th century, as the European strain spread steadily from mid-Atlantic ports. The local North American strain has been described as subspecies *americanus*, in contrast to the European, invasive subspecies *australis*.

Since 1993, we've been recording the location of stands of roadside *Phragmites*, in northern Ontario and northwestern Quebec, both as driveby waypoints, as specimens and in-stand examinations. On this trip we recorded 91 stands, of which 45 weren't previously recorded as individual records, though some were covered by text notes such as that on 2001/170/e, "This is the 10th stand N of Riv.Gordon, and was followed by 4 more in the next few km, and then no more until after WAYPT/026," which would by itself reduce the unrecorded stands to 32. Twenty-two stands were recorded once before (assuming identity within a 150m radius), a further 22 2-6 times, and 2 5-7 times. These stands fall into 5 transects, which are listed below in comparison with previous records that match them within 150m...

Table 2: *Phragmites* stands along transect highways

transect	Limits (& foxpro filter)	stands in 2010	Counts & dates of matching records
Dwyer Hill Road	Entire road, Ottawa Rd 3, Hwy 17 (Arnprior)-Burritts Rapids between (latitude, 44.98370, 45.42167)	14	(15 previous sites, 6 new) 2000 (2), 2001 (1), 2002 (2), 2003 (2), 2004(1), 2008 (3) – only 2 previous stands missed/absent.
Hwy 17, Arnprior-North Bay	Dwyer Hill Rd-Hwy 11 (E of North Bay) between (longitude, -79.43252, -76.32496)	17	(34 previous records, 5 new) 1997 (1), 1999 (9), 2001 (2), 2002 (3), 2004 (3), 2009 (2) – none of the multiply-recorded stands have been added since 1999, and only a couple previous records were missed/absent along stretches that we surveyed during daylight.
Quebec, Hwy 101	Notre-Dame-du-Nord – Temiskaming between (latitude, 46.71159, 47.58901)	16	(15 new) 2001 (1) – but see note in text.
Hwy 11, North Bay to Cochrane	Hwy 17 (W junction)-Polar Bear turn between(latitude, 46.32992, 49.05858)	37	(71 previous records, 48 previous stands, 13 new, 23 stands not refound – roadsides have been extensively reworked) 1997 (6), 2000 (17), 2002 (17)
Hwy 11, Cochrane to Hearst	between(longitude, -83.65556, -81.02964)	5	(3 new, 2 of three stands recorded in 2000 refound; the transect includes 2 more stands W of where we surveyed in 2010)

Northern limit of Japanese Knotweed: Robert S. Bouchier and Brian H. Van Hezewijk ([Distribution and Potential Spread of Japanese Knotweed \(*Polygonum cuspidatum*\) in Canada Relative to Climatic Thresholds](#), Invasive Plant Science and Management 2010 3:32–39) have proposed a model, based on the species' distribution in British Columbia, in which Japanese Knotweed should be limited to sites where winter temperatures don't drop below -30.2C. This gives northerly records of the species, in situations where it's not receiving a gardener's care, importance in forming models more appropriate for Ontario, and we collected a specimen of the most northerly such stand we've encountered at:

Cochrane, 0.2 km SSE Cochrane Town Hall. 49.06156N 81.02763W. HABITAT: trashy/sandy lot/yard in town. 2010/092/g, *Polygonum cuspidatum* (Japanese Knotweed) (Plant). 1/7 clumps herb, dead, specimen. 6 small (1 m or less) clumps & a larger 1 x 4 m clump. These have residual flower stalks, and dark reddish colour on the dry stems. They're wild in this untended lawn/lot.

We urge anyone who knows of northern stands to report them through our [Knotweed page](#).

Projects: Road Ecology (see also **Invasive Plants, Amphibians on the road** (herpetology), and **Exotic roadside snails** (below)).

Road-killed Mammals: Since large and medium-size Mammals are important elements of the biota and suffer considerable roadkill mortality in particular seasons, we're now routinely waypointing them, in the hope of [constructing models that predict their occurrence on the basis of habitat and season](#). On this trip we made 28 records of on-road Mammals in driving 2696 km, or one about every 100 km (though the recordability of on-road individuals was reduced at night and on crowded highways, and fairly often a second roadkill was seen while a first was being recorded, so that the second couldn't be accurately waypointed, and isn't included in these totals): *Lepus americanus* (Snowshoe Hare) 5, *Erethizon dorsatum* (Porcupine) 4, *Marmota monax* (Woodchuck) 4, *Vulpes vulpes* (Red Fox) 3, *Mephitis mephitis* (Skunk) 2, *Ondatra zibethicus* (Muskrat) 2, *Canis lupus* (Northern Wolf) 2 records of tracks, *Procyon lotor* (Raccoon) 1, *Odocoileus virginianus* (Whitetail Deer) 1, undifferentiated Mammalia 4.

Projects: Malacology

Exotic roadside snails: On our 23 April visit to Breezy Heights, when Aleta painted the [Xerolenta obvia](#) that's found there, we'd waypointed a few sites where the species occurs along Hwy 417, to add to those Robert Forsyth and Fred had found in November 2009. Time pressures kept us from improving on this survey of Hwy 417 on this trip, but we accumulated a multitude of negative roadside records away from the existing colony, and we're able to present a partial table of occurrences:



The NW limit on the N-bound lanes needs to be checked, as does the median, and nearby Dwyer Hill

Road, especially at the open gravelly site labelled Panmure. We saw no *Cepaea* snails anywhere along our route. The problem in casual surveys for these snails is the ingrained human preference to just keep moving along. They're big and conspicuous when you're on foot, but invisible as you're driving by them.

Table 3: *Xerolenta obvia* along Hwy 417 near the Breezy Heights Colony

	N side of hwy (NW-bound)	S side of hwy (SE-bound)
Closest negative site	Not assessed	45.36104N 76.23808W
NW-most site	Not assessed	45.34498N 76.19881W
SE-most site	45.34649N 76.20027W	45.33705N 76.18276W
Closest negative site	45.34265N 76.19318W	45.33442N 76.17233W

Zebra Mussel abundance in susceptible rivers: it's a platitude that Zebra Mussels (*Dreissena polymorpha*) will eventually become abundant in every stream that has adequate calcium and is downstream from a lake, but this doesn't diminish the shock to the observer when the increase in abundance occurs. Both eastern Ontario rivers that we checked on this trip provided such a shock, though in both cases it turned out that we hadn't visited them particularly recently::

On 6 May 2010 at **Dwyer Hill Rd/Mississippi River, 5.4 km NNE Pakenham**. (45.37765N 76.26632W) we stopped to check the new concrete bridge over the over slow/impounded river in low pasture fields. The water was pretty high, and greenish. There was a suspicious transparency that you find with the presence of Zebra Mussels. On the southwest bank, there was what appeared to be a Muskrat midden of shells, mostly large Zebra Mussels with a scattering of *Elliptio*. Zebra Mussels have been in the Mississippi River for a decade now, but we've never seen any evidence of actual abundance in the river itself, though the last time we checked at this site was 2001. Obviously we're going to have to visit all our traditional places along the Mississippi when the water is lower, to see what's what. This might, of course, not mean any more than that one Muskrat has developed a taste for Zebra Mussels and has hunted out the big ones, and that it may not indicate anything more than a long-standing infestation that's not increasing. So we have two hypotheses to test. . .

Things were similar at **Muskrat River at Hwy 17, 0.6 km NW Meath** (45.73568N 77.00000W) which we visited on 15 May, and which it turns out we hadn't checked since 2002. This is a trampled fishing area along a marshy lake outflow. *Dreissena polymorpha* (Zebra Mussel) was abundant on shore & on rocks & on Unionids in the river. This is the first time we've seen Zebras here, and the water of the river is strikingly clear. The Unionids, *Pyganodon grandis* (Common floater), and *Elliptio complanata* (Eastern Elliptio) were mysteriously represented by many fresh shells on shore & in water, and living ones on shore and in shallow water along shore. It's not clear what's pulled so many of these up unto the shore: fisherpeople or Beavers or Muskrats. At a *Phragmites australis* (Common Reed) stand, a hole or burrow in the stand was packed with a styrofoam container and Unionid shells; again we have no explanatory explanation to proffer that wouldn't reflect badly on the mentality of whichever mammalian species was responsible for this deposit..

General revisits: Only one revisit is specifically described in this category, since it was the only one where we went out only for the sake of the revisit.

Ecological condition of site visited in 1977 for “Burn” chapter of Canadian Nature Notebook: On 11 May we searched for the freshly burned area that we described in [Canadian Nature Notebook](#). Our directions were only the road distance "8 km W, 24 km N Opatatika," and an NMNS Ichthyology guess at the co-ordinates. We spent an exciting afternoon of seeing Black Bears, a Bald Eagle, and a Sandhill Crane, and photographing Moose and Wolf tracks, among the maze of new and old logging roads. We did find an area of fallen trees with some old weathered charring, pieces of charcoal under dense, rusty-green moss, and fire hollowed roots where the fire had burned down into the duff, to mineral soil. Our conclusion was that after 33 years, we couldn't tell the burned area from the surrounding clearcuts.



EOBase Narrative of the 30-years-later trip to Cochrane District, 4-15 May 2010 - these are given in unedited form, as output by the database on 15 July 2010. Military Grid UTM's are NAD27 Canada, while Latitude/longitude co-ordinates are WGS84.

4 May 2010

1) Canada: Ontario: Grenville County: Oxford-on-Rideau: **Bishops Mills General Store**. 31B/13, UTM 18TVE46 446 688.4 44.87282N 75.70097W. TIME: 1532. AIR TEMP: 9, light rain, breezy. ROUTE: gravel/hedge/paved area around store building in rural village on limestone plain. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler, Adam Zieleman. bhhzlog, **departure** (departure) (event). natural history, drive. 213651 km, to Kemptville for banking & provisioning. After a small thunder storm.

moved 15.6 km NNE.

2) Kemptville: **Clothier St just E Somerville Road, Kemptville**. UTM 18TVE 482.5 840 45.00955N 75.65631W. TIME: 1551. AIR TEMP: 12, light overcast, windy. HABITAT: residential woodland near creek, in town. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler. 2010/082/a, *Syringa vulgaris* (Common Lilac) (Plant). common shrub, in bloom, seen, driveby. white & purple bushes both very fully open.

moved 1.22 km NNW.

3) North Grenville: **Food Basics, 1.2 km WNW Kemptville(Prescott St bridge)**. 31G/4, UTM 18TVE 479.1 851.7 45.02008N 75.66070W. TIME: 1626-1630. AIR TEMP: 15 ca, sunny, breezy. HABITAT: wet barren sand flats near drainage ditch between retail clearing & swampy woods. OBSERVER: Frederick W. Schueler. 2010/082/b, *Taraxacum officinale* (Common Dandelion) (Plant). few herb, in bloom, seen. sparse single-bracted plants here, NO: *Taraxacum palustre*. . . . seen where there were a few last year. Every Dandelion all around the west side, drainage ditch to the rear, and the few along the mowed east side of the lot was examined, and all had reflexed bracts and many had deeply triangular teeth in the leaves.

4) (same location) 2010/082/ca, *Rana pipiens* (Leopard Frog) (herp). 1 adult, seen. ca 60 mm SVL, jumped into algae-streaming drainage ditch.

5) (same location) 2010/082/cb, *Phragmites australis* (Reed) (Plant). 1 stand herb, seen. sparse 2 m patch, just sprouting now.

moved 0.04 km ENE.

6) **Food Basics, 1.2 km WNW Kemptville(Prescott St bridge)**. UTM 18TVE 479.5 851.9 45.02026N 75.66029W. TIME: 1636. AIR TEMP: 15 ca, sunny, breezy. HABITAT: flowing Ludwigia/Scirpus/dark algae ditch between retail clearing & swampy woods. 2010/082/da, *Oxyloma* () (Mollusca). many adult, juvenile, specimen. dark bodied, incredibly dense on 1 m log across ditch.

7) (same location) 2010/082/db, **Mollusca** () (Mollusca). shell, drift, specimen. floating behind(W of) 1 m log across ditch.

moved 15.7 km SSW.

8) Oxford-on-Rideau: **Bolton Rd/2.8 km NW Bishops Mills**. 31B/13, UTM 18TVE47 425 705 44.88759N 75.72774W. TIME: 1712. AIR TEMP: 13, cloudy. HABITAT: scrubby oldfields near drainage ditch. 2010/082/dd, *Meleagris gallopavo* (Turkey) (Bird). 6 ca adult, seen, driveby. in hayfield SW of site. Rainbow to the E.

moved 5.1 km S.

9) Wolford: **Bolton Road, 3 km SSW Bishops Mills**. UTM 18TVE 434 655 44.84266N 75.71578W. TIME: 1716-1718, 1726-1728. AIR TEMP: 14, sunny, breezy. HABITAT: road through Thuja woods & planted Jack Pine barrens. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler. 2010/082/f, **no observation** () (event). survey, driveby. NO: *Lepus americanus* AOR/DOR. Drove down to South Branch Bridge to release captive Leopard Frogs.

moved 3.4 km NNE.

10) Oxford-on-Rideau: **Bishops Mills:S side(Schuelers)**. UTM 18TVE46 446 687 44.87156N 75.70095W. TIME: 2135. AIR TEMP: 12, clear, calm. HABITAT: rural village, shallow soil limestone plain. OBSERVER: Frederick W. Schueler. 2010/082/ga, *Pseudacris crucifer* (Spring Peeper) (herp). index 2? call, listen. barely audible calling.

11) (same location) 2010/082/gb, *Bufo americanus* (American Toad) (herp). index 1-2? call, listen. barely audible calling.

moved 0.10 km N.

12) **Bishops Mills(Co Road 18/Mill St. intersection)**. UTM 18TVE46 446 688 44.87246N 75.70096W. TIME: 2145-2151. AIR TEMP: 11, clear, calm. HABITAT: streets in rural village & surrounding fields, facing 30 Main Street-6 St Lawrence St. 2010/082/h, **no observation** () (event). survey, walk, light. NO: Animalia AOR/DOR, streets 70% dry.

moved 0.04 km N.

13) (**Bishops Mills Store**) TIME: 2331. AIR TEMP: 9 ca, clear, calm. HABITAT: gravel/hedge/paved area around store building in rural village on limestone plain. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler. 2010/082/i, *Canis latrans* (Coyote) (Mammal). several call, heard. to the N of the village, eliciting howling by Dogs. Heard while we're getting ready for sleeping in the trailer.

5 May 2010

14) (**Bishops Mills Store**) TIME: 2023. AIR TEMP: 19, light overcast, calm. HABITAT: gravel/hedge/paved area around store building in rural village on limestone plain. OBSERVER: Frederick W. Schueler. 2010/083/aa, *Lilioceris lillii* (Red Lily Beetle) (entomological). 15 ca mature, food, seen. these have chewed up the 4 remaining *Lilium* shoots. . . . at the corner of the drive, beside the *Thuja* near the Mill St sidewalk. The planted Plums have pretty well shed their petals, and the *Taraxacum officinale* (Common Dandelion) along the parking area are at the stage where I'm pulling handfuls of closed flowerheads to feed to the bunnies before they go to fluff.

15) (same location) 2010/083/ab, *Hyla versicolor* (Tetraploid Gray Treefrog) (herp). few call, heard. sporadic calls all afternoon. From the Lilacs, *Corylus*, and *Acer negundo* (Manitoba Maple) thickets.

16) (same location) 2010/083/ac, **Culicidae** (Mosquito) (entomological). many mature, heard, felt, seen. moderately annoying numbers for the first time this yr.

17) (same location) TIME: 2030. AIR TEMP: 19, light overcast, calm. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler, Adam Zieleman. 2010/083/ad, *Scolopax minor* (Woodcock) (Bird). 1 call, heard. flight song overhead as we leave.

18) (same location) bhhzlog, **departure** (departure) (event). natural history, drive. 213783 km, on inchoate

northward 30-yr-later trip. Pulling J & R's Boler trailer on a newly installed hitch, and with no real improvement on en route data entry.

moved 3.4 km NNE.

19) **Kemptville Crk/Co Road 20, 0.1 km SE Co. Rds 18 & 20.** UTM 18TVE 460.5 719.4 44.90086N 75.68290W. TIME: 2044-2057. AIR TEMP: 19, light overcast, Beaufort light breeze, Beaufort moderate breeze. HABITAT: swamps & marshes along slow brownwater creek. 2010/083/ba, *Pseudacris crucifer* (Spring Peeper) (herp). index 3 call, listen. nearby chorus, airplane & traffic noise.

20) (same location) 2010/083/bb, *Rana pipiens* (Leopard Frog) (herp). index 1 call, listen. few calls audible, airplane & traffic noise.

21) (same location) 2010/083/bc, *Bufo americanus* (American Toad) (herp). index 1 call, listen. few calls audible, airplane & traffic noise.

moved 7.3 km NE.

22) **Co Road 20, 0.8 km NE Oxford Station.** UTM 18TVE 521.3 759.4 44.93726N 75.60632W. TIME: 2056. AIR TEMP: 21, light overcast, breezy. HABITAT: Typha/grass ponds in Thuja bush/oldfields and residences. 2010/083/ca, *Pseudacris crucifer* (Spring Peeper) (herp). index 3? call, heard, driveby. chorus heard in driveby audition. NO:*Pseudacris triseriata* heard, though the possibility that some were present can't be excluded. continued to Highway 416, and the first drops of forecast rain began as we turned N on the 416.

23) (same location) 2010/083/cb, *Pseudacris crucifer* (Spring Peeper) (herp). index 2? call, heard, driveby. small chorus heard in driveby audition.

moved 11.5 km N.

24) N.Grenville: **Bo's, 19 D'Arcy Lane, 3.3 km ENE Kemptville Crk/Hwy 43.** 31G/4, UTM 18TVE 523 874.5 45.04086N 75.60522W. TIME: 2112. AIR TEMP: 19, light rain. HABITAT: marshy Typha ditch between lawn/garden & roadside in newly subdivided residential woodl. 2010/083/e, **visit** () (event). nat.hist., drive. searching for a tire pressure gauge. As usual, the residences of those we know can be recognized by the weediness of those parts of their grounds that don't need to be weeded. Bo's auto repair is about the only business in this wilderness of over-dispersed residences, which are growing up with trees now, but the trees can't conceal their absolute dependence on automobiles to get their occupants to any non-bedroom location.

moved 37.9 km NNW.

25) Canada: Ontario: Ottawa-Carleton Region: Ottawa: **Jenn & Rory's, Richmond Road, 2.0 km NE Hwys 416/417.** 31G/5, 45.35420N 75.79650W TIME: 2204. AIR TEMP: 14, heavy rain, breezy. 2010/083/f, **arrival** () (event). nat.hist., drive. FWS to enter field notes. Adam & AKS to Adam's parents' in J & R's car to pick up wading shoes.

From here we took the 417 to March Road (in error for Panmure) and tacked up to Breezy Heights, seeing a scattering of AOR/DOR *Rana* (True Frog) and other Anurans and *Lumbricus terrestris* (Nightcrawler), and hearing a few *Pseudacris crucifer* (Spring Peeper) through the cracked-open windows.

moved 31.2 km W.

26) **Breezy Heights Road, 5.7 km S Kinburn.** 31F/8, UTM 18TVF 63.2 213.1 45.34108N 76.19534W. TIME: 2452-2512. AIR TEMP: 13, cloudy, Beaufort light breeze. HABITAT: shallow roadside pond in broken-limestone roadside gravel. 2010/082/ga, *Pseudacris crucifer* (Spring Peeper) (herp). index 1-2 call, heard. small chorus.

27) (same location) 2010/082/gb, *Hyla versicolor* (Tetraploid Gray Treefrog) (herp). index 1 call, heard. few

calls.

28) (same location) 2010/082/gc, *Bufo americanus* (American Toad) (herp). index 1 call, heard. few calling, distant.

moved 0.05 km NE.

29) **Breezy Heights Road, 5.6 km S Kinburn.** UTM 18TVF 63.6 213.5 45.34140N 76.19486W. TIME: 2452-2512. AIR TEMP: 13, cloudy, Beaufort light breeze. HABITAT: broken-limestone roadside gravel. 2010/083/g, *Xerolenta obvia* () (Mollusca). abundant shell, seen. none active. Camped here for the night.

30) (same location) AIR TEMP: 13, clear, Beaufort light breeze. 2010/083/i, *Lumbricus terrestris* (Nightcrawler) (invertebrate). 50 ca shell, AOR. big heavy worms on pavement, ca 1/1.5 m.

moved 0.05 km SW.

31) **Breezy Heights Road, 5.7 km S Kinburn.** UTM 18TVF 63.2 213.1 45.34108N 76.19534W. TIME: 2507-2512. AIR TEMP: 13, clear, Beaufort light breeze. HABITAT: shallow roadside pond in broken-limestone roadside gravel. 2010/082/gd, *Pseudacris triseriata* (Striped Chorus Frog) (herp). index 1 call, heard. few calls from N of quarry & away from road.

moved 0.05 km NE.

32) **Breezy Heights Road, 5.6 km S Kinburn.** UTM 18TVF 63.6 213.5 45.34140N 76.19486W. TIME: 2555. AIR TEMP: 11 ca, clear, breezy. HABITAT: broken-limestone roadside gravel. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler. 2010/083/j, *Charadrius vociferus* (Killdeer) (Bird). 1 call, heard. heard overhead.

6 May 2010

moved 0.15 km WNW.

33) Canada: Ontario: Ottawa-Carleton Region: **Breezy Heights Road, 5.6 km S Kinburn.** UTM 18TVF 62.3 214.3 45.34207N 76.19654W. TIME: 0900-0928. AIR TEMP: 10, light rain, windy. HABITAT: broken-limestone/gravel, *Juniperus communis*/lichen barrens near quarry. OBSERVER: Frederick W. Schueler. 2010/083/ka, *Pseudacris crucifer* (Spring Peeper) (herp). few call, heard. few calls early in interval.

34) (same location) 2010/083/kb, *Xerolenta obvia* () (Mollusca). abundant shell, specimen. WAYPT/Y 001, shells scooped up from ground among *Juniperus*. With some included lichens.

35) (same location) 2010/083/kba, **Mycophycophyta** (Lichens) (lichen). abundant specimen. scooped up with *Xerolenta* shells from ground among *Juniperus*.

36) (same location) 2010/083/kc, *Euphorbia cf cyparissias* (Cypress Spurge) (Plant). codominant herb, in bloom, specimen. from big patch with Grass on higher ground among *Junipers*.

37) (same location) 2010/083/kd, **<Spire-flowered plant>** (not listed) (Plant). few herb, in bloom, specimen. from low ground among little blooming *Carex* in ditch.

moved 0.15 km ESE.

38) **Breezy Heights Road, 5.6 km S Kinburn.** UTM 18TVF 63.6 213.5 45.34140N 76.19486W. TIME: 1021. AIR TEMP: 10, cloudy, breezy. ROUTE: broken-limestone roadside gravel. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler, Adam Zieleman. bhhzlog, **departure** (departure) (event). natural history, drive. 213874 km, to Shaw Woodlot. Going along Breezy Heights Road N on Upper DHRd - saw a

stationary *Cathartes aura* (Turkey Vulture) in the wind a bit N.

moved 6.9 km NW.

39) West Carleton: **Dwyer Hill Rd/Mississippi River, 5.4 km NNE Pakenham**. UTM 18TVF 8.2 254.6 45.37765N 76.26632W. TIME: 1030-1043. AIR TEMP: 13, sunny, windy. HABITAT: bridge over slow/impounded river in low pasture fields. 2010/084/a, **visit** () (event). adult, walk. WAYPT/Y 002, checking out river & new concrete bridge. NO: Testudinata eggshells in crushed rock gravel of new bridge embankment, though some dimpling that looks like turtle-digging

There is a new concrete bridge over the river with new gravel embankments. Water is still pretty high, and greenish. There's a suspicious transparency that you find with the presence of Zebra Mussels. Not much drift, mostly Cattail stems. However, on the southwest bank, there is what appears to be a Muskrat midden of shells, mostly large Zebra Mussels with a scattering of Elliptios.

Fred says: "Zebra Mussels have been in the Mississippi River for a decade now, but we've never seen any evidence of actual abundance in the river itself. Obviously we're going to have to visit all our traditional places along the Mississippi when the water is lower, to see what's what. "

But I think that it may not mean any more than that one Muskrat has developed a taste for Zebra Mussels and has hunted out the big ones, and that it may not indicate anything more than a long-standing infestation, not an increasing one. So we have two hypotheses to test. . .

40) (same location) OBSERVER: Frederick W. Schueler. 2010/084/aa, *Hirundo rustica* (Barn Swallow) (Bird). adult, seen, heard. WAYPT/Y 002, 30 ca flying around new concrete bridge. . . . as if prospecting for nesting sites.

41) (same location) 2010/084/ab, *Hirundo pyrrhonota* (Cliff Swallow) (Bird). 1(+?) adult, seen, heard. 1 at least noted among *Hirundo rustica*.

42) (same location) 2010/084/ac, *Tachycineta bicolor* (Tree Swallow) (Bird). 1(+?) adult, seen, heard. 1 at least noted among *Hirundo rustica*.

43) (same location) 2010/084/ad, *Dreissena polymorpha* (Zebra Mussel) (Mollusca). abundant shell, specimen. on shore under S end of bridge span.

44) (same location) 2010/084/ae, *Elliptio complanata* (Eastern Elliptio) (Mollusca). common shell, specimen. on shore under S end of bridge span.

45) (same location) 2010/084/af, *Viviparus georgianus* (Banded Mystery Snail) (Mollusca). few shell, specimen. on shore under S end of bridge span.

moved 6.7 km NW.

46) Canada: Ontario: Renfrew County: **Highway 29/417, 2.1 km SE Arnprior**. UTM 18TUF 960.1 301.6 45.41921N 76.32880W. TIME: 1056. AIR TEMP: 13, sunny, windy. HABITAT: recently built grassy superhwy interchange. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler, Adam Zielemann. 2010/084/b, *Euphorbia cf cyparissias* (Cypress Spurge) (Plant). abundant herb, in bloom, seen, driveby. WAYPT/Y 003, blooming stands scattered through interchange.

moved 1.47 km W.

47) **Madawaska R/Hwy 417, 1.6 km S Arnprior**. UTM 18TUF 945.4 302.6 45.41994N 76.34760W. TIME: 1057. AIR TEMP: 13, sunny, windy. HABITAT: grassy fields & rdsides below Hydro dam on rocky river. 2010/084/c, *Euphorbia cf cyparissias* (Cypress Spurge) (Plant). abundant herb, in bloom, seen, driveby. WAYPT/Y 004, stands scattered through surrounding area. The highway is being twinned through here.

moved 5.3 km WNW.

48) **Highway 17, 5 km W Arnprior.** UTM 18TUF 895.5 320.8 45.43547N 76.41167W. TIME: 1102. AIR TEMP: 13, sunny, windy. HABITAT: grassy fields & rdsides. 2010/084/d, *Euphorbia cf cyparissias* (Cypress Spurge) (Plant). abundant herb, in bloom, seen, driveby. WAYPT/Y 005, blooming stands all along the road here. . . . & S of Arnprior.

moved 1.12 km W.

49) **Highway 17, 6 km W Arnprior.** UTM 18TUF 884.4 321.7 45.43615N 76.42594W. TIME: 1103. AIR TEMP: 14 ca, sunny, windy. HABITAT: roadside through mixed woods/swamp/rocky knolls. 2010/084/e, *Mephitis mephitis* (Striped Skunk) (Mammal). 1 adult, DOR, driveby. WAYPT/Y 006, chopped up DOR.

moved 0.11 km W.

50) **Highway 17, 6.1 km W Arnprior.** UTM 18TUF 883.3 321.8 45.43622N 76.42731W. TIME: 1103. AIR TEMP: 14 ca, sunny, windy. HABITAT: roadside through mixed woods/swamp/rocky knolls. 2010/084/f, *Erethizon dorsatum* (Porcupine) (Mammal). 1 adult, DOR, driveby. WAYPT/Y 007, chopped up DOR - *Euphorbia* continuous along here. *Euphorbia* continuous along here.

moved 7.6 km W.

51) **Highway 17, 1.0 km WSW Glasgow Station.** 31F/7, UTM 18TUF 807.6 330.3 45.44265N 76.52431W. TIME: 1108-1122. AIR TEMP: 15, sunny, windy. HABITAT: grassy rdsides/granite outcrops/open mixed woods. 2010/084/ga, **visit** () (event). natural history, walk. WAYPT/Y 008, NO:Xerolenta (the object of our stop). . . . along 100 m NW and 150 m SE from waypoint. Surface of grassy roadside is strewn with limestone gravel, which should completely change the soil chemistry, and the prospects for terrestrial Gastropods. Choke & Pin Cherries in bright white bloom. socc ca 25 cm TL under piece of hard plastic, ashy-brown NO:Euphorbia here though there is some a few 100 m NW along the road.

52) (same location) 2010/084/ga, *Thamnophis sirtalis* (Common Garter Snake) (herp). 1 juvenile, seen, under cover. WAYPT/Y 008, ca 27 cm TL, under damp plastic sheeting. . . . at mouth of culvert.

53) (same location) 2010/084/gb, *Storeria occipitomaculata* (Redbelly Snake) (herp). 1 adult, seen, under cover. ca 25 cm TL under piece of hard plastic, ashy-brown.

moved 0.13 km ESE.

54) **Highway 17, 0.9 km WSW Glasgow Station.** UTM 18TUF 808.8 329.8 45.44218N 76.52272W. TIME: 1115. AIR TEMP: 15, sunny, windy. HABITAT: grassy rdsides/granite outcrops/open mixed woods. 2010/084/h, *Ondatra zibethicus* (Muskrat) (Mammal). 1 adult, DOR. WAYPT/Y 009, long dead, at edge of gravel shoulder.

moved 8.4 km WNW.

55) **Highway 17 at SE Renfrew exit.** UTM 18TUF 731.1 361.1 45.46897N 76.62283W. TIME: 1128. AIR TEMP: 14 ca, sunny, windy. HABITAT: grassy/brushy/treed rdsides. 2010/084/i, *Euphorbia cf cyparissias* (Cypress Spurge) (Plant). abundant herb, in bloom, seen, driveby. WAYPT/Y 010, blooming stands scattered on roadside. This was the last *Euphorbia* we saw, there was none along Highway 60 W of Renfrew, and none on Highway 17 when we rejoined it at Pembroke - big pink-flowered "Crab Apple" tree on NW corner of intersection, with white-flowered ordinary Apple.

moved 2.2 km WSW.

56) **3.7 km ESE Renfrew at Bonnechere River bridge.** UTM 18TUF 710.2 355.8 45.46384N 76.64942W. TIME: 1130. AIR TEMP: 14, sunny, windy. HABITAT: grassy rdsides/fields/brushy areas. 2010/084/ja, *Prunus nigra* (Canada Plum) (Plant). dominant shrub, in bloom, seen, driveby. WAYPT/Y 011, big patch past full bloom S of road.

57) (same location) 2010/084/jb, *Taraxacum officinale* (Common Dandelion) (Plant). abundant herb, in bloom, seen, driveby. toff in huge bloom in fields all along here.

moved 0.11 km WNW.

58) **3.6 km ESE Renfrew at Bonnechere River bridge.** UTM 18TUF 709.3 356.4 45.46432N 76.65067W. TIME: 1130. AIR TEMP: 14, sunny, windy. HABITAT: grassy rdsides/fields/brushy areas. 2010/084/k, *Marmota monax* (Woodchuck) (Mammal). 1 adult, DOR, driveby. WAYPT/Y 012, freshly dead & attended by a Crow. . . . we proceeded into Renfrew and out on Highway 60.

moved 8.7 km WNW.

59) **Highway 60, 5.2 km NW Renfrew at Bonnechere River.** 31F/10, UTM 18TUF 634.1 400.8 45.50287N 76.74808W. TIME: 1158. AIR TEMP: 14 ca, sunny, windy. HABITAT: flat tilled/grassy fields. 2010/084/la, *Prunus nigra* (Canada Plum) (Plant). 1 stand shrub, in bloom, seen, driveby. WAYPT/Y 013, small patch past full bloom. . . . the only shrubs here.

60) (same location) 2010/084/lb, *Taraxacum officinale* (Common Dandelion) (Plant). abundant herb, in bloom, seen, driveby. in huge bloom all along here.

moved 0.16 km NW.

61) **Highway 60, 5.2 km ESE Northcote.** UTM 18TUF 633 402 45.50396N 76.74945W. TIME: 1158. AIR TEMP: 14 ca, sunny, windy. HABITAT: flat tilled/grassy fields. 2010/084/m, *Ondatra zibethicus* (Muskrat) (Mammal). 1 adult, DOR, driveby. WAYPT/Y 014, noted DOR.

moved 4.7 km WNW.

62) **Highway 60, 0.5 km ESE Northcote.** UTM 18TUF 587.9 416.3 45.51589N 76.80761W. TIME: 1202. AIR TEMP: 14 ca, sunny, windy. HABITAT: rdside/tilled fields. 2010/084/n, *Prunus nigra* (Canada Plum) (Plant). 1 clump shrub, in bloom, seen, driveby. WAYPT/Y 015, clump by path N of road.

moved 3.9 km W.

63) **Highway 60, 3.0 km SE Bromley.** UTM 18TUF 549.3 422.5 45.52069N 76.85717W. TIME: 1205. AIR TEMP: 14 ca, sunny, windy. HABITAT: brushy pasture. 2010/084/o, *Prunus nigra* (Canada Plum) (Plant). common shrub, in bloom, seen, driveby. WAYPT/Y 016, a few clumps in pasture S of road.

moved 2.5 km W.

64) **Highway 60, 1.9 km SSW Bromley.** UTM 18TUF 524.9 426.5 45.52374N 76.88845W. TIME: 1206. AIR TEMP: 14 ca, sunny, windy. HABITAT: grassy rdside/tilled fields. 2010/084/p, *Prunus nigra* (Canada Plum) (Plant). 1 stand shrub, in bloom, seen, driveby. WAYPT/Y 017, big stand S of road.

moved 4.2 km WSW.

65) **turn in Highway 60 in Douglas.** UTM 18TUF 485.7 410.4 45.50842N 76.93821W. TIME: 1209. AIR TEMP: 14 ca, sunny, windy. HABITAT: village. 2010/084/qa, *Syringa vulgaris* (Common Lilac) (Plant). abundant shrub, in bloom, seen, driveby. WAYPT/Y 018, flowers half-opened here. Continue N on Highway 60 without deviating from our course to check the river for drift.

66) (same location) HABITAT: village & surrounding fields. 2010/084/qb, *Taraxacum officinale* (Common Dandelion) (Plant). abundant herb, in bloom, seen, driveby. lots blooming along the road & in fields.

moved 1.00 km NW.

67) **Highway 60, 0.7 km NW Douglas.** UTM 18TUF 479.3 418.1 45.51520N 76.94663W. TIME: 1211. AIR TEMP: 14 ca, sunny, windy. HABITAT: grassy rdside/brushy area/Typha marshlet. 2010/084/ra, *Prunus nigra* (Canada Plum) (Plant). 1 bush shrub, in bloom, seen, driveby. WAYPT/Y 019, small bush W of road.

68) (same location) 2010/084/rb, *Circus cyaneus* (Northern Harrier) (Bird). 1 adult, male, seen, driveby.

pale grey M having a hard time with the wind.

moved 6.1 km NW.

69) **Highway 60/Co Road 9, Kellys Corner.** 31F/11, UTM 18TUF 438.4 463 45.55474N 77.00042W. TIME: 1215. AIR TEMP: 13, sunny, windy. HABITAT: swampy intersection. **reference** (cartigraphic reference) (event). natural history, driveby. WAYPT/Y 020, continue N on Co Road 9, lots of new construction. . . . of the roads of this intersection, NO:Euphorbia blooming - trace of rain N of here.

moved 11.1 km NW.

70) **Lake Dore Township Park, 4.5 km SW Micksburg.** UTM 18TUF 377.4 555.4 45.63645N 77.08155W. TIME: 1226-1400. AIR TEMP: 14, sunny, windy, Beaufort near gale. HABITAT: sandy parking area of town park on clearwater lake. 2010/085/a, **Chironomidae** (Chironomid Gnat) (entomological). abundant mature, seen, felt, heard, ink drawing. WAYPT/Y 021, big swarms humming around fences, & numbers landing. . . . on windows & vehicles, drawn by AKS & Adam. All Dandelions here and along the beach are *Taraxacum officinale* (Common Dandelion), and there's many little single-ranked ones on the sandy field here and where the cars park - NO:Euphorbia.

13h32 - Light rain beginning, 13h36 - heavy rain, 13h46 - rain ended but more visible out over lake - as is blue sky, 14h00 - 11 C, sunny, windy.

moved 0.08 km WNW.

71) **Lake Dore Township Park, 4.6 km SW Micksburg.** UTM 18TUF 376.6 555.6 45.63660N 77.08253W. TIME: 1230-1300. AIR TEMP: 14, sunny, windy, Beaufort near gale. HABITAT: coarse sand bathing beach at sandy lawn park among cottages, town park on clearwater la. 2010/085/ba, *Osmerus mordax* (Rainbow Smelt) (fish). 250 ca adult, dead, seen, drift. WAYPT/Y 022, ca 10 cm TL, littered on shore, ca 2-3/m. . . . in matrix of dark material, also 1 long dead ad *Lepomis* (Sunfish), in a rim of drift along the entire length of the beach.

72) (same location) 2010/085/bb, *Rana catesbeiana* (Bull Frog) (herp). 1 adult, female, dead, seen, drift. carcass on beach 115 ca-57-10.2 mm, 0.7 mm dark ova. . . . otherwise eviscerated and somewhat dried out.

73) (same location) 2010/085/bc, *Elliptio complanata* (Eastern Elliptio) (Mollusca). many shell, specimen, drift. most abundant species, fresher shells picked up. Fresh and old Unionid shells, and snails occur in pockets in a rim of drift along the entire length of the beach. The water is a slurry of chopped macrophytes and Thuja parts, 15 C in the slurry which extends a couple of metres offshore, and 15.5 C in the clearer water at the N end of the beach. The Unionid shells picked up in deep water on previous visits are still there, but there's too much surf and slurry to sample them.

74) (same location) 2010/085/bd, *Lampsilis radiata* *SUBSPECIES:siliquoidea* (not listed) (Mollusca). several shell, specimen, drift. fresher shells picked up.

75) (same location) 2010/085/be, *Anodontoides ferussacianus* (Cylindrical Floater) (Mollusca). several shell, specimen, drift. fresher shells picked up. . . . and some Anodontines that will need to be examined.

76) (same location) 2010/085/bf, *Helisoma campanulatum* (Bell-mouth Ramshorn) (Mollusca). common shell, specimen, drift. all *Helisoma* noted at collection were this species. A few *Nuphar* (Yellow Waterlily) stolons washed up.

77) (same location) 2010/085/bg, *Glechoma hederacea* (Gill-over-the-ground) (Plant). common herb, in bloom, seen. makes up quite a bit of the beach vegetation.

moved 1.6 km SE.

78) **Shaw Woods, 4.9 km SSW Micksburg.** UTM 18TUF 387.5 543.5 45.62599N 77.06820W. TIME: 1412-1420. AIR TEMP: 14, sunny, windy. HABITAT: sandy soil oldgrowth Fagus/Tilia/Sugar Maple/Erythronium woods. 2010/085/ca, *Procyon lotor* (Raccoon) (Mammal). 1 adult, AOR, tracks. WAYPT/YSHAW, tracks in newly rained-on dirt road. . . . which is denominated "Basswood Rd" and seems to run between the Shaw Woods and a "Keep Out" forest.

79) (same location) TIME: 1412-1501. AIR TEMP: 14, sunny, windy. 2010/085/cb, *Matteuccia struthiopteris* (Ostrich Fern) (Plant). common sprout, forage. fiddleheads 40 cm tall from stand down slope into woods.

80) (same location) 2010/085/cc, *Corvus corax* (Raven) (Bird). 1-2 call, heard. calling overhead.

81) (same location) 2010/085/cd, *Equisetum hyemale* (Common Scouring-rush) (Plant). abundant call, seen. dense tall stand at the announcement sign. . . . which has been replaced since 2000 but still says "National Museum of Natural Sciences. "

moved 0.18 km ENE.

82) **Shaw Woods, 4.8 km SSW Micksburg.** UTM 18TUF 389.1 544.3 45.62672N 77.06611W. TIME: 1420. AIR TEMP: 14, sunny, windy. HABITAT: overflow from Castor-influenced pond in sandy soil oldgrowth woods. 2010/085/d, *Helisoma trivolvis* (Larger Eastern Ramshorn) (Mollusca). few shell, drift, specimen. WAYPT/Y 023, few shells in Typha-stem drift at overflow from pond. . . . across road. There's no concentrated drift - but there are *Elliptio complanata* (Eastern Elliptio) fragments in the gravel road, but no signs they lived here. Duckweed is *Lemna minor* (Common Duckweed) mats up against road. *Castor canadensis* (Beaver) have piled *Typha* (Cattail) stems here, and have recently cut *Tilia* from the roadside, but have made no real dam, though the dam may have been largely created by the construction of the road. The multitude of peeled sticks around the pond shows that they're active here.

A few elongate Stickleback-like fish in the outflow over the road.

moved 0.19 km E.

83) **Shaw Woods, 4.6 km SSW Micksburg.** UTM 18TUF 391 544.6 45.62701N 77.06371W. TIME: 1425. AIR TEMP: 14, sunny, windy. HABITAT: dirt road between Red Pine plantation and Fagus/Tsuga/Acer woods. 2010/085/ea, *Taraxacum palustre* (Oldfield Dandelion) (Plant). 1 herb, in bloom, seen. WAYPT/Y 024, single large plant in bloom in dirt road.

84) (same location) 2010/085/eb, *Taraxacum officinale* (Common Dandelion) (Plant). common herb, in bloom, seen, forage. common along road, some in bloom & some enormously large plants. . . . that are not yet in bloom.

moved 0.23 km ENE.

85) **Shaw Woods, Co 9/Basswood rds.** UTM 18TUF 393.1 545.5 45.62786N 77.06105W. TIME: 1431. AIR TEMP: 14, sunny, windy. HABITAT: Red Pine plantation and Fagus/Tsuga/Acer woods. 2010/085/e, **reference** (cartigraphic reference) (event). natural history, walk. WAYPT/Y 025, we saw this road on our way N but didn't realize. . . . it was the boundary of the Shaw Woods - a sign announcing this fact has been pushed over.

moved 0.05 km N.

86) **Shaw Woods, 4.4 km SSW Micksburg.** UTM 18TUF 393.1 546 45.62833N 77.06111W. TIME: 1432. AIR TEMP: 14, sunny, windy. HABITAT: big-tree Thuja swampy woods. OBSERVER: Frederick W. Schueler. 2010/085/f, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen. WAYPT/Y 026, sparse 15 m stand with 3 m yellow rough stems. . . . & small heads with small parts. The big *Thuja* here are dying. Herbs include the pink-flowered *Dentaria diphylla* (Toothwort), a few *Trillium grandiflorum* (White Trillium), and tall *Equisetum hyemale* (Common Scouring-rush) and lots of *Equisetum cf arvense* (Field Horsetail) fertile stems.

moved 0.61 km WSW.

87) **Shaw Woods, 4.9 km SSW Micksburg.** UTM 18TUF 387.5 543.5 45.62599N 77.06820W. TIME: 1501-1551. AIR TEMP: 14, sunny, windy. HABITAT: sandy soil oldgrowth Fagus/Tilia/Sugar Maple/Erythronium woods. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler, Adam Zieleman. 2010/085/h, *Pseudacris crucifer* (Spring Peeper) (herp). few call, heard. 15h01, calling perhaps from pond or from site outside reserve. 15h51 another bout of calling.

moved 0.04 km W.

88) **Shaw Woods, 4.9 km SSW Micksburg.** UTM 18TUF 387.1 543.6 45.62605N 77.06867W. TIME: 1605-1930. AIR TEMP: 14, sunny, windy. HABITAT: sandy soil oldgrowth Fagus/Tilia/Sugar Maple/Erythronium woods. 2010/086/a, **visit** () (event). herb, in bloom, oil. WAYPT/Y 027, AKS painting site. Picids are up in the tops of the trees drumming and calling much of the drumming was likely *Picoides villosus* (Hairy Woodpecker) and the calling *Sphyrapicus varius* (Yellowbelly Sapsucker).

The leaves of the trees are a uniform lime-green hue, and they're about half to 2/3 open, so the diverse hues of early spring are gone, and the "one big green" of summer hasn't yet arrived.

One recently fallen stem of a 40 cm DBH *Tilia* lies beside the sire, excavated in the past by *Dryocopus*. One trunk still stands, immensely high, and the other fell some years ago. as trees fall they strip patches of bark from *Fagus* saplings.

There's so much Lumbricid activity here that even before summer there's patches of bare mineral soil visible between leaves and *Erethronium*.

89) (same location) 2010/086/aa, *Trillium erectum* (Red Trillium) (Plant). few herb, in bloom, oil. scattered, 2 blooming at foot of big Sugar Maple, AKS painting. And one small one seen with creamy petals and a dark ovary.

90) (same location) 2010/086/ab, *Trillium grandiflorum* (White Trillium) (Plant). common herb, in bloom, seen. scattered here, but in 5-7 m patches elsewhere in the woods. In area which may have deeper leaf litter than here.

91) (same location) 2010/086/ac, *Erythronium americanum* (Trout Lily) (Plant). dominant herb, in fruit, seen. carpeted all over the flat forest floor. . . . except in hollows where there's a deeper leaf litter. Many have green fruits, and some have enormous 25 cm leaves. is this because they're a worm-tolerant species?

92) (same location) 2010/086/ad, *Deroceras laeve* () (Mollusca). few adult, juvenile, seen, under cover. a few, the only Gastropods under Lumbricidae-plastered wood. And with NO:Plethodon cinereus in a fairly considerable search.

moved 0.04 km E.

93) **Shaw Woods, 4.9 km SSW Micksburg.** UTM 18TUF 387.5 543.5 45.62599N 77.06820W. TIME: 1643. AIR TEMP: 14, sunny, windy. HABITAT: sandy soil oldgrowth Fagus/Tilia/Sugar Maple/Erythronium woods. 2010/085/ce, *Taraxacum palustre* (Oldfield Dandelion) (Plant). 1 herb, in bloom, seen. tiny plant on road down towards pond. . . . so in a whole afternoon of searching, I find only 3 plants of this "species. "

moved 0.18 km ENE.

94) **Shaw Woods, 4.8 km SSW Micksburg.** UTM 18TUF 389.1 544.3 45.62672N 77.06611W. TIME: 1648. AIR TEMP: 14, sunny, windy. HABITAT: overflow from Castor-influenced pond in sandy soil oldgrowth woods. 2010/0856/b, *Pseudacris crucifer* (Spring Peeper) (herp). few call, heard. few calling intermittantly from below & upstream end of pond.

95) (same location) TIME: 1648-1705. AIR TEMP: 14, sunny, windy. 2010/086/c, *Chrysemys picta* (Painted Turtle) (herp). 1 adult, f, dead, specimen. dead & rotten in pond near shore, front legs stubs, PL 178 mm. This was along the path along the shore of the pond, where there were no Mollusc shells to be seen, but lots of sign of *Castor* activity. there was one Rana-like jump-in movement from the shore.

moved 0.53 km WNW.

96) **Shaw Woods, 4.8 km SSW Micksburg.** UTM 18TUF 384.4 546.7 45.62881N 77.07223W. TIME: 1705. AIR TEMP: 14, sunny, windy. HABITAT: big-tree Thuja swamp in valley in oldgrowth deciduous forest. OBSERVER: Frederick W. Schueler. 2010/086/ca, *Corvus corax* (Raven) (Bird). 2 adult, seen, heard. WAYPT/Y 028, calling(2) & low overhead(1). This is a junction in paths, crossing the central low area(ponds) back up to the high ground along Shaw Woods Road. I came back up the slope past lots of "coarse woody debris" and slightly more diverse forest floor flora than up on the flats, and very diverse wood-fungi, including a blue tinted small polypore in ranks on a fallen *Fagus*. Also I put up a large *Odocoileus virginianus* (Whitetail Deer).

97) (same location) 2010/086/cb, *Taraxacum palustre* (Oldfield Dandelion) (Plant). 1 herb, in bloom, seen. tiny plant on road along pond.

moved 0.44 km SE.

98) **Shaw Woods, 4.9 km SSW Micksburg.** UTM 18TUF 387.5 543.5 45.62599N 77.06820W. TIME: 1930ca. AIR TEMP: 13, sunny, windy. HABITAT: sandy soil oldgrowth *Fagus*/*Tilia*/Sugar Maple/*Erythronium* woods. FWS 10 May 061930/a, *Meleagris gallopavo* (Turkey) (Bird). 1 adult, seen. single dark contour feather on road.

moved 0.04 km W.

99) **Shaw Woods, 4.9 km SSW Micksburg.** UTM 18TUF 387.1 543.6 45.62605N 77.06867W. TIME: 1930ca. AIR TEMP: 13, sunny, windy. HABITAT: sandy soil oldgrowth *Fagus*/*Tilia*/Sugar Maple/*Erythronium* woods. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler, Adam Zieleman. FWS 10 May 061930/b, *Tamiasciurus hudsonicus* (Red Squirrel) (Mammal). 1 call, heard. calling.

100) (same location) OBSERVER: Frederick W. Schueler. FWS 10 May 061930/c, *Aix sponsa* (Wood Duck) (Bird). 2 pair, heard, seen. pair flying in.

101) (same location) FWS 10 May 061930/d, *Taraxacum officinale* (Common Dandelion) (Plant). few herb, seen. very sparsely through woods, not blooming.

moved 0.04 km E.

102) **Shaw Woods, 4.9 km SSW Micksburg.** UTM 18TUF 387.5 543.5 45.62599N 77.06820W. TIME: 1941. AIR TEMP: 12, sunny, windy, sunset. ROUTE: sandy soil oldgrowth *Fagus*/*Tilia*/Sugar Maple/*Erythronium* woods. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler, Adam Zieleman. 2010/087/-, **departure** (departure) (event). natural history, drive. to North Bay.

moved 10.3 km N.

103) **Highway 41, 3.3 km NNE Rankin.** UTM 18TUF 371.4 644.8 45.71675N 77.09227W. TIME: 1958. AIR TEMP: 10 ca, cloudy, breezy. HABITAT: house in grassy fields. 2010/087/a, *Prunus nigra* (Canada Plum) (Plant). shrub, in bloom, seen, driveby. WAYPT/Y 029, thicket with spent bloom near house.

moved 4.7 km NNW.

104) **Highway 41, 3.3 km NNE Locksley.** 31F/14, UTM 18TUF 354.4 688.7 45.75583N 77.11556W. TIME: 2002. AIR TEMP: 9, cloudy, breezy. HABITAT: grassy roadside, tilled fields. 2010/087/b, *Prunus nigra* (Canada Plum) (Plant). 1 clump shrub, in bloom, seen, driveby. WAYPT/Y 030, clump with pink bloom (id?) E of road. . . . missed some a ways S of here, and there's some immediately N of here.

moved 13.8 km NW.

105) **Highway 17/Co Road 26, 7.1 km SSE Petawawa.** UTM 18TUF 253.2 783.1 45.83822N 77.24898W. TIME: 2016. AIR TEMP: 9, cloudy, sunset. HABITAT: swampy highway intersection. 2010/087/e, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 031, extensive sparse stand at SE corner of intersec. . NO:Euphorbia seen from Pembroke to here, but NO:Taraxacum officinale in bloom either.

moved 40.3 km NW.

106) **Highway 17, 6.0 km NW Highway 17 Deep River.** 31K/4, UTM 18TUG 28.5 117.9 46.13322N 77.55186W. TIME: 2046. AIR TEMP: 9, cloudy, sunset. HABITAT: 2 5-6 m patches between road and big sandy area of disturbed soil - too dark for any mo. 2010/087/e, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 032, 2 5-6 m patches between road and big sandy area. . . . of disturbed soil - too dark for any more surveys.

moved 124.9 km W.

107) Canada: Ontario: Nipissing District: **Highway 17, 1.7 km W Kaibuskong River.** 31L/6, UTM 17TPB 414.2 256 46.27121N 79.16440W. TIME: 2237. AIR TEMP: 4, clear, calm. HABITAT: Picea/mixed coniferous forest, small lake/Castor-influenced Typha marsh. 2010/087/fa, *Pseudacris crucifer* (Spring Peeper) (herp). index 1-2 call, heard. WAYPT/Y 033, small surrounding chorus. Camped for the night in a wide spot in the road after bungling Mattawa dam & Eau Claire sites, and missing many others.

7 May 2010

108) Canada: Ontario: Nipissing District: **Highway 17, 1.7 km W Kaibuskong River.** UTM 17TPB 414.2 256 46.27121N 79.16440W. TIME: 1000. AIR TEMP: 4, sunny, breezy. HABITAT: Picea/mixed coniferous forest, small lake/Castor-influenced Typha marsh. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler, Adam Zielemann. FWS 10 May 071000/a, *Odocoileus virginianus* (Whitetail Deer) (Mammal). 1 juvenile, DOR, specimen. anterior portion of a small skull. . . . saved because it shows nasal tubercles from the back -- but no other bones on our side of the highway.

109) (same location) TIME: 1005. AIR TEMP: 4, sunny, breezy. ROUTE: Highway 17, 11. bhhzlog, **departure** (departure) (event). natural history, drive. 214182 km, to North Bay & north. We got out in the morning and found this to be an exemplary Boreal Forest, mostly *Picea* (Spruce) with some big *Pinus strobus* (White Pine) and *Thuja*, and *Abies* growing up underneath, on a substate of piled boulders, brocaded with Mosses and lichens, and Winterberry. Aleta could paint nonstop here for decades. Hard frost overnight. Scattered Yarrow and Wormwood along the piled sandy roadside with lichens growing in among them on the older stretches. The anterior portion of a small deer skull saved because it shows nasal tubercles from the back -- but no other bones on our side of the highway. NO:Cepaea, NO:Xerolenta seen.

moved 13.6 km W.

110) **Highway 17, 7.4 km ESE North Bay, Highway 17/11(SE).** UTM 17TPB 278.6 272.5 46.28877N 79.33986W. TIME: 1013. AIR TEMP: 4, sunny, breezy. HABITAT: urban superhwy roadside. FWS 10 May 071013/a, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 034, 40 m stand on roadside N of highway. . . . and a SUBSPECIES:australis-like stand a few 100 m on at pond & Typha marsh.

moved 4.4 km WNW.

111) **Highway 17, 3.0 km E North Bay, Highway 17/11(SE).** UTM 17TPB 236.7 286.8 46.30245N 79.39387W. TIME: 1016. AIR TEMP: 4, sunny, breezy. HABITAT: roadside marshes. FWS 10 May

071016/a, **Mammalia** (Mammal) (Mammal). 1 adult, DOR, driveby. WAYPT/Y 035, Beaver-like smear.

moved 4.0 km WNW.

112) North Bay: **Northgate shopping centre**. UTM 17TPB 199.8 303.7 46.31827N 79.44130W. TIME: 1035. AIR TEMP: 6 ca, sunny, breezy. HABITAT: shopping centre backside lane at thicket of *Alnus*, *Rhus*, *Salix* & Red Raspberry. OBSERVER: Frederick W. Schueler. 2010/088/a, *Tanacetum vulgare* (Tansy) (Plant). abundant herb, sprout, seen. WAYPT/Y 036, very tall stalks & robust sprouts. Tansy is all over North Bay, even in mowed lawns - this site is the new corner of the expanding mall, a little cul-de-sac that goes past a retaining wall of wire-basket gabions, and ends in piles of garbage. NO: *Ceapea* seen, All Dandelions are *Taraxacum officinale* (Common Dandelion).

moved 0.06 km WSW.

113) **Northgate shopping centre**. UTM 17TPB 199.2 303.5 46.31816N 79.44209W. TIME: 1039. AIR TEMP: 6 ca, sunny, breezy. HABITAT: 60 x 30 m shallow *Typha latifolia* marshlet between shopping centre, highway, & commercial buil. 2010/088/b, *Agelaius phoeniceus* (Redwinged Blackbird) (Bird). several adult, seen, heard. WAYPT/Y 037, MM calling. Also 1 F *Anas platyrhynchos* (Mallard) - one wonders which anurans come here, and how long the site will last?

moved 0.23 km SSW.

114) **Northgate shopping centre**. UTM 17TPB 198.6 301.4 46.31622N 79.44293W. TIME: 1045. AIR TEMP: 6 ca, sunny, breezy. HABITAT: confluence sandy flowing drainage ditches between shopping centre & highway. 2010/088/c, *Calla palustris* (Water Arum) (Plant). 1 stand herb, seen. WAYPT/Y 038, 1 m patch at confluence of ditches. . . . with a linear-leaved *Sagattaria*-like plant, but no shelly drift evident though water levels have recently been higher - maintenance of Unionid and Crayfish populations could be made a requirement for the installation of such constructions as the present shopping centre.

moved 0.12 km S.

115) **Northgate shopping centre**. UTM 17TPB 198.6 300.2 46.31513N 79.44307W. TIME: 1051. AIR TEMP: 6 ca, sunny, breezy. HABITAT: sandy flowing drainage ditch between shopping centre lawn & roadside strip of *Alnus*/Ono. 2010/088/da, **Rana** (True Frog) (herp). 1 adult, seen, heard. WAYPT/Y 039, jump-in.

116) (same location) 2010/088/db, *Lythrum salicaria* (Purple Loosestrife) (Plant). few herb, dead, seen. scattered stems in vegetation W of ditch. All Dandelions are *Taraxacum officinale* (Common Dandelion).

moved 1.14 km NNW.

117) **Highway 17, 1.5 km ESE North Bay, Highway 11/17(NW)**. UTM 17TPB 194.3 310.7 46.32471N 79.44834W. TIME: 1120. AIR TEMP: 7, sunny, breezy. HABITAT: urban arterial highway roadside. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler, Adam Zielemann. 2010/088/e, *Phragmites australis* *SUBSPECIES:australis* (not listed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 040, 20 m stand NE of road, subspecies *australis*.

moved 2.1 km WNW.

118) North Bay: **North Bay, 0.6 km WNW Highway 11/17(NW)**. UTM 17TPB 174.7 318.4 46.33193N 79.47355W. TIME: 1213-1231. AIR TEMP: 6 ca, sunny, hazy, Beaufort gentle breeze, Beaufort moderate breeze. HABITAT: sandy weedy vacant lot at periphery of urban retail area. OBSERVER: Frederick W. Schueler. 2010/089/-, **datasheet** (datasheet) (event). nat.hist., walk. WAYPT/Y 041, scanning periphery of North Bay retail area. DATASHEET SUMMARY: This visit was for wandering around while others shop, and seeking *Taraxacum palustre* (Oldfield Dandelion). Land ownership is apparently private. The locality is based on global positioning (+/- 7 m) near the centre of the lot.

The diel period was midday. The sky was sun hazy - bright. There was no precipitation. The wind was Beaufort 3-4 Force. Air temperature was based on the vehicle thermometer. Weather for the past 48 hr was

unseasonably cold unseasonably dry. The site was in/on plain. Bedrock was not exposed. Upland substrate was gravel. Soil moisture was less than field capacity. The terrestrial vegetation was barren/grassland. DOMINANT SPECIES: \<tansy>, Sweet Clover, grasses.

Human impact on the site included grading & filling of surface, chainlink fencing of lot (only broken down at a couple of places), and ditching. This was done about 7 years ago; either to remove some former construction or in anticipation of something else.

There were no wetlands at the site. Development stage of *Typha latifolia* (Broad-leaved Cattail), was shoots 30 cm tall. The only water was a central canalized/excavated drainage ditch. Water level was seasonally normal (?). The bottom was gravel & sand. Water quality was clear & rusty. Water movement was still. Dominant aquatic plants were emergent *Typha latifolia* (Broad-leaved Cattail). Cover objects were unavailable to be checked.

119) (same location) 2010/089/a, *Tanacetum vulgare* (Tansy) (Plant). common herb, sprout, seen. small plants thruout lot.

120) (same location) 2010/089/b, *Fragaria virginiana* (Strawberry) (Plant). abundant herb, in bloom, seen. plants in bloom thruout lot.

121) (same location) 2010/089/c, **Malus** (not listed) (Plant). 1 shrub, specimen. 60 cm tall multi-branched volunteer plant. Near the NNE corner of the lot; similar trees are blooming in the surrounding area.

122) (same location) 2010/089/d, *Taraxacum officinale* (Common Dandelion) (Plant). 1 herb, in bloom, specimen. small single-rank bract plant, most are much larger. Dandelions are sparse throughout the lot. This was initially taken for *Taraxacum palustre* (Oldfield Dandelion).

moved 2.0 km S.

123) **North Bay Lakeshore Park**. UTM 17TPB 177.6 298.6 46.31409N 79.47033W. TIME: 1318-1416. AIR TEMP: 6 ca, sunny, hazy, Beaufort moderate breeze. HABITAT: sandy urban L. Nipissing shore park. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler, Adam Zieleman. 2010/088/f, *Taraxacum officinale* (Common Dandelion) (Plant). abundant herb, in bloom, seen. WAYPT/Y 042, many small ones on lawn & shores, in dense bloom. NO: *Taraxacum palustre* seen.

moved 0.15 km WNW.

124) North Bay: **Lake. Nipissing, North Bay municipal park**. UTM 17TPB 176.2 299.1 46.31459N 79.47210W. TIME: 1325. AIR TEMP: 6 ca, sunny, hazy, Beaufort moderate breeze. HABITAT: sandy Lake Nipissing beach/lawnpark-Salix shore. OBSERVER: Frederick W. Schueler. 2010/088/g, **arrival** () (event). natural history, walk. waypoint from 1999 is entrance to the beach at a sandy path. There are no Unionids at the highwater mark here, but there are lots of rotten *Elliptio complanata* (Eastern Elliptio) fragments a ways out. I walked along beach to N not finding much until the N end of the beach. The water is 40 m from the highwater mark here, and I head N scanning for places where there may be shells.

moved 0.44 km NW.

125) **Lake. Nipissing at North Bay Lakeshore Park**. UTM 17TPB 172.9 302 46.31725N 79.47633W. TIME: 1339. AIR TEMP: 4 ca, sunny, hazy, Beaufort moderate breeze. HABITAT: shore of protected bay in brushy urban lakeshore park. 2010/088/ha, *Phragmites australis* **SUBSPECIES:americanus** (not listed) (Plant). 1 stand herb, dead, sprout, seen. WAYPT/Y 043, 15 x 25 m sparse stand of twisty stems. . . . big seedhead parts, stems smooth & reddish, new shoots(ca 30 cm)also quite reddish - in a patch of clayey soil that is oozing an oily film and which has the bulk of the Unionidshells I've found in it.

126) (same location) 2010/088/hb, *Elliptio complanata* (Eastern Elliptio) (Mollusca). shell, specimen. most common species, fresh shells saved.

127) (same location) 2010/088/hc, *Leptodea fragilis* (Fragile Paper-Shell) (Mollusca). shell, specimen. fairly common, fresh shells saved.

128) (same location) 2010/088/hd, *Lampsilis radiata SUBSPECIES:siliquoidea* (not listed) (Mollusca). shell, specimen. fairly common, fresh shells saved.

129) (same location) 2010/088/he, **Mollusca** () (Mollusca). shell, drift, specimen. in patches, mostly at winter highwater line.

moved 0.12 km E.

130) **Lake. Nipissing at North Bay Lakeshore Park.** UTM 17TPB 174.1 301.8 46.31705N 79.47484W. TIME: 1348. AIR TEMP: 4 ca, sunny, hazy, Beaufort moderate breeze. HABITAT: brushy shore of Lake Nipissing bay in urban lakeshore park. 2010/090/aa, *Spartina pectinata* (Prairie Cord Grass) (Plant). 1 clump herb, dead, seen. WAYPT/Y 044, sparse clump in bushes at upper edge sand beach. Also some stems in the bushes between these small clumps.

moved 0.11 km SE.

131) **Lake. Nipissing at North Bay Lakeshore Park.** UTM 17TPB 174.8 301 46.31627N 79.47391W. TIME: 1349. AIR TEMP: 4 ca, sunny, hazy, Beaufort moderate breeze. HABITAT: brushy shore of Lake Nipissing bay in urban lakeshore park. 2010/090/ab, *Spartina pectinata* (Prairie Cord Grass) (Plant). 1 clump herb, dead, seen. WAYPT/Y 045, sparse clump in bushes at upper edge sand beach.

moved 5.9 km N.

132) **Highway 11, 4.4 km N North Bay, Highway 11/17(NW).** UTM 17TPB 179.7 360 46.36932N 79.46606W. TIME: 1433. AIR TEMP: 9, light overcast, breezy. HABITAT: roadside bank in settled area. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler, Adam Zieleman. FWS 10 May 071433/a, *Phragmites australis SUBSPECIES:cf americanus* (not listed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 046, below bank E of road settled area 9, LOC, BRZ AIR:.

moved 5.5 km N.

133) **Highway 11, 9.8 km N North Bay, Highway 11/17(NW).** UTM 17TPB 178.6 414.6 46.41841N 79.46610W. TIME: 1436. AIR TEMP: 8 ca, cloudy, breezy. HABITAT: swampy area. FWS 10 May 071436/a, *Phragmites australis SUBSPECIES:cf americanus* (not listed) (Plant). 2 stands herb, dead, seen, driveby. WAYPT/Y 047, 7 m stands on either side of road swampy area. These are bare stems, no heads left.

moved 1.41 km N.

134) **Highway 11, 11.3 km N North Bay, Highway 11/17(NW).** UTM 17TPB 178 428.7 46.43109N 79.46649W. TIME: 1437. AIR TEMP: 8 ca, cloudy, breezy. HABITAT: roadside ditch. FWS 10 May 071437/a, *Phragmites australis SUBSPECIES:cf americanus* (not listed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 048, 7 m narrow stand in roadside ditch to E.

moved 1.9 km NNW.

135) **Highway 11, 13.1 km N North Bay, Highway 11/17(NW).** UTM 17TPB 173.8 446.8 46.44746N 79.47154W. TIME: 1438. AIR TEMP: 8 ca, cloudy, breezy. HABITAT: roadside swampy area. FWS 10 May 071438/a, *Phragmites australis SUBSPECIES:cf americanus* (not listed) (Plant). 2 stands herb, dead, seen, driveby. WAYPT/Y 049, 2 6 m stands E of road.

moved 19.6 km NW.

136) **Highway 11/Tomiko River.** 31L/12, UTM 17TPB 44.1 593.7 46.58176N 79.63703W. TIME: 1450. AIR TEMP: 9, light overcast, breezy. HABITAT: rocky river/picnic area/marsh. FWS/, **visit** () (event). drive. WAYPT/Y 050, no more *Phragmites* to here on rebuilt road. The road is wide but not twinned.

moved 4.4 km NNW.

137) **Highway 11, 4.4 km NNW Tomiko River.** UTM 17TPB 25.2 633.2 46.61764N 79.66081W. TIME: 1453. AIR TEMP: 9, light overcast, breezy. HABITAT: 6 m stand E of road grassy cleared roadside. FWS 10 May 071453/a, *Phragmites australis* *SUBSPECIES:cf americanus* (not listed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 051, 6 m stand E of road grassy cleared roadside AIR:.

moved 2.3 km NW.

138) **Highway 11, 6.6 km NNW Tomiko River.** UTM 17TPB 8.8 648.8 46.63189N 79.68191W. TIME: 1454. AIR TEMP: 9, light overcast, breezy. HABITAT: grassy cleared rdside/Picea woods. FWS 10 May 071454/a, *Phragmites australis* *SUBSPECIES:cf americanus* (not listed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 052, 3 m stands E of road. WAYPT/Y 052, FWS/ TIME:1454 NAME: phrg REMARKS:3 m stands E of road grassy cleared rdside/Picea woods AIR:

moved 2.3 km NW.

139) **Highway 11, 8.8 km NW Tomiko River.** UTM 17TNB 992.6 664.5 46.64627N 79.70266W. TIME: 1456. AIR TEMP: 9, light overcast, breezy. HABITAT: grassy roadside near Typha marsh. FWS 10 May 071456/a, *Phragmites australis* *SUBSPECIES:cf americanus* (not listed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 053, 10 m headless stand W of road. . . . another stand to W of road a ways N.

moved 3.2 km NW.

140) **Highway 11, 7.7 km SE Marten River.** UTM 17TNB 971.7 689.3 46.66891N 79.72949W. TIME: 1458. AIR TEMP: 9, light overcast, breezy. HABITAT: roadside marsh. FWS 10 May 071458/a, *Phragmites australis* *SUBSPECIES:cf americanus* (not listed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 054, 20 m stand E of rd at marsh.

moved 0.19 km NW.

141) **Highway 11, 7.5 km SE Marten River.** UTM 17TNB 970.5 690.8 46.67025N 79.73106W. TIME: 1458. AIR TEMP: 9, light overcast, breezy. HABITAT: roadside marsh. FWS 10 May 071458/b, *Phragmites australis* *SUBSPECIES:cf americanus* (not listed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 055, 15 m stand E of rd at marsh.

moved 0.19 km NW.

142) **Highway 11, 7.3 km SE Marten River.** UTM 17TNB 969.2 692.2 46.67151N 79.73269W. TIME: 1458. AIR TEMP: 9, light overcast, breezy. HABITAT: roadside marsh. FWS 10 May 071458/c, *Phragmites australis* *SUBSPECIES:cf americanus* (not listed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 056, 5 m stand E of rd at marsh.

moved 1.28 km NW.

143) **Highway 11, 6.0 km SE Marten River.** UTM 17TNB 959.9 701 46.67958N 79.74470W. TIME: 1459. AIR TEMP: 9, light overcast, breezy. HABITAT: roadside marshy area. FWS 10 May 071459/a, *Phragmites australis* *SUBSPECIES:cf americanus* (not listed) (Plant). 1 stand/dominant herb, dead, seen, driveby. WAYPT/Y 057, selected stand W of road in marshy area. . . . many more present on both sides of road.

moved 0.22 km NW.

144) **Highway 11, 5.8 km SE Marten River.** UTM 17TNB 958.3 702.5 46.68100N 79.74678W. TIME: 1459. AIR TEMP: 9, light overcast, breezy. HABITAT: selected stand W of road in marshy area - many more present on both sides of road. FWS 10 May 071459/b, *Phragmites australis* *SUBSPECIES:cf americanus* (not listed) (Plant). 1 stand/dominant herb, dead, seen, driveby. WAYPT/Y 058, selected stand W of road in marshy area. Many more present on both sides of road.

moved 0.16 km NW.

145) **Highway 11, 5.7 km SE Marten River.** UTM 17TNB 957.1 703.6 46.68200N 79.74825W. TIME: 1459. AIR TEMP: 9, light overcast, breezy. HABITAT: W of road in marshy area. FWS 10 May 071459/c,

Phragmites australis SUBSPECIES:*cf americanus* (not listed) (Plant). 1 stand/dominant herb, dead, seen, driveby. WAYPT/Y 059, selected stand W of road in marshy area.

moved 0.20 km NW.

146) **Highway 11, 5.5 km SE Marten River.** UTM 17TNB 955.7 705 46.68325N 79.75009W. TIME: 1459. AIR TEMP: 9, light overcast, breezy. HABITAT: W of road in marshy area. FWS 10 May 071459/d, *Phragmites australis* SUBSPECIES:*cf americanus* (not listed) (Plant). 1 stand/dominant herb, dead, seen, driveby. WAYPT/Y 060, selected stand W of road in marshy area.

moved 0.19 km NW.

147) **Highway 11, 5.3 km SE Marten River.** UTM 17TNB 954.3 706.4 46.68449N 79.75186W. TIME: 1459. AIR TEMP: 9, light overcast, breezy. HABITAT: W of road in marshy area. FWS 10 May 071459/e, *Phragmites australis* SUBSPECIES:*cf americanus* (not listed) (Plant). 1 stand/dominant herb, dead, seen, driveby. WAYPT/Y 061, selected stand W of road in marshy area.

moved 0.16 km NW.

148) **Highway 11, 5.1 km SE Marten River.** UTM 17TNB 953.2 707.5 46.68555N 79.75334W. TIME: 1459. AIR TEMP: 9, light overcast, breezy. HABITAT: W of road in marshy area. FWS 10 May 071459/f, *Phragmites australis* SUBSPECIES:*cf americanus* (not listed) (Plant). 1 stand/dominant herb, dead, seen, driveby. WAYPT/Y 062, selected stand W of road in marshy area.

moved 0.14 km NW.

149) **Highway 11, 5.0 km SE Marten River.** UTM 17TNB 952.2 708.6 46.68649N 79.75464W. TIME: 1459. AIR TEMP: 9, light overcast, breezy. HABITAT: W of road in marshy area. FWS 10 May 071459/g, *Phragmites australis* SUBSPECIES:*cf americanus* (not listed) (Plant). 1 stand/dominant herb, dead, seen, driveby. WAYPT/Y 063, selected stand W of road in marshy area.

moved 0.26 km NW.

150) **Highway 11, 4.7 km SE Marten River.** UTM 17TNB 950.4 710.4 46.68817N 79.75694W. TIME: 1459. AIR TEMP: 9, light overcast, breezy. HABITAT: W of road in marshy area. FWS 10 May 071459/h, *Phragmites australis* SUBSPECIES:*cf americanus* (not listed) (Plant). 1 stand/dominant herb, dead, seen, driveby. WAYPT/Y 064, selected stand W of road in marshy area.

moved 2.9 km NW.

151) **Highway 11, 1.9 km SSE Marten River.** UTM 17TNB 929.6 730.1 46.70616N 79.78371W. TIME: 1501. AIR TEMP: 9, light overcast, breezy. HABITAT: grassy roadside & marsh. FWS 10 May 071501/a, *Phragmites australis* SUBSPECIES:*cf americanus* (not listed) (Plant). 3 stands herb, dead, seen, driveby. WAYPT/Y 065, 3 low & headless stands W of road.

moved 0.84 km NNW.

152) **Highway 11, 1.1 km SSE Marten River.** UTM 17TNB 925.2 737.2 46.71261N 79.78936W. TIME: 1502. AIR TEMP: 9, light overcast, breezy. HABITAT: dry roadside. FWS 10 May 071502/a, *Phragmites australis* SUBSPECIES:*cf americanus* (not listed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 066, low headless E of road dry roadside.

moved 1.36 km NNW.

153) **Highway 11, 0.3 km NW Marten River.** UTM 17TNB 919.3 749.5 46.72375N 79.79681W. TIME: 1503. AIR TEMP: 9, light overcast, breezy. HABITAT: away from roadside. FWS 10 May 071503/a, *Phragmites australis* SUBSPECIES:*cf americanus* (not listed) (Plant). 2 stands herb, dead, seen, driveby. WAYPT/Y 067, E of road 2 stands away from road.

moved 0.25 km NNW.

154) **Highway 11, 0.5 km NNW Marten River.** UTM 17TNB 918.1 751.7 46.72578N 79.79829W. TIME:

1503. AIR TEMP: 9, light overcast, breezy. HABITAT: barren roadside rockcut. FWS 10 May 071503/b, *Phragmites australis* *SUBSPECIES:cf americanus* (not listed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 068, E of road 1 small stand at foot of rockcut.

moved 3.9 km NNW.

155) **Highway 11, 4.4 km NNW Marten River.** 31L/13, UTM 17TNB 909 789.4 46.75984N 79.80952W. TIME: 1505. AIR TEMP: 9, light overcast, breezy. HABITAT: roadside marshy area. FWS 10 May 071505/a, *Phragmites australis* *SUBSPECIES:cf americanus* (not listed) (Plant). 2 stands herb, dead, seen, driveby. WAYPT/Y 069, headless stands E & W of road in marshy area.

moved 0.26 km N.

156) **Highway 11, 4.6 km NNW Marten River.** UTM 17TNB 909.3 792 46.76212N 79.80905W. TIME: 1505. AIR TEMP: 9, light overcast, breezy. HABITAT: stand W of road, headless stands in marshy area. FWS 10 May 071505/a, *Phragmites australis* *SUBSPECIES:cf americanus* (not listed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 070, stand W of road, headless stands in marshy area.

moved 2.2 km N.

157) **Highway 11, 6.7 km N Highway 11/Marten River.** UTM 17T 912.4 813.4 46.78141N 79.80452W. TIME: 1508-1528. AIR TEMP: 9, light overcast, breezy. HABITAT: gravelly/grassy roadside & ridge of Conifer woods beside Beaver-inhabited small lake. FWS 10 May 071508/a, *Neohelix* () (Mollusca). 3 shell, juvenile, under cover, captured, specimen. WAYPT/NEOH, 2 juvs, 1 shell found. Return to site of 2002/090/a. Also 2 *Deroceras laeve*, several *Arion*, a few *Cochlicopa*.

158) (same location) FWS 10 May 071508/b, *Corvus corax* (Raven) (Bird). 2 adult, seen, heard. hanging around.

159) (same location) FWS 10 May 071508/c, *Taraxacum officinale* (Common Dandelion) (Plant). common herb, in bloom, seen. sparse on sandy gravel parking area, NO:*Taraxacum palustre*. . . . there's big picturesque *Pinus strobus* (White Pine) on the ridge W of road.

moved 20.2 km N.

160) **Highway 11, 3.3 km SE Highway 11/Herridge Lake.** UTM 17TNC 926 15.2 46.96273N 79.78269W. TIME: 1552. AIR TEMP: 9, light overcast, breezy. FWS 10 May 071552/a, *cf Tussalago farfara* (Coltsfoot) (). 1 patch herb, in bloom, driveby. WAYPT/Y 071, possible patch at foot of rockcut ca 1 km S. . . . but these may have been *Taraxacum* (Dandelion). We resume the *Phragmites* (Reed) survey here.

moved 11.7 km N.

161) **Highway 11, 0.4 km NNW Temagami.** 31M/4, UTM 17TNC 918.6 132 47.06789N 79.79002W. TIME: 1601. AIR TEMP: 9, light overcast, calm. HABITAT: S-facing slope above schoolyard. FWS 10 May 071601/a, *Taraxacum officinale* (Common Dandelion) (Plant). abundant herb, in bloom, seen, driveby. WAYPT/Y 072, beginning of full bloom.

moved 4.5 km N.

162) : : **Highway 11, 0.2 km N Highway 11/Net Lake.** UTM 17TNC 915.2 176.4 47.10794N 79.79355W. TIME: 1604. AIR TEMP: 9, light overcast, breezy. HABITAT: 10 m stand W of road on lakeshore very tall with small heads. FWS 10 May 071604/a, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 073, 10 m stand W of road on lakeshore. Very tall with small heads. Subspecies uncertain.

moved 6.6 km NE.

163) **Highway 11, 6.7 km NE Net Lake, 10.7 km NNE Temagami.** UTM 17TNC 955 228.7 47.15442N 79.73995W. TIME: 1608. AIR TEMP: 9, light overcast, breezy. HABITAT: roadside *Typha* marsh. FWS 10 May 071608/a, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 074, 100

m low stand W of road in Typha marsh.

moved 5.2 km N.

164) **Highway 11, 14.7 km SSE Highway 11/Montreal River, Latchford.** UTM 17TNC 962.1 280.4 47.20079N 79.72955W. TIME: 1611. AIR TEMP: 9, light overcast, breezy. HABITAT: soil berm/roadside ditch. FWS 10 May 071611/a, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 075, divided 15 m patch E of road where trail goes up. . . . a bank.

moved 6.2 km NNW.

165) **Highway 11, 8.5 km SSE Highway 11/Montreal River, Latchford.** 31M/5, UTM 17TNC 935 336.1 47.25128N 79.76416W. TIME: 1615. AIR TEMP: 9, light overcast, breezy. HABITAT: huge area of new rockcuts and rock removal & movement - twinning-like disturbance. FWS 10 May 071615/a, **visit** () (event). natural history, driveby. WAYPT/Y 076, huge area of new rockcuts and rock removal. . . . & movement - twinning-like disturbance cont for several km N.

moved 8.4 km NNW.

166) Canada: Ontario: Timiskaming District: Gillies Limit: **Highway 11/Montreal River, Latchford.** UTM 17TNC 899.1 412 47.32011N 79.81004W. TIME: 1620. AIR TEMP: 9, light overcast, breezy. HABITAT: rocky rover at hwy bridge below dam. OBSERVER: . FWS 10 May 071620/a, **visit** () (event). natural history, driveby. river appears to be low.

moved 12.3 km NNE.

167) **Highway 11, 5.2 km WNW Cobalt town centre.** UTM 17TNC 947.6 524.9 47.42098N 79.74350W. TIME: 1628. AIR TEMP: 9, light overcast, breezy. HABITAT: roadside ditch. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler, Adam Zieleman. FWS 10 May 071628/a, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 077, 30 m stand in roadside ditch E of road.

moved 13.0 km NNE.

168) Dymond: **Highway 11, 1.3 km NE Wabi Crk/Hwy 11.** 31M/12, UTM 17TNC 996.7 645.7 47.52888N 79.67567W. TIME: 1642. AIR TEMP: 9, light overcast, breezy. HABITAT: weedy/grassy roadside. FWS 10 May 071642/a, *Tanacetum vulgare* (Tansy) (Plant). codominant herb, dead, seen, driveby. WAYPT/Y 078, just S Highway 11/65, conspicuous stand. . . . more seen through Dymond retail strip.

169) (same location) FWS 10 May 071642/b, *Arctium lappa* (Great Burdock) (Plant). codominant herb, dead, seen, driveby. conspicuous spreading fruiting stalks, just S Highway 11/65. . . . more seen through Dymond retail strip.

moved 2.4 km N.

170) **Highway 11, 3.4 km NNE Wabi Crk/Hwy 11.** UTM 17TNC 997.1 669.9 47.55069N 79.67457W. TIME: 1644. AIR TEMP: 9, light overcast, breezy. HABITAT: grassy roadside ditch. FWS 10 May 071644/a, *Phragmites australis* *SUBSPECIES:cf australis* (not listed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 079, 40 m stand W of road. This is the only possibly *SUBSPECIES:australis* stand seen N of North Bay.

moved 13.9 km NNW.

171) **Highway 11, 7.8 km SE Highway 11 at Earleton overpass.** UTM 17TNC 946.8 799.3 47.66782N 79.73863W. TIME: 1654. AIR TEMP: 9, light overcast, breezy. FWS 10 May 071654/a, **visit** () (event). emergency, drive. WAYPT/Y 080, W on Highway 542 from emergency road closing.

moved 6.4 km W.

172) **Highway 542/571.** UTM 17TNC 882.5 798.5 47.66802N 79.82421W. TIME: 1659. AIR TEMP: 9, light overcast, breezy. HABITAT: huge grey to black flat claybelt tilled fields/grassy fields. FWS 10 May 071659/a, **visit** () (event). natural history, drive. WAYPT/Y 081, N on Highway 571 to Earleton.

NO:Phragmites seen along Highway 542 through Thornloe; some *Caltha palustris* (Marsh-Marigold) in bloom (noted as far S as Temagami but not waypointed).

moved 9.0 km N.

173) **Highway 11, 4.0 km N Earlton overpass.** UTM 17TNC 881.1 888.7 47.74921N 79.82436W. TIME: 1707. AIR TEMP: 9, light overcast, breezy. HABITAT: sparse 10 m stand E of road - daylilies 10 m stand on W at old homesite a way S, and a. FWS 10 May 071707/a, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 082, sparse 10 m stand E of road. *Hemerocallis* 10 m stand on W side of rd at old homesite a way S, and a plumlike bush by a house N of there.

moved 43.6 km N.

174) **Highway 11, 4.5 km SE Englehart River bridge.** 31M/13, UTM 17TNC 880.4 932.3 47.78839N 79.82436W. TIME: 1710. AIR TEMP: 9, light overcast, breezy. HABITAT: grassy roadside. FWS 10 May 071710/a, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 083, thin 7 m stand on grassy roadside E of road.

moved 22.3 km NW.

175) **Highway 11, 7.0 km SE Crooked Creek.** 41P/16, UTM 17TND 743.2 108.2 47.94841N 80.00446W. TIME: 1725. AIR TEMP: 9, light overcast, breezy. HABITAT: grassy rdside/Picea woods. FWS 10 May 071725/a, *Ursus americanus* (Black Bear) (Mammal). 1 adult, seen, driveby. WAYPT/Y 084, big, off to the E of the road.

moved 7.0 km NW.

176) Marquis: **Highway 11/Crooked Creek, Blanche River.** UTM 17TND 698.8 161.8 47.99711N 80.06312W. TIME: 1730ca. AIR TEMP: 9, light overcast, breezy. HABITAT: deep crk/river conflu., clay, boulder, gravel bed. FWS 10 May 071730/a, **visit** () (event). natural history, drive. drive-in access to river cut off by new construction. . . . so we had to go elsewhere for AKS to paint a scene.

moved 0.32 km NNE.

177) **Blanche River, 0.4 km NNE Crooked Creek/Hwy 11.** UTM 17TND 699.8 164.8 47.99978N 80.06169W. TIME: 1745-2054. AIR TEMP: 9, light overcast, breezy. HABITAT: gravel boatlaunch area in marshy slow Claybelt river at foot of Picea/Abies forest. FWS 10 May 071745/a, **visit** () (event). drive, oil. WAYPT/Y 085, supper & painting site. 20h45 AKS done with painting.



178) (same location) FWS 10 May 071745/b, *Pseudacris crucifer* (Spring Peeper) (herp). 1-index 2 call, heard. 1 calling just as we arrive, but soon silent. . . . 19h41 another single bout of calling, 19h53 another single bout of calling, a couple more bouts and then at 20h20 first calling by>1, some trilling, 20h31 small chorus, trilling continues, 20h45 still small chorus little or no trilling. *Turdus migratorius* (Robin) the only birds singing.

179) (same location) FWS 10 May 071745/c, *Lampsilis radiata* *SUBSPECIES:silivoidea* (not listed) (Mollusca). 2 shell, drift, specimen. valve & pair up on bank, none fresh or seen in water.

180) (same location) FWS 10 May 071745/d, *Taraxacum officinale* (Common Dandelion) (Plant). common herb, in bloom, seen. few blooms on scattering of plants, NO:Taraxacum palustre. A fair number of fertile stems of

Equisetum arvense (Field Horsetail) in the grassy/barren top of the boatlaunch area - which seems to have been bulldozed out into the marshes along the river.

181) (same location) FWS 10 May 071745/e, **Helisoma** (Ramshorn Snail) (Plant). shell, drift, specimen. sparsely in floating & bank stem drift. - no concentrations of drift anywhere along 100 m of shore.

182) (same location) FWS 10 May 071745/f, *Arion cf subfuscus* () (Plant). many adult, under cover, specimen. 1 drowned in river, many under cover esp wet chunks of wood. . . . right down at waters edge. Specimens died in vials, and preserved in isopropyl, 19 May.

183) (same location) FWS 10 May 071745/g, **Oniscidea** (Sowbug) (invertebrate). few adult, under cover, specimen. small, under cover with Arion.

184) (same location) FWS 10 May 071745/h, *Ceryle alceon* (Belted Kingfisher) (Bird). 1? adult, heard. calling heard along river.

LIST: *Gavia immer* calling at 19h03,
Zonotrichia albicollis (Whitethroat Sparrow), singing;
Turdus migratorius (Robin), several singing & seen;
Bonasa umbellus (Ruffed Grouse), drumming;
Colaptes, calling.

185) (same location) TIME: 1953-1957. AIR TEMP: 9, light overcast, breezy. HABITAT: N-facing Picea-topped granite rock slope near marshy slow Claybelt river. FWS 10 May 071953/a, **moss & lichen** (not listed) (Mollusca). specimen. ignorantly collected mosses & lichens from painting site.

186) (same location) TIME: 2019. AIR TEMP: 9, light overcast, breezy. HABITAT: gravel boatlaunch area in marshy slow Claybelt river at foot of Picea/Abies forest. FWS 10 May 072019/a, *Ardea herodias* (Great Blue Heron) (Bird). 2 adult, seen. pair low overhead, HEADING:NE.

187) (same location) TIME: 2045. AIR TEMP: 9, light overcast, breezy. FWS 10 May 072045/a, *Anas americana* (Baldpate) (Bird). 2 adult, seen, heard. pair fly down to river & then away. Various diving ducks have been flying around unidentified, and *Larus argentatus* (Herring Gull) overhead.

188) (same location) TIME: 2054. AIR TEMP: 8, light overcast, Beaufort gentle breeze. ROUTE: Highway 11. bhhzlog, **departure** (departure) (event). natural history, drive. 214449 km, to Cochrane.

moved 6.1 km NW.

189) **Highway 11, 6.3 km NW Crooked Creek/Hwy 11.** 42A/1, UTM 17UND 656.5 208.5 48.03954N 80.11903W. TIME: 2103. AIR TEMP: 6, light overcast, windy. HABITAT: grassy rdside/Picea woods. 2010/090/b, *Alces alces* (Moose) (Mammal). 1 adult, AOR. WAYPT/Y 086, small ad, stood on road & then HEADING:E & along road. . . . until it turned into a track leading into the woods.

moved 62.3 km NNW.

190) Canada: Ontario: Cochrane District: **Bob & Joan Lougheeds, W of Matheson.** 42A/10, UTM 17U 363.8 759.5 48.53764N 80.50703W. TIME: 2157-2216. AIR TEMP: 4 ca, windy. HABITAT: house/lawn in Paper Birch woodland/flooded gravel pit. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler, Adam Zieleman, Bob Lougheed. 2010/090/c, *Pseudacris crucifer* (Spring Peeper) (herp). index 1-2 call, heard. small chorus from around lake. We came to stop here through letting the gas run down, and thinking that there's be a gas station open until 22h00 in Matheson, which, however proved not to be the case. So Aleta phoned around, but couldn't reach here (since Joan was on the phone to Ruth in Brockville) and we showed up mysteriously in the dark.

A first we were parking to wait out the night, but then Bob remembered 20 litres of gas he'd gotten for his

ATV, and we exchanged this for some cash Aleta had on hand, and resumed our travels.

moved 69.5 km NNW.

191) Cochrane: **Brissons, Commando Lake, Cochrane.** 42H/3, UTM 17U 982.2 342.1 49.06274N 81.02415W. TIME: 2328. AIR TEMP: 0, clear, windy. HABITAT: residence above claybelt urban park lake. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler, Adam Zieleman. 2010/090/d, **arrival** () (event). natural history, drive. from Matheson. After arriving, we were set up in bedrooms indoors, and spent a couple of hours filtering what our dietary regimes would allow of what Ray proffered, and riotously catching up on our lives since 2004. Ray reports that there continue to be NO:Lithobates in the lake here.

Wiffts of blowing graupelly snow in the morning.

8 May 2010

192) Canada: Ontario: Cochrane District: **Brissons, Commando Lake, Cochrane.** UTM 17U 982.2 342.1 49.06274N 81.02415W. AIR TEMP: -1, windy, graupel. OBSERVER: Aleta Karstad Schueler. AKS 10 May 08/a, **visit** () (event). natural history, drive. letter to Rory in Oxford. It's especially important to be warm and dry tonight, as we were last night as well - as there's a cutting north wind here in Cochrane with temperatures hovering around freezing. It's blowing a fine, graupelly snow here now, and the Brisson's deck is white with it. Commando Lake is slate grey and corrugated by the wind.

We got here around 23h30 pm last night after discovering that we didn't have enough gas to get to the Husky Station in Cochrane (the gas pumps in Matheson close early) right near Bob and Joan Lougheed's place. Luckily Bob keeps a couple of containers filled with gas for his 4-wheeler, so we bought 20 gallons from him and carried on our way. Joan was on the phone with Ruth in Brockville, so couldn't come out to say hi.

In Cochrane the Brissons welcomed us with their usual gusto and Fred & Adam were fed bacon and eggs at midnight and we all interrupted each other with bits and pieces of important news and questions about this and that, while Rey popped down marshmallows and tried to tempt Adam with them. I insisted that Rey have some cheese if he was going to eat that much sugar, so he did - and reported this morning that "the cheese worked!" - he'd slept well and woke up feeling fine.



The Brissons have renovated the front part of the inside of the Empire Theatre and have a cafe and a DVD library, which keep them busy full time after 10h00 as well as late nights. It's a good thing that John, the eldest, has returned home to work with them, as Rey is beginning to look old and tired. Valerie is quite unrecognizably beautiful and is working in Sarnia. Mark, who was so sick with some kind of teen-age cancer or leukemia when we were here the last time, is working as a train conductor in Toronto.

The youngest, Alex is in his early teens, growing up with just as much charm and wit as his elder brother John (the stand-up comic who entertained us so well when he was Alex's age and Jennifer was about 8). He was

the first down to the trailer, came right inside where I was rummaging around in the dark, and said "You're even more beautiful!" - the scamp! He was away early this morning to some kind of a youth day at his friend's church, and gave Carol his house key for me to use today - how thoughtful!

I am going to do this evening's painting of a view of the main street of Cochrane, from the sidewalk of the Empire Theatre, while Rey and John are working, Carol is out with a friend to watch a dance recital, and Adam has just gone out to watch tonight's feature, "Iron Man 2" at the Empire. Fred is downstairs working on improving Fox Pro for in the field data entry, and getting this trip's records (so far) all set right.

We were glad to hear from Jennifer that you have been supplied with a heater to cozy up to, and hope that you'll soon have some nice sunshine to bask in - a sunny corner of some quadrangle to sit and eat lunch on the grass. -- Love, Aleta Mom

moved 0.06 km WSW.

193) . UTM 17UME 981.6 341.9 49.06260N 81.02494W. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler, Adam Zieleman. WAYPT/Y 113, () (). . WAYPT/Y 113 TEXT NOT FOUND.

9 May 2010

moved 0.06 km ENE.

194) Canada: Ontario: Cochrane District: Cochrane: **Brissons, Commando Lake, Cochrane**. UTM 17U 982.2 342.1 49.06274N 81.02415W. TIME: 0912. AIR TEMP: -1, sunny, breezy. ROUTE: Highway 11. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler. bhzlog, **departure** (departure) (event). natural history, drive. 214604 km, to Matheson for meeting & drift. Patches of yesterday's snowy graupel remain on the ground, and the ditches and small ponds are skimmed with ice.

moved 42.6 km SSE.

195) **Highway 11, 14.7 km SSE Tunis**. 42A/10, UTM 17UND 156.7 953.3 48.71285N 80.78681W. TIME: 0940. AIR TEMP: 0, sunny, breezy. HABITAT: grassy rdside/brushy oldfield. 2010/091/a, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 087, 30 m stand right along road to W.

moved 19.2 km SE.

196) **Highway 11, 2.6 km SE Val Gagne exit**. UTM 17UND 285.1 810.2 48.58365N 80.61324W. TIME: 0955. AIR TEMP: 0, sunny, breezy. HABITAT: rdside/brushy oldfield. 2010/091/b, *Buteo cf lagopus* (Rough-legged Hawk) (). 1 adult, seen, driveby. WAYPT/Y 088, fairly pale, sitting on fencepost.

moved 6.3 km SE.

197) **Highway 11, 6.9 km W Highway 11/101 in Matheson**. UTM 17UND 327.4 763.5 48.54142N 80.55620W. TIME: 0959. AIR TEMP: 0, sunny, breezy. HABITAT: grassy oldfield. 2010/091/c, *Cathartes aura* (Turkey Vulture) (Bird). 1 adult, seen, driveby. WAYPT/Y 089, tipping over field.

moved 3.6 km E.

198) **Bob & Joan Lougheeds, W of Matheson**. UTM 17U 363.8 759.5 48.53764N 80.50703W. TIME: 1013. AIR TEMP: 1, sunny, breezy. HABITAT: house/lawn in Paper Birch woodland/flooded gravelpit. 2010/091/da, *Narcissus pseudo-poeticus* (Daffodil) (Plant). 25 ca herb, in bloom, seen. in bed in lawn.

199) (same location) 2010/091/db, *Gavia immer* (Common Loon) (Bird). 1 adult, seen. on lake.

200) (same location) OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler, Bob & Joan Lougheed.

2010/091/dc, *Carpodacus purpureus* (Purple Finch) (Bird). 18 adult, male, female, seen. at birdfeeder, Mm & FF equally abundant. After meeting we stayed for a prolonged lunch. Also seen around the feeder
LIST: *Carduelis tristis* (Goldfinch), 2 MM;
Carduelis pinus (Pine Siskin), 1;
Quiscalus quiscula (Common Grackle), 1;
Zonotrichia leucophrys (Whitecrown Sparrow), 1;
Colaptes, 1 on lawn pecking as if at Ants.

moved 2.3 km W.

201) **Highway 11/Watabeag River**. UTM 17UND 340.8 759.5 48.53777N 80.53818W. TIME: 1517-1529. AIR TEMP: 7, sunny, windy. HABITAT: barren rdside/meandering muddy creek in grassy/brushy area. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler. 2010/091/f, **visit** () (event). natural history, walk. WAYPT/Y 090, no evidence river has recently been higher. . . . than it is now. *Typha latifolia* (Broad-leaved Cattail) is the only Cattail here. *Lemna minor* (Common Duckweed) sparsely among *Typha* (Cattail) and *Equisetum* (Horsetail) segments in the one patch of floating drift. There's a sprawling herbaceous vine under W side of the bridge span, rambling over boulder fill,

202) (same location) OBSERVER: Frederick W. Schueler. 2010/091/fa, *Mergus merganser* (Common Merganser) (Bird). 2 adult, seen. pair on river.

203) (same location) 2010/091/fb, *Vulpes vulpes* (Red Fox) (Mammal). 1 adult, DOR. old DOR at SW corner of span.

moved 4.3 km NW.

204) **Highway 11/Warbler Creek**. UTM 17UND 307.1 785.9 48.56171N 80.58356W. TIME: 1535-1537. AIR TEMP: 7, sunny, windy. HABITAT: barren rdside/meandering muddy creek in grassy/brushy area. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler. 2010/091/g, **visit** () (event). natural history, walk. WAYPT/Y 091, no evidence creek has recently been higher. . . . than it is now. *Taraxacum officinale* (Common Dandelion) in bloom sparsely on W side of road, *Equisetum arvense* (Field Horsetail) fertile stems densely on E side.

moved 3.4 km NW.

205) **Highway 11, 2.6 km SE Val Gagne exit**. UTM 17UND 284.6 810.8 48.58421N 80.61389W. TIME: 1541. AIR TEMP: 7, sunny, windy. HABITAT: rdside/burned grassy field. 2010/091/h, *Buteo lagopus* (Rough-legged Hawk) (Bird). 1 adult, seen, driveby. WAYPT/Y 092, light-phase, sitting on fencepost.

moved 3.3 km NW.

206) **Highway 11, 0.7 km NW Val Gagne exit**. UTM 17UND 262.8 835 48.60600N 80.64338W. TIME: 1544. AIR TEMP: 7, sunny, windy. HABITAT: rdside/grassy field. 2010/092/a, *Buteo lagopus* (Rough-legged Hawk) (Bird). 1 adult, seen, driveby. WAYPT/Y 093, light-phase, sitting on fencepost.

moved 15.8 km NW.

207) **Highway 11/67, 14.9 km SSE Tunis**. UTM 17UND 156.1 951.3 48.71101N 80.78767W. TIME: 1558. AIR TEMP: 7, sunny, windy. HABITAT: grassy rdside/brushy oldfield. 2010/092/b, *Phragmites australis* *SUBSPECIES:americanus* (not listed) (Plant). 1 stand herb, dead, seen. WAYPT/Y 094, dense 20 m stand on SE side of intersection. . . . big seed parts, small heads, smooth reddish stems. This is growing more densely than I think I've ever seen *americanus* grow.

moved 0.22 km NNE.

208) **Highway 11, 14.7 km SSE Tunis**. UTM 17UND 156.6 953.4 48.71289N 80.78690W. TIME: 1603. AIR TEMP: 7, sunny, windy. HABITAT: grassy roadside ditch/brushy oldfield. 2010/092/c, *Phragmites australis* *SUBSPECIES:australis* (not listed) (Plant). 1 stand herb, dead, specimen. WAYPT/Y 095, fairly open 30 m stand, small fluffy seed parts. . . . micro-rough yellow sheathed stems, the same stand as waypoint #087.

moved 13.1 km NNW.

209) **Highway 11, 1.6 km SSE Tunis**. 42A/15, UTM 17UNE 123.9 80.1 48.82693N 80.83094W. TIME: 1626. AIR TEMP: 7, sunny, windy. HABITAT: flat marshy/grassy claybelt area. 2010/092/d, *Vulpes vulpes* (Red Fox) (Mammal). 1 adult, DOR, driveby. WAYPT/Y 096, old red-pelaged DOR.

moved 10.6 km NW.

210) Hanna: **Highway 11/Wicklow River (S bridge)**. UTM 17UNE 60.3 164.5 48.90302N 80.91746W. TIME: 1639. AIR TEMP: 7, sunny, windy. HABITAT: brownwater claybelt river at bridge, Picea/Populus woods. 2010/092/e, **visit** () (event). natural history, walk. WAYPT/Y 097, no evidence stream has recently been higher. . . . than it is now. A place of unparalleled beauty, but not much we can do here now.

moved 4.2 km WNW.

211) **Long Lake traditional campsite, 12.7 km NW Tunis**. UTM 17UNE 20.5 177.7 48.91485N 80.97183W. TIME: 1648. AIR TEMP: 7, cloudy, windy. HABITAT: brushy roadside of old highway in Populus/Picea woods near lake & ponds. 2010/092/f, *Populus balsamifera* (Balsam Poplar) (Plant). dominant tree, sprout, seen. WAYPT/Y 098, roadside densely grown up in 2-3 m sucker-sprouts. We drove in here to check if road is still passable, and find things not much changed except for the continued growth of Poplar whips in the entire roadsides. The track is now just used by ATVs, as far as we can tell from this end.

moved 16.8 km NNW.

212) **Cochrane, 0.2 km SSE Cochrane Town Hall**. 42H/3, UTM 17UME 979.7 340.8 49.06156N 81.02763W. TIME: 1720. AIR TEMP: 7, light overcast, windy. HABITAT: trashy/sandy lot/yard in town. 2010/092/g, *Polygonum cuspidatum* (Japanese Knotweed) (Plant). 1/7 clumps herb, dead, specimen. WAYPT/Y 099, 6 small(1 m or less)clumps & larger 1 x 4 m clump. These have residual flower stalks, and dark reddish colour on the dry stems. They're wild in this untended lawn/lot.

10 May 2010

moved 0.52 km ENE.

213) Canada: Ontario: Cochrane District: Cochrane: **Commando Lake(western lobe)**. UTM 17UME 984.4 342.8 49.06344N 81.02116W. TIME: 1100-1130. AIR TEMP: 12 ca, sunny, breezy. HABITAT: clear deep sand-bottom lake in urban lawnpark, water 9 C. OBSERVER: Frederick W. Schueler. 2010/092/h, **visit** () (event). natural history, walk. walked around W lobe of the lake. This repeated the survey of 30 August 1997, and differences can be noted in records from that date. *Typha latifolia* (Broad-leaved Cattail) is still the only Cattail, and still in a narrow stand around about 60% of the perimeter. *Chara* (Stonewort) was not seen, however, though wirey stems that may be the *Polygonum amphibium* (Water Smartweed) of that visit were thrusting out from tens of metres of the shore. *Taraxacum officinale* (Common Dandelion) was in full bloom on the S-facing bank at the N end of the basin, though blooms are scattered or absent elsewhere, and I've seen NO: *Taraxacum palustre* in Cochrane.

I was looking for drift, and found only small pockets of *Typha* (Cattail) stems and plastic at the NW and SW corners of the basin. No floating or on-shore mollusc shells were found. The water was 9 C in the SW corner. One drake *anas platyrhynchos* made up the tally of waterbirds; at least 2 *Corvus corax* (Raven) were discussing things to the west.

214) **Commando Lake(SE corner western lobe)**. UTM 17UME 984.4 342.8 49.06344N 81.02116W. TIME: 1100-1130. AIR TEMP: 12 ca, sunny, breezy. HABITAT: clear deep sand-bottom lake in urban lawnpark, water 9 C. 2010/092/ha, *Orconectes virilis* (Northern Crayfish) (Crayfish). 1 adult, male,

specimen. small M dead on bottom, another in water too deep to get at .

215) (same location) 2010/092/hb, *Helisoma trivolvus* (Larger Eastern Ramshorn) (Mollusca). 2 adult, male, specimen. large shells from bottom. Two more in water too deep to get at, a *Lymnaea stagnalis* (Great Pond Snail) shell and some very old *Pyganodon* (Floater) shells in too-deep water along the E shore of the W lobe.

216) (same location) 2010/092/hc, **Discus** () (Mollusca). many adult, specimen. abundantly under dry plywood lamina on S-facing N bank.

217) (same location) 2010/092/hd, *Rana septentrionalis* (Mink Frog) (herp). 1 adult, specimen. in Typha along N bank, 2 other jump-in movements seen. My first record of this species here since 1972.

moved 0.23 km WSW.

218) **Brissons, Commando Lake, Cochrane**. UTM 17U 982.2 342.1 49.06274N 81.02415W. TIME: 1559. AIR TEMP: 13, sunny, breezy. ROUTE: Highway 11. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler. bhhzlog, **departure** (departure) (event). natural history, drive. 214775 km, to Long Lake for painting & survey.

moved 16.2 km S.

219) Hanna: **Long Lake picnic area, 13 km NW Tunis**. 42A/15, UTM 17UNE 9 182 48.91876N 80.98751W. TIME: 1616. AIR TEMP: 12, cloudy, light rain, windy. HABITAT: Aspen/lawn picnic area near shore of claybelt lake. 2010/093/a, *Dryocopus pileatus* (Pileated Woodpecker) (Bird). 1 adult, seen, driveby. flew across highway HEADING:E.

moved 2.7 km E.

220) **old Highway 11, 11.6 km NW Tunis**. UTM 17UNE 35.7 176.9 48.91412N 80.95103W. TIME: 1623. AIR TEMP: 12, light overcast, breezy. HABITAT: grown-over old highway through Picea/Salix swamp. OBSERVER: Frederick W. Schueler. 2010/093/ba, **visit** () (event). wade. WAYPT/Y 100, S end of flooding of old hwy at broken culvert. . . . where a little water is flowing out.

moved 0.14 km W.

221) **old Highway 11, 11.7 km NW Tunis**. UTM 17UNE 34.4 176.9 48.91416N 80.95292W. TIME: 1626. AIR TEMP: 12, light overcast, breezy. HABITAT: grown-over old highway through Picea/Salix swamp. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler. 2010/093/bb, **visit** () (event). natural history, wade. WAYPT/Y 101, N end of flooding of old highway. Maximum depth is about 25 cm, dark brown water, no obvious Beaver action. This thwarted our plan to drive down to the campsite at the main Beaver dam S of here.



moved 1.6 km WNW.

222) **Long Lake access, 13.0 km NW Tunis, 16.7 km SSE Cochrane T**. UTM 17UNE 19.1 180 48.91696N 80.97378W. TIME: 1634-1900. AIR TEMP: 12, light overcast, breezy. HABITAT: White Spruce/Aspen forest on clay banks of narrow lake. OBSERVER: Aleta Karstad Schueler, Frederick W. Schueler. 2010/093/c, **visit** () (event). natural history, oil. WAYPT/Y 102, AKS painting looking out over the lake. . . . made difficult by changing wind/wave and cloud/sun

conditions. The path here is deeply rutted, but the clay is hard and dry. A fair percentage of the Aspen trees are dead, and the *Picea glauca* (White Spruce) are coming up among them and the survivors like towers.

223) (same location) 2010/093/ca, *Tamiasciurus hudsonicus* (Red Squirrel) (Mammal). 2 adult, seen, heard. 17h11, 2 running independently on forest floor. 17h35, 2 chasing each other up and down trunk of Spruce with growling calls, 19h00 1 running about on forest floor.

moved 0.02 km WSW.

224) **Long Lake access, 13.0 km NW Tunis.** UTM 17UNE 18.9 180 48.91691N 80.97407W. TIME: 1636. AIR TEMP: 12, light overcast, breezy. HABITAT: Carexy shore of narrow brownwater lake in White Spruce/Aspen forest on clay. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler. 2010/093/d, **visit** () (event). natural history, wade. WAYPT/Y 103, water is high, so there's not much prospect. . . . Of looking for shells or drift along the shores.

225) (same location) TIME: 1638. AIR TEMP: 12, light overcast, breezy. 2010/093/da, *Pseudacris crucifer* (Spring Peeper) (herp). 1 call, heard. bout of calling beginning with trills. Just about the only calling we heard from the lakeshore all afternoon.

moved 0.13 km E.

226) **Long Lake large pond, 12.9 km NW Tunis.** UTM 17UNE 20.2 179.9 48.91683N 80.97226W. TIME: 1645. AIR TEMP: 12, light overcast, breezy. HABITAT: deep Typha-ringed pond in young Aspen/Spruce thickets/woods on clay. OBSERVER: Frederick W. Schueler. 2010/093/e, *Typha latifolia* (Broad-leaved Cattail) (Plant). dominant herb, dead, seen. WAYPT/Y 104, a continuous band around perimeter of pond. NO:Anura calling and no eggs seen, but this is just the N end of the pond.

moved 0.08 km S.

227) **Long Lake Third pond, 12.8 km NW Tunis.** UTM 17UNE 20.2 179.1 48.91612N 80.97218W. TIME: 1651. AIR TEMP: 12, light overcast, breezy. HABITAT: shallow Typha pond in Alnus thickets on clayey sand. 2010/093/f, *Typha latifolia* (Broad-leaved Cattail) (Plant). dominant herb, dead, wade. WAYPT/Y 105, nrly completely thruout pond, little open water. NO:Anura calling and no eggs seen.

moved 0.14 km S.

228) **Long Lake traditional campsite, 12.7 km NW Tunis.** UTM 17UNE 20.5 177.7 48.91485N 80.97183W. TIME: 1659. AIR TEMP: 12, light overcast, breezy. HABITAT: brushy roadside of old highway in Populus/Picea woods near lake & ponds. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler. 2010/093/g, *Physocarpus opulifolius* (Ninebark) (Plant). 2 shrub, seen. 2 spreading 2 m bushes one with fruit capsules on roadside.

moved 0.18 km NNW.

229) **Long Lake middle pond, 12.9 km NW Tunis.** UTM 17UNE 20.1 179.4 48.91646N 80.97232W. TIME: 1723-1730. AIR TEMP: 13, sunny, cloudy, breezy. HABITAT: shallow Typha pond in Alnus thickets on clayey sand. OBSERVER: Frederick W. Schueler. 2010/094/aa, *Typha angustifolia* (Narrow-leaved Cattail) (Plant). 1 herb, dead, wade, specimen. WAYPT/Y 106, only 1 seedhead seen & collected. . . . though there's a patch of narrow-leaved foliage with no seedheads at the NE corner of the pond.

230) (same location) 2010/094/ab, *Typha latifolia* (Broad-leaved Cattail) (Plant). 2/dominant herb, dead, wade, specimen. throu pond 2 exceptionally gappy seedheads collected. Many of the seedheads looked "poorly" as if poorly fertilized last spring.

231) (same location) 2010/094/ac, *Lithobates cf sylvaticus* (not listed) (herp). 1 eggmass egg, hatch, dead,

seen. 1 egg mass 80% killed by freezing, the rest hatching out.

moved 0.04 km SSE.

232) **Long Lake Third pond, 12.8 km NW Tunis.** UTM 17UNE 20.2 179.1 48.91612N 80.97218W. TIME: 1723-1730. AIR TEMP: 13, sunny, cloudy, breezy. HABITAT: shallow Typha pond in Alnus thickets on clayey sand. 2010/094/b, *Pseudacris crucifer* (Spring Peeper) (herp). 1-2 call, heard. a few calls by 1-2.

moved 0.07 km NNW.

233) **Long Lake central rut, 12.9 km NW Tunis.** UTM 17UNE 20 179.7 48.91672N 80.97257W. TIME: 1755-1803. AIR TEMP: 12, cloudy, Beaufort moderate breeze. HABITAT: Juncus-y 4 x 10 m, 25 cm deep, ruts in clay among grass & Alnus thickets in old highway cl. 2010/094/d, **Gerris** (Water Strider) (entomological). 4 mature, dipnetted, specimen. WAYPT/Y 107, dipnetted in search for Dytiscids. . . . which were not found. Tiny *Pseudacris crucifer* (Spring Peeper) -like tadpoles were sparsely present in the ruts.

The empty but moist puddles around the clearing all have frost marks on their bottoms, showing that they were frozen to the bottom when full; these would have been 5-5 cm deep puddles. There's a mass of both *Alces alces* (Moose) fur and bones on one side of the road, and one of *Ursus americanus* (Black Bear) fur & bones on the other -- neither is a complete skeleton, so their evidently both some form of post-consumer waste.

moved 1.39 km NW.

234) **Little Lake speedway.** UTM 17UNE 11.6 190.9 48.92675N 80.98392W. TIME: 1907. AIR TEMP: 11, sunny, breezy. HABITAT: shortgrass field, bare sandy soil, dry marsh, abandoned car track, near lake. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler. 2010/094/e, *Taraxacum officinale* (Common Dandelion) (Plant). common herb, in bloom, seen. WAYPT/Y 108, dense patch of double-rank bracted plants. . . . with wooly flower stalks in bloom - all the speedway facilities are gone, and the site of the racetrack is being spread with grey gravel. The lake level is high.

moved 0.58 km ESE.

235) **Highway 11, 13.7 km NW Tunis.** UTM 17UNE 16.6 187.9 48.92407N 80.97712W. TIME: 1915. AIR TEMP: 11, sunny, breezy. HABITAT: soggy roadside ditch in grassy roadside. OBSERVER: Frederick W. Schueler. 2010/094/f, *Ambystoma laterale* (Blue-spotted Salamander) (herp). 1 adult, under cover, seen. WAYPT/Y 109, large individual with blue dorsal spots. . . . under soggy corrugated cardboard.

moved 0.05 km SSE.

236) **Highway 11, 13.7 km NW Tunis.** UTM 17UNE 16.9 187.5 48.92366N 80.97679W. TIME: 1917. AIR TEMP: 11, sunny, breezy. HABITAT: soggy roadside ditch in grassy roadside. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler. 2010/094/ga, *Typha angustifolia* (Narrow-leaved Cattail) (Plant). 1 stand herb, dead, seen. WAYPT/Y 110, S end of stand, continuous stand starts 2 m N. Most stalks are knocked over, only 3 stalks still standing, none of which retained any fluff.

moved 0.04 km NW.

237) **Highway 11, 13.7 km NW Tunis.** UTM 17UNE 16.6 187.8 48.92395N 80.97715W. TIME: 1918. AIR TEMP: 11, sunny, breezy. HABITAT: soggy roadside ditch in grassy roadside. OBSERVER: Frederick W. Schueler. 2010/094/gb, *Typha angustifolia* (Narrow-leaved Cattail) (Plant). 1 stand herb, dead, seen. WAYPT/Y 111, N end of stand, continuous stand starts 2 m S.

moved 13.4 km NNW.

238) **Highway 11, 2.7 km S Cochrane Town Hall.** 42H/3, UTM 17UME 977.8 315.6 49.03891N 81.03015W. TIME: 1939. AIR TEMP: 11, sunny, breezy. HABITAT: grassy roadside. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler. 2010/094/h, *Vulpes vulpes* (Red Fox) (Mammal). 1 adult, seen, driveby. WAYPT/Y 112, red pelage, trotting along road, HEADING:S. . . . but on the distal edge of the gravel shoulder, so not AOR.

moved 2.7 km N.

239) Cochrane: **Brissons, Commando Lake, Cochrane**. UTM 17U 982.2 342.1 49.06274N 81.02415W. TIME: 1944. AIR TEMP: 11, sunny, breezy. HABITAT: residence above claybelt urban park lake. 2010/094/i, **arrival** () (event). natural history, drive. from Long Lake.

11 May 2010

240) Canada: Ontario: Cochrane District: **Brissons, Commando Lake, Cochrane**. UTM 17U 982.2 342.1 49.06274N 81.02415W. TIME: 1355. AIR TEMP: 14, sunny, breezy. HABITAT: residence above claybelt urban park lake. OBSERVER: Frederick W. Schueler. 2010/095/a, *Ceryle alceon* (Belted Kingfisher) (Bird). 1 adult, heard. heard over the lake. Other Birds

LIST: *lzalb*, singing;

lzleu, singing;

lagep, singing.

241) (same location) TIME: 1400. ROUTE: Highway 11, Mc Cowan Road, Wakatike Road. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler, Adam Zieleman. bhzlog, **departure** (departure) (event). natural history, drive. 214817 km, to 8 km W, 24 km N Opatatika, 1977 burn.

moved 9.9 km W.

242) Clute: **Highway 11, 1.5 km W Frederickhouse R/Hwy 11**. UTM 17UME 883.3 337.4 49.05846N 81.15955W. TIME: 1409. AIR TEMP: 13, sunny, breezy. HABITAT: drish flat-bottomed roadside ditch forest. 2010/095/b, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 114, 35 m sparse stand N or road, small tan heads. . . . extends well back from road - is there a taxonomic difference between those that we see with the small tan heads, and those with wispy or absent heads?

moved 17.7 km WNW.

243) **Highway 11/655**. UTM 17UME 720.9 408 49.12139N 81.38229W. TIME: 1419. AIR TEMP: 13, sunny, breezy. HABITAT: flat brushy/swampy/young woods roadside. 2010/095/c, **visit** () (event). natural history, driveby. WAYPT/Y 115, for stretches along here the rdsides are mowed. . . . or brush-hogged of the dense stands of metre-high single-stem brush that grows up, NO:*Phragmites* along here. We e-mail Mike Oldham about the tall spreading greyish Umbellifer that's conspicuous along the highway up here.

moved 25.5 km NW.

244) **Highway 11, 0.3 km W Matagami R at Hwy 11**. 42H/5, UTM 17UME 532.5 581.2 49.27605N 81.64258W. TIME: 1436. AIR TEMP: 13, sunny, breezy. HABITAT: soggy roadside, Aspen/Spruce forest. 2010/095/e, *Caltha palustris* (Marsh-Marigold) (Plant). 1 stand herb, in bloom, seen, driveby. WAYPT/Y 117, a few clumps down below highway to N.

moved 25.4 km W.

245) **Highway 11, 2.7 km WNW Gregoire Mills**. UTM 17UME 279.5 613.2 49.30242N 81.99095W. TIME: 1452. AIR TEMP: 13, sunny, breezy. HABITAT: grassy roadside. 2010/095/f, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 118, 40 m sparse 1 m-tall headless stand S of road. Is this maybe some other kind of grass?

moved 16.1 km WNW.

246) **Highway 11, 3.5 km WNW Moonbeam**. 42G/8, UTM 17UME 129.9 673.1 49.35427N 82.19789W. TIME: 1504. AIR TEMP: 13, sunny, breezy. HABITAT: narrow newly constructed roadside ditch. 2010/095/g, *Typha angustifolia* (Narrow-leaved Cattail) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 119,

narrow stand with head-fluff all blown away.

moved 3.8 km NW.

247) **Highway 11, 7.2 km WNW Moonbeam, Highway 11.** UTM 17UME 102.5 698.8 49.37699N 82.23629W. TIME: 1507. AIR TEMP: 13, sunny, breezy. HABITAT: grassy rdside/tracksid between highway & railway. 2010/095/h, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 120, 10 m headless stand S of road.

moved 5.1 km W.

248) **Highway 11, 8.8 km ESE Kapuscasing.** UTM 17UME 52.2 708.1 49.38468N 82.30571W. TIME: 1510. AIR TEMP: 13, sunny, breezy. HABITAT: grassy roadside. 2010/095/i, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 121, big tan-smallhead stand on mound S of road.

moved 8.8 km WNW.

249) **Kapuscasing at central Highway 11 lights.** UTM 17ULE 970.3 741.3 49.41311N 82.41935W. TIME: 1518. AIR TEMP: 13, sunny, breezy. HABITAT: sparsely urbanized highway roadside. 2010/095/j, **visit** () (event). natural history, driveby. WAYPT/Y 122, Kapuscasing requires ca 8 km of highway for 9500. . . . advertised inhabitants - not a model of densified urbanization, NO:Phragmites along its Highway 11 rdsides.

moved 5.7 km WNW.

250) **Highway 11, 3.8 km ESE Val Rita.** UTM 17ULE 916.4 759.1 49.42827N 82.49412W. TIME: 1524. AIR TEMP: 13, sunny, breezy. HABITAT: dry roadside ditch/grassy roadside. 2010/095/k, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 123, ca 15 m headless patch N of road.

moved 3.8 km WNW.

251) **Highway 11 at Val Rita.** 42G/7, UTM 17ULE 883.2 777.1 49.44384N 82.54040W. TIME: 1527. AIR TEMP: 13, sunny, breezy. HABITAT: hwy/railway settlement. 2010/095/l, **visit** () (event). natural history, driveby. WAYPT/Y 124, ground between highway & railway bulldozed up for >1 km. . . . E of here, NO:Phragmites seen.

moved 6.6 km WNW.

252) **Highway 11, 6.6 km WNW Val Rita.** UTM 17ULE 821.5 800.9 49.46406N 82.62622W. TIME: 1531-1539. AIR TEMP: 13, sunny, breezy. HABITAT: grassy rdside/open Picea woods. 2010/095/ma, *Corvus corax* (Raven) (Bird). 2+ adult, juvenile, seen, heard. WAYPT/Y 125, pair with chunks of meat & unseen loud young. . . . with apparent nest site in 2 closely appressed *Picea glauca* (White Spruce) N of road. AKS got out to pee here, and stumbled onto this loud event. At first we say one adult with a chunk of meat, on the ground in a place that subsequently proved to be very pecked-up, then it flew around with the other parent, while juvenile-Raven sounds were emitted from the presumed nest site.

253) (same location) 2010/095/mb, *Taraxacum officinale* (Common Dandelion) (Plant). common herb, in bloom, seen. scattered blooms on S-facing sandy bank.

moved 5.8 km WNW.

254) **Highway 11, 12.8 km ESE Opasatika.** UTM 17ULE 767.5 821 49.48108N 82.70142W. TIME: 1543. AIR TEMP: 13, sunny, breezy. HABITAT: grassy roadside. 2010/096/aa, **visit** () (event). abundant natural history, seen, driveby. WAYPT/Y 126, big stands of the mystery Umbellifer N of highway.

moved 0.24 km NW.

255) **Highway 11, 12.5 km ESE Opasatika.** UTM 17ULE 765.6 822.6 49.48241N 82.70410W. TIME: 1543. AIR TEMP: 13, sunny, breezy. HABITAT: grassy roadside. 2010/096/ab, **visit** () (event). abundant natural history, seen, driveby. WAYPT/Y 127, big stands of mystery Umbellifer N of the highway. . . . for ca 1 km

along here.

moved 12.5 km WNW.

256) **Highway 11 at Opatatika.** 42G/10, UTM 17ULE 651.3 874.6 49.52674N 82.86354W. TIME: 1553. AIR TEMP: 13, sunny, breezy. HABITAT: hwy/railway settlement. 2010/096/b, **reference** (cartigraphic reference) (event). natural history, driveby. WAYPT/Y 128, reference for our search for 1977 fire.

moved 7.7 km WNW.

257) **Highway 11/Mc Cowan Road, 7.7 km WNW Opatatika.** UTM 17ULE 577.6 897.7 49.54587N 82.96615W. TIME: 1558. AIR TEMP: 13, sunny, windy. HABITAT: gravel road past disturbed empty log-sort fields. 2010/096/c, **reference** (cartigraphic reference) (event). natural history, driveby. WAYPT/Y 129, head N on Mc Cowan Road in search for 1977 fire. The southernmost 3 km here are patchy with little clearcuts with torn-up soil, and then young woods with lots of little ponds, many of which seem to have been borrow pits for the construction of the road.

moved 19.4 km N.

258) **Mc Cowan Road, 23.0 km NNW Opatatika.** UTM 17ULF 574 91.2 49.71973N 82.97816W. TIME: 1619. AIR TEMP: 13, sunny, windy. HABITAT: gravel road past young woods with ponds. 2010/096/d, *Ursus americanus* (Black Bear) (Mammal). 1 adult, AOR, driveby. WAYPT/Y 130, medium size, on roadside.

moved 2.1 km NNE.

259) **Mc Cowan Road, 24.6 km NNW Opatatika.** UTM 17ULF 582.4 110.6 49.73736N 82.96727W. TIME: 1622. AIR TEMP: 13, sunny, windy. HABITAT: gravel road past large pond in young woods. 2010/096/e, *Haliaeetus leucocephalus* (Bald Eagle) (Bird). 1 juvenile, seen, driveby. WAYPT/Y 131, juv with streaky white head, flew up. . . . from edge of pond.

moved 0.45 km N.

260) **Mc Cowan Road, 25.0 km NNW Opatatika.** UTM 17ULF 582.9 115.1 49.74136N 82.96671W. TIME: 1623. AIR TEMP: 13, sunny, windy. HABITAT: not noted. 2010/096/f, **reference** (cartigraphic reference) (event). natural history, drive. WAYPT/Y 132, this 24 road km N of Highway 11. . . . (though the km markers that we followed at first have stopped, and this looks like it's a road that was built after 1977).

moved 5.1 km N.

261) **Mc Cowan Road, 30.0 km NNW Opatatika.** 42G/15, UTM 17ULF 579.9 166.3 49.78732N 82.97266W. TIME: 1633. AIR TEMP: 13, sunny, windy. HABITAT: gravel road past swampy area in young woods. 2010/096/g, *Grus canadensis* (Sandhill Crane) (Bird). 1 adult, AOR, driveby. WAYPT/Y 133, flew up from road & flew along ahead of us for sev 100 m.

moved 1.07 km N.

262) **Mc Cowan Road, 31.1 km NNW Opatatika.** UTM 17ULF 579.4 176.9 49.79691N 82.97377W. TIME: 1636ca. AIR TEMP: 13, sunny, windy. HABITAT: brushy area. 2010/096/h, **reference** (cartigraphic reference) (event). natural history, drive. WAYPT/Y 134, turned around here, since odometer is 30-odd km. . . . and we haven't seen anything we remember from 1977.

moved 2.3 km S.

263) **Mc Cowan Road, 28.8 km NNW Opatatika.** UTM 17ULF 580.3 153.9 49.77624N 82.97172W. TIME: 1641. AIR TEMP: 13, sunny, windy. HABITAT: gravel road past swampy area/drawn-down Beaver flood. 2010/096/i, *Canis lupus* (Wolf) (Mammal). present adult, AOR, tracks. WAYPT/Y 135, trackways on road. Here the road runs past a big *Castor* flood E of the road with a large lodge & brown peaty bottom, largely drained, but we didn't stop to examine it for shells or anything else.

moved 0.78 km SSE.

264) **Mc Cowan Road, 28.0 km NNW Opatatika**. UTM 17ULF 583.7 146.9 49.77000N 82.96667W. TIME: 1642ca. AIR TEMP: 12, sunny, breezy. HABITAT: not reached. 2010/096/-, **reference** (cartigraphic reference) (event). natural history, driveby. WAYPT/YOP, this is the nearest-minute lat/long assigned to. . . . the 1977 fish collection in 1979 by the NMNS without consulting us.

moved 0.39 km WSW.

265) **Mc Cowan Road, 28.0 km NNW Opatatika**. UTM 17ULF 580 145.7 49.76887N 82.97178W. TIME: 1653-1740. AIR TEMP: 12, sunny, breezy, windy. HABITAT: newly built dirt road in young Spruce/Aspen forest/boggy swamps. 2010/096/ja, *Canis lupus* (Wolf) (Mammal). present adult, AOR, tracks. WAYPT/Y 136, deep tracks in dry mud in middle of the road. . . . several trackways heading N & S all along the road here. - this was our best guess at the location of the 1977 burn, and only a few 100 m from the NMNS waypoint, but except for some dark patches on a sculpted-away roadside log which was the incentive for stopping here, we've seen no signs of past fire other than some areas along the road with no organic layer - and these may have been scalped when the road was built. All the *Picea* (Spruce) are swathed in lichen, which again argues against youth, and there's no real uniformity in any of the stands of smaller trees. There are old shed fragments and gas cans around, so maybe the place was high-graded for clear-cutting and then the newer road was recently built to allow low-grading - *Lycopodium clavatum* (Staghorn Clubmoss) & *Lycopodium lucidulum* (Shining Clubmoss) among a grove of Aspens, no *Rana* eggs in the ditches scanned.

266) (same location) 2010/096/jb, *Pseudacris crucifer* (Spring Peeper) (herp). few call, heard. 1 bout of calls at arrival, few calling at 17h30 (windy).

moved 0.25 km N.

267) **Mc Cowan Road, 28.3 km NNW Opatatika**. UTM 17ULF 580.2 148.2 49.77107N 82.97158W. TIME: 1709-. AIR TEMP: 12, sunny, breezy, windy. HABITAT: roadside pools along newly built dirt road past *Ledum* thickets in Spruce/Aspen fores. 2010/096/ka, **visit** () (event). natural history, walk. WAYPT/Y 137, AKS description of site. <<get AKS description of site>>

268) (same location) 2010/096/kb, *Pseudacris crucifer* (Spring Peeper) (herp). few larva, seen. very few black 9 mm tadpoles among many Culicidae larvae. A Culicid-dense 2 x 2 x 0.35 m pool in raw sandy clay & peat beside road, with a few tiny tadpoles. <<get times from notes>>

moved 0.75 km S.

269) **Mc Cowan Road, 27.6 km NNW Opatatika**. UTM 17ULF 579 140.8 49.76438N 82.97305W. TIME: 1751-1759. AIR TEMP: 13, sunny, breezy. HABITAT: brownwater/*Typha latifolia* pond E of gravel road. OBSERVER: Frederick W. Schueler. 2010/097/aa, *Pseudacris crucifer* (Spring Peeper) (herp). index 3 call, heard. WAYPT/Y 138, chorus with some trilling.

270) (same location) 2010/097/ab, *Rana sylvatica* (Wood Frog) (herp). index 2 call, heard. small chorus, swamped by Peepers.

271) (same location) 2010/097/ac, **<moss>** (not listed) (herp). 1/common specimen. floating moss from open pond.

272) (same location) 2010/097/ad, *Helisoma trivolvus* (Larger Eastern Ramshorn) (Mollusca). few shell, drift, specimen. from floating moss from open pond.

273) (same location) 2010/097/ae, **Coleoptera** (Beetle) (entomological). 1 mature, specimen. from floating moss from open pond, taken incidentally.

moved 0.59 km S.

274) **Mc Cowan Road, 27.0 km NNW Opatatika**. UTM 17ULF 579.2 134.9 49.75911N 82.97253W. TIME:

1809. AIR TEMP: 13, sunny, breezy. HABITAT: Castor/Typha latifolia pond. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler, Adam Zieleman. 2010/097/b, *Pseudacris crucifer* (Spring Peeper) (herp). index 3 call, heard. WAYPT/Y 139, driveby audition of chorus.

moved 1.04 km SSE.

275) **Mc Cowan Road, 26.0 km NNW Opatatika.** 42G/10, UTM 17ULF 581.3 124.7 49.74997N 82.96931W. TIME: 1813-1828. AIR TEMP: 13, sunny, breezy. HABITAT: campsite clearing with rotton log dock into clearwater lake/Aspen-Picea woods. 2010/097/ca, *Pseudacris crucifer* (Spring Peeper) (herp). index 1 call, heard. WAYPT/Y 140, few calling sporadically nearby. This would be a very nice campsite, and it's obviously used that way fairly frequently.

276) (same location) 2010/097/cb, **Pulmonata** () (Mollusca). many adult, under cover, specimen. lots of small snails under chipboard sheets & old plywood. Of moist outhouse seat.

277) (same location) 2010/097/cc, *Ambystoma laterale* (Blue-spotted Salamander) (herp). 1 adult, under cover, photo. large, no spots, AKS photo, under moist old plywood. . . . outhouse seat.

278) (same location) 2010/097/cd, *Taraxacum officinale* (Common Dandelion) (Plant). many herb, in bloom, seen. scattered blooms here, plants all along road.

279) (same location) 2010/097/ce, *Alces alces* (Moose) (Mammal). present adult, tracks. tracks in mud of lakeshore & all along road.

280) (same location) 2010/097/cf, *Botaurus lentiginosus* (American Bittern) (Bird). 1 call, heard. calling heard briefly.

moved 3.2 km S.

281) **Mc Cowan Road, 23.1 km NNW Opatatika.** UTM 17ULF 576.6 93.2 49.72152N 82.97468W. TIME: 1837-1842. AIR TEMP: 13, sunny, windy. HABITAT: wide little-used rutty gravel rds past Picea woods. 2010/097/d, *Ursus americanus* (Black Bear) (Mammal). 3 adult, juvenile, AOR, seen, photo. WAYPT/Y 141, 1 nearby, medium size, 2(mother & yr-old cub?). . . . several 100 m S in rdway. AKS photos & notes.

moved 4.0 km S.

282) **Mc Cowan Road, 19.3 km NNW Opatatika.** UTM 17ULF 578.9 53.3 49.68575N 82.96994W. TIME: 1850. AIR TEMP: 13, sunny, windy. HABITAT: high banked-up road culvert over sedge marsh/Alder swamp. 2010/097/e, **visit** () (event). index call, heard. WAYPT/Y 142, NO:Anura heard calling. We thought this looked good for maybe hearing calling by a few speccies, but it turns out to be silent.

moved 0.25 km SSE.

283) **Mc Cowan Road, 19.0 km NNW Opatatika.** UTM 17ULF 580 51 49.68370N 82.96839W. TIME: 1851. AIR TEMP: 13, sunny, windy. HABITAT: not noted. 2010/097/f, *Pseudacris crucifer* (Spring Peeper) (herp). index call, heard. WAYPT/Y 143, 1 calling with trills. This is the intersection with the road to the NNW.

moved 3.1 km SE.

284) **Mc Cowan Rd/Waxatike Road, 16.0 km NNW Opatatika.** UTM 17ULF 597.7 25.1 49.66085N 82.94287W. TIME: 1858. AIR TEMP: 13, sunny, windy. HABITAT: not noted. 2010/097/g, **reference** (cartigraphic reference) (event). natural history, drive. WAYPT/Y 144, head E on Waxatike Road.

moved 1.05 km ENE.

285) **Waxatike Road, 16.0 km NNW Opatatika.** UTM 17ULF 607.7 28.5 49.66414N 82.92915W. TIME: 1858. AIR TEMP: 13, sunny, windy. HABITAT: Typha dominated excavated roadside pond. 2010/097/h, *Pseudacris crucifer* (Spring Peeper) (herp). index call, heard. WAYPT/Y 145, small chorus.

moved 2.1 km NE.

286) **Waxatike Road, 17.1 km N Opatatika**. UTM 17ULF 622.8 43.3 49.67777N 82.90886W. TIME: 1903. AIR TEMP: 13, sunny, windy. HABITAT: not noted. 2010/097/i, **reference** (cartigraphic reference) (event). natural history, drive. WAYPT/Y 146, conclude that the older road is Waxatike Road. . . . on the basis of continued km signs, while the other road jumps to kms in the low 50's.

moved 4.8 km NNE.

287) **Waxatike Road, 21.4 km N Opatatika**. UTM 17ULF 640.6 88 49.71841N 82.88575W. TIME: 1920ca. AIR TEMP: 13, sunny, windy. HABITAT: young forest & interdigitated swamps. 2010/097/j, **reference** (cartigraphic reference) (event). natural history, drive. WAYPT/Y 147, road turns off to W that may be 1977 site.

moved 3.2 km NNE.

288) **Waxatike Road, 24.4 km N Opatatika**. UTM 17ULF 651.4 118.7 49.74620N 82.87180W. TIME: 1925-2000. AIR TEMP: 11, sunny, sunset, breezy. HABITAT: Picea woods on clay with roadside ponds in excavation, near limit of presumed 1977 fire. 2010/097/k, **visit** () (event). natural history, walk, specimen. WAYPT/Y 148, we've been driving around looking for places. . . . which looked like they'd been burned in 1977, and which matched our verbal description of where we'd been, and here there's a sharp border to the older forest, and a tangle of fallen Spruce logs, so we stopped here to look around. AKS found charcoal 24.4 km N Opatatika, 24 road km just S of here, and generally patchy cover of young and older woods.

moved 0.12 km SSE.

289) **Waxatike Road, 24.3 km N Opatatika**. UTM 17ULF 651.8 117.6 49.74519N 82.87117W. TIME: 1930. AIR TEMP: 11, sunny, windy. HABITAT: young White Spruce/aspens/Paper Birch woods. 2010/098/aa, **<Twinflower honeysuckle>** (not listed) (Plant). 1 shrub, in bloom, specimen. WAYPT/Y 149, 1 blooming bush.

290) (same location) 2010/098/ab, *Lycopodium dendroideum* (Round-branched Groundpine) (Plant). 1 herb, specimen. a patch of a few m diameter.

291) (same location) 2010/098/ac, () (Plant). 1 herb, specimen. heavily browsed 2 m bushy tree. *Populus balsamifera* (Balsam Poplar) is also heavily browsed here - this site may be burned but I find no charcoal, *Rubus idaea* (Red Raspberry) is the identifiable low shrub.

moved 0.12 km NNW.

292) **Waxatike Road, 24.4 km N Opatatika**. UTM 17ULF 651.4 118.7 49.74620N 82.87180W. TIME: 1958-2004. AIR TEMP: 11, sunny, sunset, breezy. HABITAT: roadside ponds in clay excavations along Picea woods. OBSERVER: Frederick W. Schueler. 2010/098/ba, *Equisetum variegatum* (Variagated Horsetail) (Plant). 1/dominant herb, specimen. densely throughout one pond.

293) (same location) 2010/098/bb, **Stagnicola** () (Mollusca). common shell, drift, specimen. floating at S end of little pond.

294) (same location) 2010/098/bc, *Catharus guttatus* (Hermit Thrush) (Bird). 1 call, heard. singing in woods.

moved 0.92 km SSW.

295) **Waxatike Road, 23.6 km N Opatatika**. UTM 17ULF 648 110.2 49.73847N 82.87623W. TIME: 2008. AIR TEMP: 11, clear, windy, sunset. HABITAT: brushy roadside. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler, Adam Zielemann. 2010/098/c, **reference** (cartigraphic reference) (event). natural history, driveby. WAYPT/Y 150, sign post announcing 24 road km N Highway 11.

moved 2.4 km SSW.

296) **W of Waxatike Road, 21.4 km N Opatatika.** UTM 17ULF 637.8 88 49.71834N 82.88956W. TIME: 2016-2056. AIR TEMP: 11-10, clear, breezy. HABITAT: large Beaver dam & impoundment in area of young forest. 2010/098/d, **visit** () (event). natural history, walk, oil. WAYPT/Y 151, very long Beaver dam lake. . . . surrounded by yg *Picea glauca* (White Spruce) (other trees doubtless eaten) with about 25 countable branch whorls, so plausibly originating with a 1977 fire. <<get AKS description>>

297) (same location) AIR TEMP: 11, clear, breezy. 2010/098/da, **Mollusca** () (Mollusca). shell, drift, specimen. floating shells & sticks in extension of Beaver dam along road. This drift was floating behind the extension of the Beaver dam along the old road, and there were many white flecks which led me to think it would be rich, but all the flecks turned out to be nonmolluscan.

298) (same location) 2010/098/daa, *Lymnaea stagnalis* (Great Pond Snail) (Mollusca). several shell, specimen. floating few shells in extension of Beaver dam along old road. This drift was floating and there were many white flecks which led me to think it would be rich, but all the flecks turned out to be nonmolluscan.

299) (same location) AIR TEMP: 10, clear, breezy. 2010/098/dab, *Helisoma trivolvus* (Larger Eastern Ramshorn) (Mollusca). several shell, specimen. floating few shells in extension of Beaver dam along old road.

300) (same location) 2010/098/db, *Canis lupus* (Wolf) (Mammal). 1 scat, specimen. on old rd/ATV trail.

301) (same location) 2010/098/dc, *Pseudacris crucifer* (Spring Peeper) (herp). index 3 call, heard. chorus starting ca 20h45 from nearby Typha pond.

302) (same location) 2010/098/dd, *Gavia immer* (Common Loon) (Bird). 1? call, heard, seen. calling sporadically, overhead at 20h45.

moved 1.9 km S.

303) **Waxatike Road, 19.5 km N Opatatika.** UTM 17ULF 638.9 69.1 49.70130N 82.88741W. TIME: 2132. AIR TEMP: 6, clear, breezy. HABITAT: brushy roadside & woods. 2010/098/f, *Lepus americanus* (Snowshoe Hare) (Mammal). 1 adult, AOR, driveby. WAYPT/Y 152, brown pelage, ran across road.

moved 1.19 km SSW.

304) **Waxatike Road, 18.5 km N Opatatika.** UTM 17ULF 632.7 58.8 49.69197N 82.89565W. TIME: 2134. AIR TEMP: 6, clear, breezy. HABITAT: brushy roadside & woods. 2010/098/g, *Lepus americanus* (Snowshoe Hare) (Mammal). 1 adult, AOR, driveby. WAYPT/Y 153, brown pelage, ran across road.

moved 4.2 km SW.

305) **Waxatike Road, 15.9 km NNW Opatatika.** UTM 17ULF 605.5 27.4 49.66308N 82.93220W. TIME: 2139-2141. AIR TEMP: 6, clear, breezy. HABITAT: swamp/brushy area. 2010/098/ha, *Pseudacris crucifer* (Spring Peeper) (herp). index 3 call, heard. WAYPT/Y 154, surrounding chorus.

306) (same location) 2010/098/hb, *Rana sylvatica* (Wood Frog) (herp). index 1 call, heard. few calling.

307) (same location) 2010/098/hc, *Scolopax minor* (Woodcock) (Bird). 1 call, heard. peenting & flying.

moved 2.0 km SW.

308) **Mc Cowan Road, 15.0 km NNW Opatatika.** UTM 17ULF 592 12.7 49.64957N 82.95040W. TIME: 2144. AIR TEMP: 5, clear, breezy. HABITAT: brushy roadside & woods. 2010/098/j, *Lepus americanus* (Snowshoe Hare) (Mammal). 1 adult, AOR, driveby. WAYPT/Y 155, brown pelage, ran along road.

moved 5.0 km S.

309) **Mc Cowan Road, 10.9 km NW Opasatika.** UTM 17ULE 587.2 963.4 49.60509N 82.95519W. TIME: 2152-2153. AIR TEMP: 6, clear, breezy. HABITAT: swamp/brushy young Aspen woods. 2010/099/aa, *Pseudacris crucifer* (Spring Peeper) (herp). index 3 call, heard. WAYPT/Y 156, big chorus, and lots heard driveby N of here.

310) (same location) 2010/099/ab, *Rana sylvatica* (Wood Frog) (herp). index 1 call, heard. few calling.

311) (same location) 2010/099/ac, *Gallinago gallinago* (Snipe) (Bird). 1 call, heard. winnowing overhead.

moved 6.5 km S.

312) **Mc Cowan Road just N Highway 11, 7.8 km WNW Opasatika.** UTM 17ULE 577.4 899.3 49.54725N 82.96651W. TIME: 2202. AIR TEMP: 6, clear, breezy. HABITAT: brushy area among log-sorting yards. 2010/099/b, *Lepus americanus* (Snowshoe Hare) (Mammal). 1 adult, AOR, driveby. WAYPT/Y 157, brown pelage, ran along road. . . . missed waypointing one a ways N of here.

moved 120.9 km ESE.

313) **Highway 11, 5.1 km N Driftwood.** 42H/3, UTM 17UME 711.1 481 49.18707N 81.39631W. TIME: 2326-2327. AIR TEMP: 5, clear, breezy. HABITAT: marshy/brushy ponds along highway. 2010/099/ca, *Pseudacris crucifer* (Spring Peeper) (herp). index 3 call, heard. WAYPT/Y 116, slow chorus. Waypoint made on the way W -- is this where we got the green Pyganodon?

314) (same location) 2010/099/cb, *Rana sylvatica* (Wood Frog) (herp). index 1 call, heard. few calls audible.

moved 7.4 km S.

315) Calder: **Highway 11/655, S of Driftwood.** UTM 17UME 721.2 407.5 49.12100N 81.38185W. TIME: 2333. AIR TEMP: 5, clear, breezy. 2010/099/d, **visit** () (event). natural history, driveby. missed waypointing an AOR *Vulpes vulpes* a few km S of here.

moved 26.9 km ESE.

316) Cochrane: **Brissons, Commando Lake, Cochrane.** UTM 17U 982.2 342.1 49.06274N 81.02415W. TIME: 2353. AIR TEMP: 5, clear, breezy. 2010/099/e, **arrival** () (event). natural history, drive. from 8 km W, 24 km N Opasatika, before midnight.

12 May 2010

317) Canada: Ontario: Cochrane District: **Brissons, Commando Lake, Cochrane.** UTM 17U 982.2 342.1 49.06274N 81.02415W. TIME: 1700. AIR TEMP: 15, sunny, breezy. ROUTE: Highway 11. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler, Adam Zieleman. bhhzlog, **departure** (departure) (event). natural history, drive. 215229 km, to Long Lake Camp.

moved 0.96 km SSW.

318) **Highway 11, 0.9 km S Cochrane Town Hall.** UTM 17UME 977.7 333.6 49.05510N 81.03026W. TIME: 1705. AIR TEMP: 15, sunny, breezy. HABITAT: roadside ditch/brushy fields/motels. 2010/099/f, *Vulpes vulpes* (Red Fox) (Mammal). 1 adult, AOR, tracks. WAYPT/Y 158, reddish, **HEADING**:E across highway. . . . crossing point located by tracks on shoulder, as GPS wasn't tracking when the Fox was crossing in front of us.

moved 16.0 km SSE.

319) **Long Lake 2010 camp, 12.8 km NW Tunis.** 42A/15, UTM 17UNE 20.1 179 48.91606N 80.97232W. TIME: 1734. AIR TEMP: 15, sunny, Beaufort light breeze. HABITAT: grassy old highway clearing in Populus-Picea woods/shallow Typha pond in Alnus thicket. 2010/099/g, **arrival** () (event). natural history, drive. WAYPT/Y 159, parked trailer here, near Third Pond. NO:Anura calling audible.

moved 0.10 km NE.

320) **Long Lake camp, S end of Deep Pond.** UTM 17UNE 20.8 179.8 48.91680N 80.97148W. TIME: 1824-1832. AIR TEMP: 15 ca, sunny, Beaufort light breeze. HABITAT: deep clear Typha latifolia-ringed excavated pond in clay. 2010/099/h, **visit** () (event). natural history, walk, heard. WAYPT/Y 160, NO:Lithobates eggs seen in pond. NO:Anura calling audible - the water is very clear here. The Aspens on the bank of clay on the E side continue to grow, and perhaps to shade the Ant mounds there, which seem to have reduced vigour - at least they're all caved in by something, which may be *Colaptes* or some other predator.

moved 0.08 km WNW.

321) Hanna: **Long Lake camp near Deep Pond, 12.9 km NW Tunis.** UTM 17UNE 20.1 180.2 48.91711N 80.97243W. TIME: 1845-1847. AIR TEMP: 15 ca, sunny, Beaufort light breeze. HABITAT: clay bank with moss patches & yg Picea glauca under Aspen/Fir canopy. 2010/099/i, *Pseudacris crucifer* (Spring Peeper) (herp). 1-2 call, heard. WAYPT/Y 161, 2 bouts of calling now. 20h10 - no calling audible. AIR_TEMP 11.5, CLR, CLM, SET - 20h15 few start calling from pond, and almost immediately a small chorus,

WAYPT/Y 161, average with 174 for AKS painting site. This is bare clay and patches of moss trees are Aspen & Fir with the Aspens dying at 10 cm DBH (e. g. the one in the painting) otherwise there's tufty

broad-leaved *Carex* and low wire-like *Cornus stolonifera*.



moved 0.12 km S.

322) **Long Lake 2010 camp, 12.8 km NW Tunis.** UTM 17UNE 20.1 179 48.91606N 80.97232W. TIME: 1919-1956. AIR TEMP: 14, sunny, sunset, clear, calm. HABITAT: grassy old highway clearing in Populus-Picea woods/shallow Typha pond in Alnus thicket. 2010/099/ga, *Bonasa umbellus* (Ruffed Grouse) (Bird). 1 adult, male, seen, heard. grey-phase M with ruff expanded crossing road just to S at 19h19. . . . then seen completely deflated in roadside *Alnus* (Alder), and then pecking along roadside near trailer at 19h56.

323) Hanna: **Long Lake 2010 camp, 12.8 km NW Tunis.** 48.91606N 80.97202W TIME: 2010. AIR TEMP: 11.5, sunny, clear, sunset. OBSERVER: Frederick W. Schueler. 2010/100/a, *Pseudacris crucifer* (Spring Peeper) (herp). index 3 call, heard. chorus all up & down the lake. We're hoping to hear Wood Frog calling after this warm day, to help give us some idea of what stage their breeding cycle is at.

324) (same location) TIME: 2052. AIR TEMP: 7, clear, calm, sunset. 2010/100/ba, *Pseudacris crucifer* (Spring Peeper) (herp). index 2 call, heard. small chorus from nearby ponds.

325) (same location) 2010/100/bb, *Rana sylvatica* (Wood Frog) (herp). index 1 call, heard. first few calls from nearby ponds.

326) (same location) TIME: 2113. AIR TEMP: 4, clear, calm. 2010/100/ca, *Pseudacris crucifer* (Spring Peeper) (herp). index 2 call, heard. small chorus from nearby ponds.

327) (same location) 2010/100/cb, *Rana sylvatica* (Wood Frog) (herp). index 1 call, heard. few calling from nearby ponds.

moved 0.18 km WNW.

328) **Long Lake access, 13.0 km NW Tunis.** UTM 17UNE 18.9 180 48.91691N 80.97407W. TIME: 2132-2137. AIR TEMP: 4, clear, calm. HABITAT: Carexy shore of narrow brownwater lake in White Spruce/Aspen forest on clay. 2010/100/d, *Pseudacris crucifer* (Spring Peeper) (herp). index 3 call, heard. chorus all up & down the lake. NO: *Lithobates sylvaticus* calling heard.

moved 0.18 km ESE.

329) **Long Lake 2010 camp, 12.8 km NW Tunis.** 48.91606N 80.97202W TIME: 2142. AIR TEMP: 3, clear, calm. HABITAT: grassy old highway clearing in Populus-Picea woods/shallow Typha pond in Alnus thicket. 2010/100/ea, *Pseudacris crucifer* (Spring Peeper) (herp). index 3 call, heard. chorus from nearby ponds.

330) (same location) 2010/100/eb, *Rana sylvatica* (Wood Frog) (herp). index 1 call, heard. few calling from nearby ponds.

331) (same location) TIME: 2231-2250. AIR TEMP: 1, clear, calm. 2010/100/fa, *Pseudacris crucifer* (Spring Peeper) (herp). index 2 call, heard. slow small chorus from nearby ponds, stopped 222h32 & resumed.

332) (same location) 2010/100/fb, *Rana sylvatica* (Wood Frog) (herp). index 1 call, heard. very few calls from nearby ponds.

333) (same location) TIME: 2316. AIR TEMP: -0.5, clear, calm. 2010/100/ha, *Pseudacris crucifer* (Spring Peeper) (herp). index 1 call, heard. few calling from nearby ponds, still a chorus from the lake. . . . then silence all night after 25h00 or so.

334) (same location) 2010/100/hb, *Rana sylvatica* (Wood Frog) (herp). index 1 call, heard. very few calls from nearby ponds.

13 May 2010

335) Canada: Ontario: Cochrane District: **Long Lake 2010 camp, 12.8 km NW Tunis.** 48.91606N 80.97202W TIME: 1007. AIR TEMP: 13, sunny, breezy. OBSERVER: Frederick W. Schueler. 2010/101/a, *Pseudacris crucifer* (Spring Peeper) (herp). 1 call, heard. 1 bout of calling. . . . after silence since 25h00. Very sporadic calling through the day, none, e. g., heard again before 10h24 or 11h11.

There's almost no birdsong here, and the trees haven't begun to leaf out, though scattered 1-2.5 m bushes of various species have begun to open their leaves. Woodpecker drumming is conspicuous, with *Sphyrapicus varius* (Yellowbelly Sapsucker) drumming & calls, and *Picoides villosus* (Hairy Woodpecker) drumming recognizable.

336) (same location) AIR TEMP: 17, sunny, breezy. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler, Adam Zielemann. 2010/101/c, *Vanessa atalanta* (Red Admiral) (entomological). 1 mature, seen, photo. on road with small fritillary-patterned sp., AKS photo.

moved 0.12 km NNW.

337) **Long Lake camp near Deep Pond, 12.9 km NW Tunis.** UTM 17UNE 20.1 180.2 48.91711N 80.97237W. TIME: 1024-1045. AIR TEMP: 14 ca, sunny, breezy. HABITAT: clay bank with moss patches & yg *Picea glauca* under Aspen/Fir canopy. OBSERVER: Frederick W. Schueler. 2010/101/b, **<moss>** (not listed) (). abundant herb, specimen. WAYPT/Y 174, sample of moss painted by AKS. Average with 161 AKS painting site - moss patch painted by AKS is 120 x 120 cm, others are 220 x 115 cm, 110 x 65 cm, 165 x 140 cm, 160 x 110 cm, 80 x 60 cm, 110 x 110 cm, 65 x 60 cm, 70 x 80 cm, 42 x 50 cm. The soil is bare now, but within & between the moss patches there's a lot of \<hawkweed> with lesser amounts of \toff, \<yarrow>, and \<strawberry>. There's also a scattering of *Rubus idaea* (Red Raspberry), *Rosa* (Rose), and *Cornus stolonifera* (Red-osier Dogwood), and a Solidago-like tall herb with long simple leaves that must cover the site in the summer, but which doesn't have any seed-parts by which it could be identified now. Also a *Viburnum* opening three-lobed "maple" leaves, and "Gaultheria" along the brink of the ditch. Just S of this site there's 2 parallel ditches with a dense growth of "swamp honeysuckle" between them and dense piles of decaying *Salix* (Willow) stems in one of the ditches. Beyond that there's the big trees of an open *Picea glauca* (White Spruce) / *Populus tremuloides* (Trembling Aspen) woods, evidently undisturbed by the construction of the highway.

Co-ords averaged with 161 for AKS painting site.

moved 0.33 km SSE.

338) **old Highway 11, 12.6 km NW Tunis.** UTM 17UNE 21.2 177.1 48.91435N 80.97084W. TIME: 1210-1212. AIR TEMP: 17 ca, sunny, breezy. HABITAT: *Salix* thicket being overtopped by *Picea glauca* & Aspen trees. 2010/102/a, **visit** () (event). natural history, walk. WAYPT/Y 162, wilderness dehumidifier on its top here. . . . in the woods with various other more subdued trash, such as oil cans and sheets of masonite (Isopods & Lumbricids under the masonite). Leaves of shrub *Salix* (Willow) and *Cornus stolonifera* (Red-osier Dogwood) starting to open here, in contrast to the less sheltered situation at camp.

moved 0.25 km E.

339) **old Highway 11, 12.4 km NW Tunis.** UTM 17UNE 23.8 176.9 48.91418N 80.96738W. TIME: 1218-1230. AIR TEMP: 17 ca, sunny, breezy. HABITAT: *Abies/Picea/Poplar* woods. 2010/102/b, *Caltha palustris* (Marsh-Marigold) (Plant). 1 clump herb, seen. WAYPT/Y 163, not yet in bloom in seepage N of old culvert. There's chain-sawdust on the pavement here, and a 50 m area of disturbance N of the road. One 30 cm *Abies stump* (riddled by *Camponotus*) is visible, but if trees enough to provide the tops left here, they must have come from further to the N. *Lepus americanus* (Snowshoe Hare) droppings are scattered among the cut tops, and it looks like some *Picea mariana* (Black Spruce) twigs that would have been above snow level may have been nipped off by them. No ATV trackways are evident. The old highway here is just a band of pavement through the woods, not the grassy opening it used to be, but if you look back at the road from the woods you can see the Grass, submerged in *Populus balsamifera* (Balsam Poplar). *Corvus corax* (Raven) in the distance.

moved 0.10 km E.

340) **old Highway 11, 12.4 km NW Tunis.** UTM 17UNE 24.7 176.9 48.91416N 80.96608W. TIME: 1234. AIR TEMP: 17 ca, sunny, breezy. HABITAT: *Abies/Picea/Poplar* woods. 2010/102/c, *Alces alces* (Moose) (Mammal). present adult, food, tracks. WAYPT/Y 164, extensive debarking of Aspen. Incidentally felled Aspen by logging. These are big irregular gouges of shovel-like teeth. There's another area of disturbance N of the road, here, and stumps of 3 25-30 cm *Picea* (Spruce) that have been removed.

moved 0.15 km E.

341) Hanna: **old Highway 11, 12.3 km NW Tunis.** UTM 17UNE 26.2 176.9 48.91415N 80.96403W. TIME: 1237. AIR TEMP: 17 ca, sunny, breezy. HABITAT: *Abies/Picea/Poplar* woods. 2010/102/d, **visit** () (event). natural history, walk. WAYPT/Y 165, another area of disturbance N of the road. . . . no stumps of trees cut near the road.

moved 0.09 km E.

342) **old Highway 11, 12.2 km NW Tunis.** UTM 17UNE 27.1 176.9 48.91413N 80.96278W. TIME: 1239. AIR TEMP: 17 ca, sunny, breezy. HABITAT: grassy spot along old highway through Abies/Picea/Poplar woods. 2010/102/e, **visit** () (event). natural history, walk. WAYPT/Y 166, 10 m grassy patch being whipped in by Poplars.

moved 0.14 km ESE.

343) **N of old Highway 11, 12.1 km NW Tunis.** UTM 17UNE 28.5 176.5 48.91382N 80.96094W. TIME: 1244. AIR TEMP: 18 ca, sunny, breezy. HABITAT: open Picea woods with diversely-mossy Ledum/Abies undergrowth. 2010/102/fa, *Lycopodium annotinum* (Bristly Clubmoss) (Plant). 1/dominant herb, specimen. WAYPT/Y 167, N limit of area where this species is dominant. Ground cover.

344) (same location) 2010/102/fb, **<cranberry>** (not listed) (Plant). 1 subshrub, specimen. taken with *Lycopodium annotinum*.

345) (same location) 2010/102/fc, **Sphagnum** (Sphagnum Moss) (Bryophyte). 1/common specimen. taken with *Lycopodium annotinum*.

346) (same location) 2010/102/fd, **Sphagnum** (Sphagnum Moss) (Bryophyte). 1/common specimen. taken with *Lycopodium annotinum* in wetter places.

moved 0.14 km W.

347) **old Highway 11, 12.2 km NW Tunis.** UTM 17UNE 27.1 176.8 48.91403N 80.96285W. TIME: 1300. AIR TEMP: 18 ca, sunny, breezy. HABITAT: open Picea woods with diversely-mossy Ledum/Abies undergrowth. 2010/102/g, *Lycopodium annotinum* (Bristly Clubmoss) (Plant). dominant herb, seen. WAYPT/Y 169, W limit of area where this species dominates. The ground cover along old highway.

moved 0.20 km E.

348) **old Highway 11, 12.0 km NW Tunis.** UTM 17UNE 29.1 176.7 48.91401N 80.96007W. TIME: 1307. AIR TEMP: 18 ca, sunny, breezy. HABITAT: open Picea woods with diversely-mossy Ledum/Abies undergrowth. 2010/103/a, *Lycopodium annotinum* (Bristly Clubmoss) (Plant). dominant herb, seen. WAYPT/Y 170, E limit of huge area where this sp. dominates. . . . the ground cover N of ditch along old/hwy.

moved 0.08 km E.

349) **Highway 11, 12.0 km NW Tunis.** UTM 17UNE 29.9 176.7 48.91396N 80.95899W. TIME: 1309-1311. AIR TEMP: 18 ca, sunny, breezy. HABITAT: Larix/Alnus/Picea swamp with Feather Moss/Sphagnum ground cover. 2010/103/b, *Lycopodium annotinum* (Bristly Clubmoss) (Plant). codominant herb, seen. WAYPT/Y 171, E limit of huge area where this species. . . . is the codominant ground cover along Highway 11.

moved 0.49 km WNW.

350) Hanna: **Highway 11, 12.4 km NW Tunis.** UTM 17UNE 25.4 178.8 48.91583N 80.96512W. TIME: 1322. AIR TEMP: 19 ca, sunny, windy. HABITAT: grassy/sandy roadside. 2010/103/ca, **Lonicera** (Honeysuckle) (Plant). 1 shrub, in bloom, specimen. WAYPT/Y 172, single 40 cm shaggy-barked blooming shrub.

351) (same location) 2010/103/cb, *Taraxacum officinale* (Common Dandelion) (Plant). abundant herb, in bloom, seen. tousled/wooly-stalk plants all along SW facing side of road.

352) (same location) 2010/103/cc, *Fragaria virginiana* (Strawberry) (Plant). abundant herb, in bloom, seen. tiny plants, all along SW facing side of road.

moved 0.52 km WNW.

353) **W of Highway 11, 12.9 km NW Tunis.** UTM 17UNE 20.6 180.8 48.91769N 80.97165W. TIME: 1332. AIR TEMP: 19 ca, sunny, windy. HABITAT: open Picea/Aspen woods with diversely-mossy undergrowth - cutting across from highway to AKS. 2010/103/d, *Lycopodium annotinum* (Bristly Clubmoss) (Plant). 1 stand herb, seen. WAYPT/Y 173, 30 m patch under big Picea glauca. This reminds me that this species isn't so unique at the other end of the highway loop as I'd imagined when I found the patch there. I'm cutting across from highway to AKS painting site.

moved 0.18 km S.

354) **Long Lake 2010 camp, 12.8 km NW Tunis.** 48.91606N 80.97202W TIME: 1340. AIR TEMP: 20, sunny, windy. HABITAT: grassy old highway clearing in Populus-Picea woods/shallow Typha pond in Alnus thicket. 2010/103/g, **weather** (climate observation) (event). 1 walk. back to camp to read thermometer.

moved 0.01 km WNW.

355) **Long Lake Third pond, 12.8 km NW Tunis.** UTM 17UNE 20.2 179.1 48.91612N 80.97218W. TIME: 1530-1540. AIR TEMP: 20, cloudy, breezy. HABITAT: shallow Typha pond in Alnus thickets on clayey sand. 2010/103/ha, *Rana sylvatica* (Wood Frog) (herp). 30 ca eggmasses egg, dead, seen, wade. 30 green-dead eggmasses in 1 cluster, 30 cm depth in mid-pond. These were all killed by frost, and were disintegrating into individual pale granular eggs. About 25 masses were on the surface, and about 3 sunken below the centre of the aggregation. I waded all around the pond and saw no more eggs.

356) (same location) 2010/103/hb, **Lobaria** (not listed) (lichen). 1 specimen. reddish lichen on downed log beside pond.

moved 0.14 km S.

357) **Long Lake traditional campsite, 12.7 km NW Tunis.** UTM 17UNE 20.5 177.7 48.91485N 80.97183W. TIME: 1610. AIR TEMP: 20, light overcast, breezy. HABITAT: brushy roadside of old highway in Populus/Picea woods near lake & ponds. 2010/103/i, **visit** () (event). natural history, walk. heading down track to look for frogs & eggs.

358) (same location) 2010/103/ia, **Amelanchier** () (Plant). 1 shrub, disease, seen. just breaking buds, with many black dead leaves. Surely these aren't leaves killed by the frost, but must be the result of some foliage-killing event or disease from last fall. I've seen this condition on a couple of other shrubs here.

359) (same location) 2010/103/ib, *Alces alces* (Moose) (Mammal). present adult, scat, tracks, seen. tracks, largely big, all along track, 2 piles of old droppings. These tracks were fresh, and at the N end here were more recent than any ATV tracks.

moved 0.22 km SW.

360) **Long Lake track, 12.8 km NW Tunis.** UTM 17UNE 18.9 176.2 48.91352N 80.97401W. TIME: 1610-1613. AIR TEMP: 19 ca, light overcast, breezy. HABITAT: ruts all across grassy track through Poplar/Abies/Picea forest. 2010/103/j, **Gerris** (Water Strider) (entomological). common mature, seen. WAYPT/Y 175, common on all ruts along track. NO:Lithobates eggs here.

moved 0.13 km SSW.

361) **Long Lake track, 12.7 km NW Tunis.** UTM 17UNE 18.5 175 48.91243N 80.97462W. TIME: 1616. AIR TEMP: 19 ca, light overcast, breezy. HABITAT: ruts in clay across grassy/Carex track through Poplar/Abies/Picea forest. 2010/103/k, **no observation** () (event). survey, walk. WAYPT/Y 176, NO:Lithobates eggs here, water milky.

moved 0.02 km SSE.

362) **Long Lake track, 12.7 km NW Tunis.** UTM 17UNE 18.6 174.8 48.91228N 80.97447W. TIME: 1617. AIR TEMP: 19 ca, light overcast, breezy. HABITAT: ruts in clay across grassy/Carex track through

Poplar/Abies/Picea forest. 2010/103/la, *Lithobates sylvaticus* (not listed) (herp). 1 eggmass egg, dead, seen. WAYPT/Y 177, 1 dead green eggmass, 20 m x 40 cm x 30 cm rut.

363) (same location) 2010/103/lb, *Nymphalis antiope* (Mourning Cloak) (entomological). 3 mature, seen. flying around.

moved 0.19 km S.

364) Hanna: **Long Lake track, 12.6 km NW Tunis.** UTM 17UNE 18.7 172.9 48.91059N 80.97422W. TIME: 1622. AIR TEMP: 19 ca, light overcast, breezy. HABITAT: ruts across clay across grassy/Carex track through Poplar/Abies/Picea forest. 2010/103/m, **no observation** () (event). survey, walk. WAYPT/Y 178, NO:Lithobates eggs in cross-track rut system. . . . water clear.

moved 0.09 km S.

365) **Long Lake track, 12.5 km NW Tunis.** UTM 17UNE 18.9 172 48.90977N 80.97398W. TIME: 1625. AIR TEMP: 19 ca, light overcast, breezy. HABITAT: ruts in Grass/Carex/Typha area in track through Alnus-brush clearcut. 2010/104/a, *Lithobates sylvaticus* (not listed) (herp). 1 eggmass egg, dead, seen. WAYPT/Y 179, 1 dead green eggmass at S end, 15 m x 1 m x 20 cm rut.

moved 0.02 km SSE.

366) **Long Lake track, 12.5 km NW Tunis.** UTM 17UNE 19 171.8 48.90956N 80.97390W. TIME: 1627. AIR TEMP: 19 ca, light overcast, breezy. HABITAT: ruts in Grass/Carex/Typha area in track through Alnus-brush clearcut. 2010/104/b, *Lithobates sylvaticus* (not listed) (herp). 1 eggmass egg, hatch, seen. WAYPT/Y 180, 1 hatching-out eggmass in 1 m x 1 m x 10 cm rut/hole.

moved 2.2 km E.

367) Hanna: **Highway 11, 11.0 km NW Tunis.** UTM 17UNE 40.8 173.3 48.91091N 80.94409W. TIME: 1630-2030ca. AIR TEMP: 19 ca, light overcast, breezy. HABITAT: Black Spruce/Sphagnum/Leatherleaf bog. OBSERVER: Aleta Karstad Schueler. AKS 10 May 131630/a, *Picea mariana* (Black Spruce) (Plant). 1/dominant sapling, oil. AKS painting of scene. Blog text: "13 May finds me again painting a little spruce tree, but this one is not young like yesterday's sapling in the woods. It is a Black Spruce, and no younger than the tall club-tipped Black Spruces at the edges of the bog. We've known this bog for many years, and I'm pleased to be able to paint in it again.

"From the highway, you can tell it's a bog by the way the trees are shorter toward the centre, and spaced out by moss and shrubs. The pillow of moss that is growing up around the base of this little tree is Sphagnum, the acid-producing environment of everything that grows in the bog. Growth here is very slow, as organic decomposition almost doesn't happen. The living and dead *Sphagnum* (Sphagnum Moss), and the water that it holds, is antiseptic. Nutrients are available to the roots of plants mainly through the action of micorhyzal fungi. Most bog plants retain their leaves through the winter, as it is expensive to grow new ones.



"Many of my old bog friends are here. \<Leatherleaf> is in bloom, each vertical-leaved stem tipped by a row of tiny white bells. \<Bog Rosemary> also, but smaller, glossy, rolled-in leaves with white undersides (also held vertically) is blooming in pink. The droopy-leaved plants are \<Labrador Tea> (with orange fuzz on the undersides) and \<Bog Laurel> (with smooth undersides). The pale, thin grass-like leaves are last year's Carex. It will grow new this summer, as will \<Bog Lily>, whose old leaves litter the Sphagnum in places like scraps of wet brown paper tissue. "

368) (same location) AKS 10 May 131630/b, *Vulpes vulpes* (Red Fox) (Mammal). 1 scat, specimen. scat balanced on the branches of a low Picea. Blog text: "Walking with long strides like a heron, trying to make minimal impression in the garden-like bog surface, I spot an artifact that appears to be balanced on the branches of a low spruce - a dry fox dropping entirely composed of compacted mouse fur and tiny bones. The felty fur inside is slightly yellow- dusty with what I guess must be the fruits of a special fungus that finished off the fox's meal. The next step in the processing of this dropping will be to break it up, extract the teeth, and send them to a mammalogist to find out what kind of mice the fox was eating. "

moved 2.2 km W.

369) **Long Lake track, 12.4 km NW Tunis.** UTM 17UNE 18.8 169.9 48.90787N 80.97418W. TIME: 1631-1633. AIR TEMP: 19 ca, light overcast, breezy. HABITAT: small stream\2 track through Alnus-brush clearcut. OBSERVER: Frederick W. Schueler. 2010/104/c, *Castor canadensis* (Beaver) (Mammal). dam, seen. WAYPT/Y 181, broached 10 m dam across track, impounded ca 60 cm. . . . deep before dam was opened, now 20 cm. There's more impoundments downstream in the clearcut - and the brushy growth certainly provides a lot of Beaver food.

moved 0.10 km SSW.

370) **Long Lake track, 12.3 km NW Tunis.** UTM 17UNE 18.5 169 48.90705N 80.97456W. TIME: 1635. AIR TEMP: 19 ca, light overcast, breezy. HABITAT: ruts in wide Grass/Carex area in track through Alnus-brush clearcut. 2010/104/d, *Lithobates sylvaticus* (not listed) (herp). 1 eggmass egg, hatch, seen. WAYPT/Y 182, 1 hatching-out mass in 1 m x 40 cm x 10 cm rut/hole.

moved 0.04 km SW.

371) **Long Lake track, 12.3 km NW Tunis.** UTM 17UNE 18.3 168.7 48.90680N 80.97486W. TIME: 1637-1641. AIR TEMP: 19 ca, light overcast, breezy. HABITAT: ruts in wide Grass/Carex area in track through Alnus-brush clearcut. 2010/104/e, *Lithobates sylvaticus* (not listed) (herp). 14 eggmasses egg, dead, seen. WAYPT/Y 183, 14 dead green eggmasses in 10 m x 25 m x 40 cm rut. . . . complex, 4 & 5 masses were clustered, and losing their separateness, the rest were scattered in the arms of the rut complex.

moved 0.05 km SSW.

372) **Long Lake track, 12.3 km NW Tunis.** UTM 17UNE 18.1 168.3 48.90641N 80.97512W. TIME: 1643. AIR TEMP: 19 ca, light overcast, breezy. HABITAT: ruts in wide Grass/Carex track through boggy Picea forest. 2010/104/fa, *Lithobates sylvaticus* (not listed) (herp). 2 eggmasses egg, dead, seen. WAYPT/Y 184, 1 green, 1 grey dead eggmasses in 10 m x 40 cm x 20 cm. . . . rut.

373) (same location) 2010/104/fb, *Caltha palustris* (Marsh-Marigold) (Plant). several herb, in bloom, seen. a few clumps with blooms almost open. These were more open when I came back around 18h00.

moved 0.03 km SSW.

374) **Long Lake track, 12.3 km NW Tunis.** UTM 17UNE 18 168 48.90618N 80.97525W. TIME: 1645. AIR TEMP: 19 ca, light overcast, breezy. HABITAT: ruts in wide Grass/Carex track through boggy Picea forest. 2010/104/g, *Lithobates sylvaticus* (not listed) (herp). 5 eggmasses egg, dead, seen. WAYPT/Y 185, 5 grey eggmasses, some dead, some alive but not. . . . near hatching in 1 m wide part of 10 m x 50 cm x 20 cm rut in generally rutted-up area. Note that on a scale of 20 m or so these eggmasses are always in the "best" spot.

moved 0.04 km SSW.

375) **Long Lake track, 12.3 km NW Tunis.** UTM 17UNE 17.8 167.7 48.90589N 80.97550W. TIME: 1647. AIR TEMP: 19 ca, light overcast, breezy. HABITAT: ruts in wide Grass/Carex track through boggy Picea forest. 2010/104/h, *Lithobates sylvaticus* (not listed) (herp). 2 eggmasses egg, dead, seen. WAYPT/Y 186, 2 vividly green dead eggmasses. . . . in 10 m x 40 cm x 15 cm rut among other ruts nrly this large.

moved 0.07 km SSW.

376) **Long Lake track, 12.3 km NW Tunis.** UTM 17UNE 17.5 167 48.90528N 80.97589W. TIME: 1651. AIR TEMP: 19 ca, light overcast, breezy. HABITAT: ruts in wide Grass/Carex track through boggy Picea forest. 2010/104/ia, *Lithobates sylvaticus* (not listed) (herp). 2 eggmasses egg, dead, seen. WAYPT/Y 187, 2 vividly green dead eggmasses. . . . in 8 m x 50 cm x 20 cm rut; none in nearby smaller ruts.

377) (same location) 2010/104/ib, *Lycopodium annotinum* (Bristly Clubmoss) (Plant). dominant herb, seen. dominant ground cover under adjacent woods.

378) (same location) 2010/104/ic, *Pseudacris crucifer* (Spring Peeper) (herp). 1 call, heard. 1 bout of calling nearby.

moved 0.04 km SSW.

379) **Long Lake track, 12.3 km NW Tunis.** UTM 17UNE 17.4 166.6 48.90492N 80.97602W. TIME: 1655. AIR TEMP: 19 ca, light overcast, breezy. HABITAT: ruts in wide Grass/Carex track through boggy Aibes/Picea forest. 2010/105/aa, *Lithobates sylvaticus* (not listed) (herp). 17 eggmasses egg, dead, seen. WAYPT/Y 188, 17 green dead eggmasses, 8 clustered(4 sunken),. . . . 4 in another cluster, 5 scattered in 16 m x 7 cm x 30 cm rut complex with confluent 30 m rut to S.

380) (same location) 2010/105/ab, *Caltha palustris* (Marsh-Marigold) (Plant). 1 herb, in bloom, seen. 1 clump in bloom.

moved 0.05 km SSW.

381) **Long Lake track, 12.3 km NW Tunis.** UTM 17UNE 17.2 166.1 48.90447N 80.97627W. TIME: 1657. AIR TEMP: 19 ca, light overcast, breezy. HABITAT: ruts in wide Grass/Carex track through boggy Aibes/Picea forest. 2010/105/b, *Lithobates sylvaticus* (not listed) (herp). 1 eggmass egg, dead, seen. WAYPT/Y 189, 1 green dead eggmass in 50 cm wide spot in 10 m. . . . x 40 cm x 30 cm rut.

moved 0.02 km WSW.

382) **Long Lake track, 12.3 km NW Tunis.** UTM 17UNE 17.1 166 48.90439N 80.97646W. TIME: 1659. AIR TEMP: 19 ca, light overcast, breezy. HABITAT: ruts in wide Grass/Carex track through boggy Aibes/Picea forest. 2010/105/c, *Lithobates sylvaticus* (not listed) (herp). 3 eggmasses egg, dead, seen. WAYPT/Y 190, 3 green partially sunken dead eggmasses. . . . in 3 m x 1.5 m x 20 cm rut.

moved 0.04 km WSW.

383) **Long Lake track, 12.3 km NW Tunis.** UTM 17UNE 16.8 165.8 48.90422N 80.97687W. TIME: 1700. AIR TEMP: 19 ca, light overcast, breezy. HABITAT: ruts in wide Grass/Carex track through boggy Aibes/Picea forest. 2010/105/d, *Lithobates sylvaticus* (not listed) (herp). 1 eggmass egg, dead, seen. WAYPT/Y 191, 1 grey but not developing dead eggmass. . . . in 3 m x 1.5 m x 20 cm rut.

moved 0.01 km WSW.

384) **Long Lake track, 12.3 km NW Tunis.** UTM 17UNE 16.7 165.8 48.90417N 80.97699W. TIME: 1701. AIR TEMP: 19 ca, light overcast, breezy. HABITAT: ruts in wide Grass/Carex track through boggy Aibes/Picea forest. 2010/105/ea, *Lithobates sylvaticus* (not listed) (herp). 1 eggmass egg, dead, seen. WAYPT/Y 192, 1 grey but not developing dead eggmass in. . . . 6 m x 60 cm x 20 cm rut.

385) (same location) 2010/105/eb, *Lycopodium annotinum* (Bristly Clubmoss) (Plant). dominant herb, seen.

dominant ground cover under adjacent woods to E.

moved 0.02 km SW.

386) **Long Lake track, 12.3 km NW Tunis.** UTM 17UNE 16.5 165.7 48.90405N 80.97724W. TIME: 1703. AIR TEMP: 19 ca, light overcast, breezy. HABITAT: ruts in Grass/Carex track through grassy clearcut. 2010/105/f, *Lithobates sylvaticus* (not listed) (herp). 1 eggmass egg, dead, seen. WAYPT/Y 193, 1 green dead eggmass in 3.5 m x 60 cm x 15 cm rut.

moved 0.01 km WSW.

387) **Long Lake track, 12.3 km NW Tunis.** UTM 17UNE 16.4 165.6 48.90398N 80.97741W. TIME: 1704. AIR TEMP: 19 ca, light overcast, breezy. HABITAT: ruts in Grass/Carex track through grassy clearcut. 2010/105/ga, *Lithobates sylvaticus* (not listed) (herp). 1 eggmass egg, hatch, seen. WAYPT/Y 194, 1 hatching eggmass in Carex-draped 4 m x 20 cm x 10 cm. . . . rut.

388) (same location) 2010/105/gb, *Canis lupus* (Wolf) (Mammal). 1+ adult, scat, tracks. big track in fresh mud here. Droppings are scattered all along the track.

moved 0.01 km WSW.

389) **Long Lake track, 12.3 km NW Tunis.** UTM 17UNE 16.3 165.5 48.90394N 80.97758W. TIME: 1707. AIR TEMP: 19 ca, light overcast, breezy. HABITAT: ruts in Grass/Carex track through grassy clearcut. 2010/105/h, *Lithobates sylvaticus* (not listed) (herp). 3 eggmasses egg, hatch, dead, seen. WAYPT/Y 195, 2 hatching eggmasses, 1 green & dead. . . . in 6 m x 30 cm x 10 cm rut with open muddy bottom ruts.

moved 0.19 km SW.

390) **Long Lake track, 12.3 km NW Tunis.** UTM 17UNE 15.1 164.1 48.90262N 80.97913W. TIME: 1711. AIR TEMP: 18 ca, light overcast, breezy. HABITAT: end of track at grassy/clay clearing at Beaver dam. 2010/105/ia, **visit** () (event). natural history, walk. WAYPT/Y 196, low Beaver dam across drained creek here. . . . no concentrated drift. NO:Pseudacris crucifer calling.

391) (same location) 2010/105/ib, *Spiraea alba* (Meadowsweet) (Plant). 1/common shrub, seen. 1 shrub here, a thicket across creek.

392) (same location) 2010/105/ic, *Taraxacum officinale* (Common Dandelion) (Plant). common herb, in bloom, seen. small plants in bloom S facing clay slope.

393) (same location) 2010/105/id, *Fragaria virginiana* (Strawberry) (Plant). common herb, in bloom, seen. small plants in bloom S facing clay slope.

moved 0.03 km S.

394) **Long Lake track, 12.3 km NW Tunis.** UTM 17UNE 15.2 163.8 48.90235N 80.97905W. TIME: 1713-1719. AIR TEMP: 18 ca, light overcast, breezy. HABITAT: breached Beaver dam - get from previous. 2010/105/j, **visit** () (event). natural history, walk. WAYPT/Y 197, old Beaver dam breached very abruptly. . . . down into a hole in the clay, so that water pours into the hole from the meandering channel through the old pond. The cross-section of the dam is nrly solid clay, as the bulk of the wood has rotted away. Sun breaking through to overcast. NO:Pseudacris crucifer calling.

moved 0.13 km ENE.

395) **Long Lake track, 12.2 km NW Tunis.** UTM 17UNE 16.4 164.3 48.90284N 80.97741W. TIME: 1729-1736. AIR TEMP: 18 ca, light overcast, breezy. HABITAT: grassy clearcut. 2010/106/b, *Typha latifolia* (Broad-leaved Cattail) (Plant). herb, dead, in fruit, seen. WAYPT/Y 198, patches in moist ares, but with no open water. Which might contain eggmasses -- <<little anemone-like flowers>> there's 'pretty good regeneration" by *Picea* (Spruce) and *Aibies*, with dead *Carduus* standing up and a perimeter of *Picea* (Spruce), \tlat, *Populus tremuloides* (Trembling Aspen), and *Rubus idaea* (Red Raspberry).

moved 1.5 km NNE.

396) **Long Lake 2010 camp, 12.8 km NW Tunis.** 48.91606N 80.97202W TIME: 1807. AIR TEMP: 16, light overcast, windy. HABITAT: grassy old highway clearing in Populus-Picea woods/shallow Typha pond in Alnus thicket. 2010/106/ca, *Bonasa umbellus* (Ruffed Grouse) (Bird). 1 adult, seen, heard. on road with expanded ruff, followed by drumming all evening.

397) (same location) 2010/106/cb, *Pseudacris crucifer* (Spring Peeper) (herp). 1 call, heard. 1 calling from near lake.

398) (same location) TIME: 1922. AIR TEMP: 16, light overcast, windy. 2010/106/d, *Pseudacris crucifer* (Spring Peeper) (herp). index 1 call, heard. brief burst of calling from nearby, soon ended.

moved 1.17 km WNW.

399) **Long Lake picnic area, 13 km NW Tunis.** UTM 17UNE 9 182 48.91876N 80.98751W. TIME: 2000,2030. AIR TEMP: 14 ca, light overcast, breezy. HABITAT: Aspen/lawn picnic area near shore of claybelt lake. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler. 2010/106/ea, *Dryocopus pileatus* (Pileated Woodpecker) (Bird). 1 adult, seen. on big dead tree near lake, calling & pecking. . . . with calls responding from across the highway. Drumming a few times at 20h30, heard from camp.

400) (same location) TIME: 2000ca. AIR TEMP: 14 ca, light overcast, breezy. OBSERVER: Frederick W. Schueler. 2010/106/eb, **visit** () (event). natural history, walk. lawn fertilized by outhouses locked by a steel bar. . . . with screws into the wood of the buildings, so the mowed lawn around the outhouses is intensely green, and dotted with tissue. The green fades radially away from the outhouse buildings, but the dotting continues down the paths to the lake, and may be part of the reason for the vigorous growth of the brush along the trails.

The "bear-proof" green boxlike garbage containers don't latch unless slammed shut.

The *Populus tremuloides* (Trembling Aspen) are thriving on this treatment, and the oldest of the carved dates I was able to read was from 1993.

The lakeshore is all brushy, so that the sturdy wooden seats set out on concrete bases just look into a haze of twigs, not down the lake as they used to.

moved 1.17 km ESE.

401) **Long Lake 2010 camp, 12.8 km NW Tunis.** 48.91606N 80.97202W TIME: 2002-2027. AIR TEMP: 16, light overcast, windy. HABITAT: grassy old highway clearing in Populus-Picea woods/shallow Typha pond in Alnus thicket. 2010/106/dm, *Pseudacris crucifer* (Spring Peeper) (herp). index 1 call, heard. 20h02, calling still sporadic, 20h27, nearby calling resumes. Briefly, and then again at 20h30 with lots of trills.

moved 0.18 km WNW.

402) **Long Lake access, 13.0 km NW Tunis.** UTM 17UNE 18.9 180 48.91691N 80.97407W. TIME: 2008,2016. AIR TEMP: 15 ca, overcast. HABITAT: Carexy shore of narrow brownwater lake in White Spruce/Aspen forest on clay. 2010/100/e, *Pseudacris crucifer* (Spring Peeper) (herp). index 3 call, heard. 20h08, chorus begins, 20h16, resumes aft lapse.

moved 0.18 km ESE.

403) **Long Lake 2010 camp, 12.8 km NW Tunis.** 48.91606N 80.97202W TIME: 2044. AIR TEMP: 12, overcast, calm. HABITAT: grassy old highway clearing in Populus-Picea woods/shallow Typha pond in Alnus thicket. 2010/106/fa, *Pseudacris crucifer* (Spring Peeper) (herp). index 3 call, heard. chorus nearby.

404) (same location) 2010/106/fb, *Rana sylvatica* (Wood Frog) (herp). index 1 call, heard. first calling

nearby.

405) (same location) TIME: 2129-2203. AIR TEMP: 11, light overcast, calm. 2010/107/aaa, *Pseudacris crucifer* (Spring Peeper) (herp). index 2-3 call, heard. 21h44, index 2 small. chorus, 21h43, index 3 chorus.

406) (same location) 2010/107/aab, *Rana sylvatica* (Wood Frog) (herp). index 1 call, heard. 21h44, only a few calling, 21h43, a few from each of 3 ponds.

407) (same location) TIME: 2222-2234. AIR TEMP: 11, light overcast, calm. 2010/107/aba, *Pseudacris crucifer* (Spring Peeper) (herp). index 1-2 call, heard. 22h22, index 2 small. chorus, 22h34, nearby calling stopped.

408) (same location) 2010/107/abb, *Rana sylvatica* (Wood Frog) (herp). index 1 call, heard. few calling nearby.

409) (same location) TIME: 2251,2537. AIR TEMP: 9, overcast, breezy, light rain. 2010/107/aca, *Pseudacris crucifer* (Spring Peeper) (herp). index 1 call, heard. few calling nearby, 22h51, breeze, 25h37, light rain begins. . . . distant chorus.

410) (same location) 2010/107/acb, *Rana sylvatica* (Wood Frog) (herp). index 1 call, heard. few calling nearby, 22h51, breeze, 25h37, light rain begins.

14 May 2010

411) Canada: Ontario: Cochrane District: **Long Lake 2010 camp, 12.8 km NW Tunis**. 48.91606N 80.97202W TIME: 0528. AIR TEMP: 6, overcast, calm, drizzle. OBSERVER: Frederick W. Schueler. 2010/107/ca, *Pseudacris crucifer* (Spring Peeper) (herp). index 1 call, heard. few calling slowly nearby. . . . stopping when I get out to read the thermometer.

412) (same location) 2010/107/cb, *Rana sylvatica* (Wood Frog) (herp). 1 call, heard. 1 call heard nearby.

413) (same location) 2010/107/cc, *Bonasa umbellus* (Ruffed Grouse) (Bird). 1 call, heard. drumming nearby.

moved 0.60 km NNW.

414) **N end Long Lake, 13.4 km NW Tunis**. UTM 17UNE 17.9 184.4 48.92094N 80.97542W. TIME: 1211. AIR TEMP: 7 ca, overcast, calm, drizzle. HABITAT: low Beaver dam at inlet to Carex-tussock lake shallows, fringed by *Typha latifolia*. 2010/107/e, **visit** () (event). natural history, wade. WAYPT/Y 199, looking for eggmasses, but not seeing any eggs. . . . or drift, though the depth at the *Typha latifolia* (Broad-leaved Cattail) that fringe the open water is deeper than I'd want to go with these boots (40 cm), so they've just been subjected to a visual scan.

moved 0.06 km SE.

415) **N end Long Lake, 13.3 km NW Tunis**. UTM 17UNE 18.3 184 48.92056N 80.97480W. TIME: 1221. AIR TEMP: 7 ca, overcast, calm, drizzle. HABITAT: Carex-tussock lake shallows, with outer fringe of *Typha latifolia*. 2010/107/f, **visit** () (event). natural history, wade. WAYPT/Y 200, came ashore from looking for eggmasses. . . . but not seeing any eggs or drift, saw only 1 black living *Physa* (Tadpole Snail).

moved 0.54 km SSE.

416) **Long Lake 2010 camp, 12.8 km NW Tunis**. 48.91606N 80.97202W TIME: 1300ca. AIR TEMP: 8,

drizzle, Beaufort light air. ROUTE: Highway 11. bhhzlog, **departure** (departure) (event). nat.hist., drive. 215259 km, to Cochrane & New Liskeard. NO: Anura calling. Note that just before this I saw a 30 cm patch of *Sedum* along the old highway near AKS' painting site.

moved 5.3 km NW.

417) **Highway 11, 0.8 km NW Highway 11/Wicklów River.** 42A/14, UTM 17UME 987.2 221 48.95383N 81.01722W. TIME: 1528. AIR TEMP: 9, drizzle, calm. HABITAT: roadside, Alnus swamp. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler, Adam Zieleman. 2010/108/a, *Circus cyaneus* (Northern Harrier) (Bird). 1 adult, seen, driveby. WAYPT/Y 201, 1 M here, another a few km S.

moved 5.3 km SE.

418) Hanna: **Long Lake 2010 camp, 12.8 km NW Tunis.** 42A/15, 48.91606N 80.97202W TIME: 1550ca. AIR TEMP: 9, drizzle, calm. HABITAT: grassy old highway clearing in Populus-Picea woods/shallow Typha pond in Alnus thicket. OBSERVER: Frederick W. Schueler. 2010/108/b, *Pseudacris crucifer* (Spring Peeper) (herp). few call, heard. sporadic bouts of calling as we leave camp. . . . after picking up the trailer.

moved 2.1 km ESE.

419) **Highway 11, 11.0 km NW Tunis.** UTM 17UNE 40.8 173.3 48.91091N 80.94409W. TIME: 1554. AIR TEMP: 10, overcast, calm. HABITAT: Black Spruce/Sphagnum/Leatherleaf bog. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler. 2010/108/c, **visit** () (event). natural history, walk. WAYPT/Y 202, AKS painting site from yesterday.

moved 0.03 km WSW.

420) **Highway 11, 11.0 km NW Tunis.** UTM 17UNE 40.5 173.1 48.91078N 80.94451W. TIME: 1558. AIR TEMP: 10, overcast, calm. HABITAT: Black Spruce/Sphagnum/Leatherleaf bog. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler, Adam Zieleman. 2010/108/d, *Sarracenia purpurea* (Pitcher-plant) (Plant). 1 herb, photo. WAYPT/Y 203, AKS photo of single plant nested down among Picea.

moved 3.3 km ESE.

421) **Highway 11, 8.0 km NW Tunis.** UTM 17UNE 70.7 160.3 48.89917N 80.90333W. TIME: 1603. AIR TEMP: 10, overcast, calm. HABITAT: grassy roadside. 2010/108/e, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 204, small headless clump E of highway.

moved 30.8 km SSE.

422) **Highway 11, 7.9 km NW Val Gagne exit.** 42A/10, UTM 17UND 214.2 888.3 48.65421N 80.70890W. TIME: 1630. AIR TEMP: 10, overcast, calm. HABITAT: grassy roadside. 2010/108/f, **visit** () (event). natural history, driveby. WAYPT/Y 205, 20 m patch of tall spreading greyish Umbellifer. . . . that's conspicuous along the highway N of the Wicklów River - this is the first we've seen S of there.

423) (same location) 2010/108/fa, **cf Pastinaca sativa** (Parsnip) (Plant). 1 herb, dead, specimen. 20 m patch of tall spreading greyish Umbellifer. This may be a different species from that seen along the road N of Cochrane.

moved 12.6 km SE.

424) **Highway 11, 4.7 km SE Val Gagne exit.** UTM 17UND 298.6 795.3 48.57013N 80.59498W. TIME: 1643. AIR TEMP: 10, overcast, calm. HABITAT: grassy roadside. 2010/108/g, **visit** () (event). natural history, seen, driveby. WAYPT/Y 206, tall spreading greyish Umbellifer. . . . on both side of road.

moved 5.6 km SE.

425) **Highway 11, 5.4 km W Highway 11/101, Matheson.** UTM 17UND 342.1 759.4 48.53769N 80.53634W. TIME: 1647. AIR TEMP: 10, drizzle, calm. HABITAT: grassy roadside. 2010/108/h, *Circus cyaneus* (Northern Harrier) (Bird). 1 adult, female, seen, driveby. WAYPT/Y 207, F plumage, HEADING:N.

moved 54.4 km SSE.

426) Canada: Ontario: Timiskaming District: **Highway 11/Kenogami L at Kenogami**. 42A/1, UTM 17UND 595.6 278.2 48.10291N 80.19983W. TIME: 1728. AIR TEMP: 8, light rain. HABITAT: lakeshore village. 2010/108/i, **visit** () (event). natural history, driveby. WAYPT/Y 208, continue S.

moved 31.6 km SE.

427) **Highway 11, 6.9 km NNW Highway 560/11 at Englehart**. 31M/13, UTM 17TND 796 34.6 47.88155N 79.93512W. TIME: 1728. AIR TEMP: 9, drizzle. HABITAT: damp low spot in Aspen woods. 2010/108/j, *Caltha palustris* (Marsh-Marigold) (Plant). common herb, in bloom, driveby. WAYPT/Y 209, many in bloom E of road. . . . there's lots of *Amelanchier* in bloom along here.

moved 8.3 km SSE.

428) **Highway 11, 0.9 km W Highway 11/Englehart River**. UTM 17TNC 842.4 965.9 47.81918N 79.87450W. TIME: 1756. AIR TEMP: 9, light rain, breezy. HABITAT: grassy rdside/rdside ditch. 2010/109/aa, *Typha angustifolia* (Narrow-leaved Cattail) (Plant). dominant herb, dead, seen. WAYPT/Y 210, 1 head picked had 14 mm gap, all fluff blown off. . . . the heads, so my plan of mapping the extent of this stand wouldn't have been practical, especially in the rain.

429) (same location) 2010/109/ab, *Tanacetum vulgare* (Tansy) (Plant). 3 clumps herb, dead, seen. waypoint at largest of 3 clumps.

moved 5.1 km SE.

430) **Highway 11, 4.5 km SE Highway 11/Englehart River**. UTM 17TNC 880.3 932.1 47.78825N 79.82443W. TIME: 1804. AIR TEMP: 9, light rain, breezy. HABITAT: grassy roadside. 2010/109/b, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 211, 5 m stand E of highway.

moved 1.07 km N.

431) **Highway 11/569, 3.7 km SE Highway 11/Englehart River**. UTM 17TNC 879.7 942.8 47.79789N 79.82503W. TIME: 1807. AIR TEMP: 9, light rain, breezy. HABITAT: roadside. 2010/109/c, **reference** (cartigraphic reference) (event). natural history, drive. WAYPT/Y 212, head S on Highway 569 to 2000 Wood Frog site.

moved 5.4 km E.

432) **Tomstown, Blanche River bridge**. UTM 17TNC 934.2 943.6 47.79786N 79.75229W. TIME: 1812. AIR TEMP: 9, light rain, breezy. HABITAT: riverside village. 2010/109/d, **reference** (cartigraphic reference) (event). natural history, driveby. WAYPT/Y 213, water high, continue S to 2000 Wood Frog site.

moved 1.27 km SE.

433) **1.3 km SE Tomstown**. UTM 17TNC 944.6 936.3 47.79115N 79.73855W. TIME: 1820. AIR TEMP: 10, light rain, calm. HABITAT: roadside at brushy 10 yr clearcut. 2010/109/e, **visit** () (event). natural history, drive, walk. WAYPT/Y 214, proposed camp if we were to spend the night. . . . listening for Wood Frogs - there's a residence/sawmill-looking building down the road a bit, so logging is evidently continuing in this vicinity.

moved 0.23 km ENE.

434) **1.4 km ESE Tomstown**. UTM 17TNC 946.7 937.4 47.79211N 79.73578W. TIME: 1827. AIR TEMP: 10, light rain, calm. HABITAT: old barn/grassy fields/young Castor dams. OBSERVER: Frederick W. Schueler. 2010/109/f, *Ondatra zibethicus* (Muskrat) (Mammal). 1 adult, seen. WAYPT/Y 215, seen in Beaver pond. Old barn site, stream past here nicely terraced by tall brush/mud Beaver dams. NO:Anura calling nearby.

moved 0.10 km NNW.

435) **1.3 km ESE Tomstown.** UTM 17TNC 946.3 938.3 47.79290N 79.73627W. TIME: 1832. AIR TEMP: 10, light rain, calm. HABITAT: grassy field in old farmsite. 2010/109/ga, *Syringa vulgaris* (Common Lilac) (Plant). 1 stand shrub, seen. WAYPT/Y 216, 10 m patch, not yet in bloom.

436) (same location) 2010/109/gb, *Hemerocallis fulva* (Day Lily) (Plant). 1 patch herb, seen. 10 m patch among Lilacs, not yet in bloom.

437) (same location) 2010/109/gc, *Narcissus pseudo-poeticus* (Daffodil) (Plant). 1 clump herb, seen. 1 clump among Lilacs, not yet in bloom.

moved 0.05 km N.

438) **1.3 km ESE Tomstown.** UTM 17TNC 946.3 938.9 47.79339N 79.73622W. TIME: 1834. AIR TEMP: 10, light rain, calm. HABITAT: <haircap moss>/Alnus/Picea flats. 2010/109/h, <haircap moss> (not listed) (). dominant seen. WAYPT/Y 217, ground completely covered with this moss for 100 m. . . . or so.

moved 0.09 km NNE.

439) **1.3 km ESE Tomstown.** UTM 17TNC 946.6 939.8 47.79419N 79.73588W. TIME: 1837. AIR TEMP: 10, light rain, calm. HABITAT: Castor dam flooding a channel into Alnus/Salix brush swamp. 2010/109/ia, *Anas discors* (Blue-winged Teal) (Bird). 2 pair, seen, heard. WAYPT/Y 218, pair swimming above dam & flew away.

440) (same location) 2010/109/ib, *Botaurus lentiginosus* (American Bittern) (Bird). 1 call, heard. thunder-pumping.

moved 0.14 km NNW.

441) **1.2 km ESE Tomstown.** UTM 17TNC 946.3 941.2 47.79546N 79.73626W. TIME: 1843. AIR TEMP: 10, light rain, calm. HABITAT: Beaver-dammed channel in Salix/Alnus brush swamp. 2010/109/ja, **reference** (cartographic reference) (event). natural history, walk. WAYPT/YD 0 UP, waypoint from 2000 visit. Main channel of creek is a deep brownwater Beaver channel, NO:Lithobates eggmasses seen in any of the shallower portions of the impoundment, actual waypoint is a bit off the channel in a grassy glade among *Salix* (Willow), marked by *Alces alces* (Moose) browsing and a couple of moist summer droppings. It seems implausible to spend the night here listening for Wood Frogs.

moved 0.19 km WSW.

442) **1.1 km ESE Tomstown.** UTM 17TNC 944.6 940.2 47.79466N 79.73854W. TIME: 1854. AIR TEMP: 10, light rain, calm. HABITAT: Alnus/Kalmia roadside ditch in Aspen/Osmunda woods. 2010/109/k, *Pseudacris crucifer* (Spring Peeper) (herp). index 2 call, heard. WAYPT/Y 219, the main centre of calling around here.

moved 0.51 km SE.

443) **1.5 km ESE Tomstown.** UTM 17TNC 947.7 936.2 47.79100N 79.73448W. TIME: 1908. AIR TEMP: 10, light rain, calm. HABITAT: new Beaver dam & pond in steep claybelt valley, grassy areas, Alnus brush on 10 yr cl. 2010/109/la, *Castor canadensis* (Beaver) (Mammal). 2 adult, dam, seen. WAYPT/Y 220, new Beaver dam mostly of poles. . . . many newly peeled. 2 *Castor* swimming around looking me over, impoundment extends up into a formerly-coniferous valley to one side of the "main" channel - came here via a grassy track in *Alnus* (Alder) brush of the former clearcut, with lots of coarse woody debris still on the ground.

444) (same location) 2010/109/lb, *Alces alces* (Moose) (Mammal). 1 bone, female, specimen. F skull & jaws on bank.

445) (same location) 2010/109/lc, *Ceryle alceon* (Belted Kingfisher) (Mammal). 1+? call, heard. rattling along creek.

moved 10.1 km SSE.

446) **2.6 km SSE Hilliardton**. 31M/12, UTM 17TNC 989.4 844.1 47.70748N 79.68084W. TIME: 2001. AIR TEMP: 9, overcast, calm. HABITAT: brushy swamp. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler, Adam Zieleman. FWS 10 May 142001/a, *Lepus americanus* (Snowshoe Hare) (Mammal). 1 adult, AOR, driveby. WAYPT/Y 221, on roadside.

moved 17.3 km SE.

447) Casey: **Casey Marsh/12.3 km NE New Liskeard**. UTM 17TPC 93.5 705.5 47.58114N 79.54558W. TIME: 2030-2121. AIR TEMP: 14, sunny, windy. HABITAT: Salix-brushy oldfields near impounded claybelt Typha marsh near lake. FWS 10 May 142030/a, *Pseudacris crucifer* (Spring Peeper) (herp). index 3 call, heard. big surrounding chorus.

448) (same location) FWS 10 May 142030/b, *Podilymbus podiceps* (Pied-bill Grebe) (Bird). 1 call, heard. one call.

449) (same location) FWS 10 May 142030/c, *Porzana carolina* (Sora) (Bird). 1+ call, heard. long-peeper calls. . . . and other marsh-bird calls.

450) (same location) FWS 10 May 142030/d, *Castor canadensis* (Beaver) (Mammal). 1+ adult, food, seen, tracks. 1 swimming around inspecting me. *Populus balsamifera* (Balsam Poplar) cut outside of berm - are big burrows in exposed bank due to Beavers?

451) (same location) FWS 10 May 142030/e, *Matteuccia struthiopteris* (Ostrich Fern) (Plant). several sprout, seen. fiddleheads still at ground level.

452) (same location) FWS 10 May 142030/g, *Scolopax minor* (Woodcock) (Bird). 1 call, heard. few peents heard.

moved 0.08 km NW.

453) **Casey Marsh, 3.1 km S Judge**. UTM 17TPC 93 706.1 47.58174N 79.54628W. TIME: 2112-2121. AIR TEMP: 10, light rain, calm. HABITAT: Typha-dominated waterfowl impoundment berm. OBSERVER: Frederick W. Schueler. FWS 10 May 142112/a, *Pseudacris crucifer* (Spring Peeper) (herp). index 3 call, heard. WAYPT/Y 222, big surrounding chorus.

454) (same location) FWS 10 May 142112/b, *Bufo americanus* (American Toad) (herp). index 1 call, heard. few calls.

455) (same location) FWS 10 May 142112/c, *Rana pipiens* (Leopard Frog) (herp). index 1 call, heard. few calls.

456) (same location) FWS 10 May 142112/d, *Porzana carolina* (Sora) (Bird). several? call, heard. long-peeper calls.

457) (same location) FWS 10 May 142112/e, *Castor canadensis* (Beaver) (Mammal). 1+? call, heard. distant tail-splashes.

458) (same location) FWS 10 May 142112/f, *Gallinago gallinago* (Snipe) (Bird). 2 call, heard. winnowing.

15 May 2010

moved 0.08 km SE.

459) Canada: Ontario: Timiskaming District: Casey: **Casey Marsh/12.3 km NE New Liskeard**. UTM 17TPC 93.5 705.5 47.58114N 79.54558W. TIME: 0700,0843-0853. AIR TEMP: 10, light overcast, Beaufort light breeze. HABITAT: brushy surround of Typha-dominated waterfowl impoundment, near ditch. OBSERVER: Frederick W. Schueler. 2010/110/bc, **visit** () (event). call, heard. listening from inside of trailer. More \bufo and continuing \cruc chorus through the night. Fog in the morning, awakeish at 07h00, fog gone by the time we're operational at 08h43, 10, LOC, F 2. \cruc few sporadic, \agep lots of calling & 'burgalee' dominating the sound scape, \melo some songs, Covus corax, distant rolling croaks, *Spizella passerina* (Chipping Sparrow), some songs, \<sora>, whinnies, \zalb a few songs, *Podylimbus podiceps*, a few calls, \<robin> distant singing, \gall a couple of ground calls earlier, *Carduelis tristis* (Goldfinch), overhead calls, 08h52, calling has subsided quite a bit now that I'm up and recording it.

moved 0.08 km NW.

460) **Casey Marsh, 3.1 km S Judge**. UTM 17TPC 93 706.1 47.58174N 79.54628W. TIME: 0940. AIR TEMP: 11, sunny, Beaufort moderate breeze. HABITAT: Typha-dominated waterfowl impoundment berm. FWS 10 May 150940/a, *Rana pipiens* (Leopard Frog) (herp). index 1 call, heard. few calling from central arrea of Typha mats.

461) (same location) FWS 10 May 150940/b, *Pseudacris crucifer* (Spring Peeper) (herp). index 1 call, heard. few calling sporadically.

462) (same location) FWS 10 May 150940/c, *Marmota monax* (Woodchuck) (Mammal). 1 adult, seen. peeking out of burrow in berm. . . . which is riddled by burrows of various sorts.

moved 0.06 km SW.

463) **Casey Marsh/3.2 km S Judge**. UTM 17TPC 92.6 705.6 47.58129N 79.54679W. TIME: 0950. AIR TEMP: 13 ca, sunny. HABITAT: diked waterfowl marsh, hay/brushy oldfields & ditches. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler, Adam Zieleman. FWS 10 May 150950/a, *Alces alces* (Moose) (Mammal). 1 adult, tracks. WAYPT/YCM, fresh trackway along road. <<get 110/c>>

464) (same location) FWS 10 May 150950/b, *Taraxacum officinale* (Common Dandelion) (Plant). abundant herb, in bloom, seen, forage. touslely big-plant clumps like those seen at Shaw Woods.

moved 0.09 km E.

465) Casey: **Casey Marsh/12.3 km NE New Liskeard**. UTM 17TPC 93.5 705.5 47.58114N 79.54558W. TIME: 1008. AIR TEMP: 14, sunny, windy. HABITAT: brushy surround of Typha-dominated waterfowl impoundment, near ditch. 2010/110/ba, **<Mystery plant>** (not listed) (event). 1/dominant herb, sprout, specimen. dominates flat 10 x 40 m area of ditchside W of parking spot.

466) (same location) 2010/110/bb, **Ribes** () (Plant). 1/few shrub, in bloom, specimen. in bud to bloom, 1 of 2 bushes under Silver Maples. \<silver maple> with 2-3 cm leaves now.

467) (same location) TIME: 1030. AIR TEMP: 14, sunny, windy. ROUTE: highway 65, 101, 63, 533, 17, Dwyer Hill Road. bhhzlog, **departure** (departure) (event). natural history, drive. 215511 km, to home via Quebec Highway 101. *Caltha palustris* (Marsh-Marigold) in bloom W along the ditch a ways.

moved 3.5 km WSW.

468) **9.2 km S Belle Vallee**. UTM 17TPC 61.5 692.4 47.56986N 79.58848W. TIME: 1048. AIR TEMP: 14, sunny, windy. HABITAT: homesite yard. 2010/110/d, *Prunus nigra* (Canada Plum) (Plant). 1 stand shrub, in bloom, seen, driveby. WAYPT/Y 223, in yard N of road, in late bloom. . . . also a 4 m patch of some Goutweed-like stuff a bit along on roadside.

moved 5.7 km NE.

469) Casey: **Judge, Blanche R/Hwy 65 bridge**. UTM 17TPC 96.2 737.3 47.60975N 79.54120W. TIME: 1055. AIR TEMP: 14, sunny, windy. HABITAT: cloudy steep clay-bed river in agricultural area. OBSERVER: Frederick W. Schueler. 2010/110/e, *Homo sapiens* (Human People) (Mammal). many adult, seen, driveby. many trailers parked along rivers & fishermen active.

moved 4.7 km ESE.

470) Canada: Quebec: : **Notre Dame du Nord, just NW Ottawa River bridge**. 31M/11, UTM 17TPC 138.7 716.5 47.59028N 79.48529W. TIME: 1118-1125. AIR TEMP: 14 ca, sunny, windy. HABITAT: parking area Park W of Ottawa River. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler, Adam Zieleman. 2010/111/aa, *Taraxacum officinale* (Common Dandelion) (Plant). abundant herb, in bloom, seen. WAYPT/Y 224, densely in parkinglot field. NO:*Taraxacum palustre* here. There's no shore to the Ottawa River here, since the banks are hardened with wooden seawalls for hundreds of metres.

471) (same location) 2010/111/ab, **<cosmos>** (not listed) (Plant). 1 herb, specimen. 2 m patch in parkinglot field.

moved 0.17 km SE.

472) **Notre Dame du Nord Ottawa River bridge**. UTM 17TPC 139.7 715.1 47.58901N 79.48401W. TIME: 1128. AIR TEMP: 14 ca, sunny, windy. HABITAT: bridge over fleuve. 2010/111/b, **visit** () (event). natural history, walk, photo. WAYPT/Y 225, AKS photos for possible painting.

moved 3.1 km E.

473) **Highway 101, 3.1 km E Notre Dame du Nord**. UTM 17TPC 170.8 712.9 47.58645N 79.44268W. TIME: 1130. AIR TEMP: 13, sunny, breezy. HABITAT: rdside/tilled field. 2010/111/c, *Tanacetum vulgare* (Tansy) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 226, single clump between field & road.

moved 5.2 km S.

474) **Highway 101, 6.5 km SSE Notre Dame du Nord**. UTM 17TPC 175.2 661.1 47.53982N 79.43820W. TIME: 1134. AIR TEMP: 13, sunny, breezy. HABITAT: grassy field. 2010/111/d, *Marmota monax* (Woodchuck) (Mammal). 1 adult, seen, driveby. WAYPT/Y 227, in field W of road.

moved 3.8 km S.

475) **Highway 101, 9.9 km SSE Notre Dame du Nord**. UTM 17TPC 176 622.9 47.50542N 79.43819W. TIME: 1138. AIR TEMP: 13, sunny, breezy. HABITAT: roadside ditch/tilled field. 2010/111/ea, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, specimen. WAYPT/Y 228, 8 m small-head stand E of road.

476) (same location) 2010/111/eb, *Passerculus sandwichensis* (Savannah Sparrow) (Bird). present call, heard. singing in nearby field.

moved 0.41 km S.

477) **Highway 101/Riv. de l'Outre**. UTM 17TPC 176 618.8 47.50171N 79.43826W. TIME: 1143. AIR TEMP: 13, sunny, breezy. HABITAT: slow muddy river in agricultural area. 2010/111/f, **reference** (cartigraphic reference) (event). natural history, seen, driveby. WAYPT/Y 229, continue S, river appears high.

moved 15.6 km S.

478) **Highway 101, 7.0 km WSW St. Eugene-de-Guigues**. 31M/6, UTM 17TPC 176.3 603.2 47.48768N 79.43826W. TIME: 1144. AIR TEMP: 13, sunny, breezy. HABITAT: roadside ditch/ fields. 2010/111/g, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 230, 15 m nrly headless stand E of road.

moved 8.3 km S.

479) **Highway 101, 10.0 km NW Lorraineville**. UTM 17TPC 169.3 520.4 47.41331N 79.44973W. TIME:

1150. AIR TEMP: 13, sunny, breezy. HABITAT: brushy area. 2010/111/h, *Prunus nigra* (Canada Plum) (Plant). 1 stand shrub, in bloom, seen, driveby. WAYPT/Y 231, in clump W of road, in late bloom. . . . near garage-like building.

moved 2.3 km SSE.

480) **Highway 101, 8.2 km WNW Lorraineville**. UTM 17TPC 174.6 497.7 47.39284N 79.44329W. TIME: 1152. AIR TEMP: 12, light overcast, breezy. HABITAT: brushy rside/tilled field. 2010/111/i, *Marmota monax* (Woodchuck) (Mammal). 1 adult, seen, driveby. WAYPT/Y 232, on fencepost W of road.

moved 6.8 km S.

481) **Highway 101/382, Ville Marie**. UTM 17TPC 180.8 430.1 47.33188N 79.43695W. TIME: 1157. AIR TEMP: 12, light overcast, breezy. HABITAT: town. 2010/111/j, **reference** (cartigraphic reference) (event). natural history, seen, driveby. WAYPT/Y 233, continue S.

moved 9.3 km SSE.

482) **Highway 101 at Ottawa River, 6.5 km NNW Fabre**. UTM 17TPC 206.1 340.4 47.25075N 79.40589W. TIME: 1206-1251. AIR TEMP: 12, light overcast, breezy. HABITAT: lawnpark picnic area at cobble/coarse sand shore of Ottawa River. 2010/111/k, **visit** () (event). natural history, walk. WAYPT/Y 234, stopped for lunch & sampling. This is a picnic area with 40 cm DBH Aspen and single trees of *Thuja*, \<bur oak>, and \<paper birch> with its bark peeled off.

483) (same location) 2010/111/l, *Anotylus rugosus* () (entomological). many mature, drift, specimen. drift from coarse sand beach from W of waypoint. Subject: Beetle ID

Date: Sun, 30 May 2010 10:52:01 -0400

From: Joyce Cook <joyce_cook at carleton. ca>

To: Frederick W. Schueler <bckcdb at istar. ca>

Hi Fred, I now have identified the beetle your drift sample was teeming with: it is an Oxyteline Staphylinid, *Anotylus rugosus* (Fabricius). It is an introduced European species. Beetles in this genus are known to feed on dung and rotting vegetation, and many oxytelines have a preference for riparian habitats. The remaining beetles were not present in large numbers, but represent a fair amount of diversity. I'll get to them eventually. -- Joyce

Other Beetles (identified by Joyce later)

LIST: *Agonum species*, Carabidae;

Amara species, Carabidae;

Bembidion, species 1 - Carabidae;

Bembidion, species 2 - Carabidae;

Loricera pilicornis, Fabricius - Carabidae;

Agabus species, Dytiscidae;

Hydroporus species, Dytiscidae;

Hydroporini, Dytiscidae - 1 unidentified species;

Anacaena limbata, (Fabricius) - Hydrophilidae;

Cercyon haemorrhoidalis, (Fabricius) - Hydrophilidae;

Cercyon pygmaeus, (Illiger) - Hydrophilidae;

Cryptopleurum minutum, (Fabricius) - Hydrophilidae;

Cymbiodyta vindicata, Fall - Hydrophilidae;

Helophorus grandis, Illiger - Hydrophilidae;

Helophorus orientalis, Motschulsky - Hydrophilidae;

Anotylus cf insecatus, (Gravenhorst) - Staphylinidae;

Mycetoporus consors, Le Conte - Staphylinidae;

Philonthus, species 1 - Staphylinidae;

Philonthus, species 2 - Staphylinidae;

Tachinus species, - Staphylinidae;

Tachyporus species, - Staphylinidae;
Aleocharinae, 2 unidentified species - Staphylinidae;
Agoliinus manitobensis, (Brown) - Scarabaeidae;
Aphodius granarius, (Linne) - Scarabaeidae;
Aphodius prodromus, Brahm - Scarabaeidae;
Planolinoides aenictus, (Cooper & Gordon) - Scarabaeidae;
Cyphon, 2 species - Scirtidae;
Ellychnia corrusca (Linne) - Lampyridae,
Epuraea, 2 species - Nitidulidae;
Atomaria species, Cryptophagidae;
Henotiderus hirtus, (Casey) - Cryptophagidae;
Adalia bipunctata, (Linne) - Coccinellidae;
Anatis mali, (Say) - Coccinellidae;
Coccinella septempunctata, Linne - Coccinellidae;
Anaspis flavipennis Haldeman - *Scraptiidae*,
Orsodacne atra (Ahrens) - *Chrysomelidae*,
Phyllotreta striolata (Fabricius) - *Chrysomelidae*,
Alticini, 2 unidentified species - *Chrysomelidae*;
Phloeophagus species, Curculionidae;
Pissodes strobi, (Peck) - Curculionidae;
Entiminae, 1 unidentified species - Curculionidae;
Ips pini, (Say) - Scolytidae;
Orthotomicus caelatus, (Eichhoff) - Scolytidae;
Pityogenes plagiatus plagiatus, (Le Conte) - Scolytidae.

484) (same location) 2010/111/m, **Oniscidea** (Sowbug) (invertebrate). adult, specimen. in alcohol from cobble shore E of waypoint. Includes the few shells found along this shore.

moved 9.8 km SSE.

485) **Highway 101, 3.4 km S Fabre**. 31M/3, UTM 17TPC 242 249.3 47.16817N 79.36104W. TIME: 1314. AIR TEMP: 13 ca, light overcast, calm. HABITAT: brush-hogged roadside in deciduous/mixed forest. 2010/112/a, *Trillium grandiflorum* (White Trillium) (Plant). 1 stand herb, in bloom, seen, driveby. WAYPT/Y 235, extensive stands in bloom W of road. . . . where woods & brush bush-hogged.

moved 15.5 km SSE.

486) **Laniel at Hwy 101**. UTM 17TPC 314.4 112 47.04328N 79.26947W. TIME: 1326. AIR TEMP: 13 ca, light overcast, calm. HABITAT: town. 2010/112/b, **reference** (cartigraphic reference) (event). natural history, seen, driveby. WAYPT/Y 236, continue S, lots of roadside bush-hogging. . . . on W side of highway N of here.

moved 6.7 km S.

487) **Highway 101, 6.7 km S Laniel**. 31L/14, UTM 17TPC 315.5 45 46.98295N 79.27002W. TIME: 1331. AIR TEMP: 13 ca, light overcast, calm. HABITAT: dropoff from roadside into brushy area. 2010/112/c, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 237, 4 m dense headless stand W of road.

moved 5.2 km S.

488) **Highway 101, 11.9 km S Laniel**. UTM 17TPB 315.2 993.1 46.93631N 79.27186W. TIME: 1338. AIR TEMP: 13, light overcast, calm. HABITAT: rdside/old Aspen swamp ca 2.5 m below level of highway. 2010/112/d, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 238, dense headless stand W of road, driveby waypoint.

moved 0.02 km NNE.

489) **Highway 101, 11.9 km S Laniel.** UTM 17TPB 315.3 993.3 46.93647N 79.27176W. TIME: 1338-1340. AIR TEMP: 13, light overcast, calm. HABITAT: rdside/old Aspen swamp ca 2.5 m below level of highway. 2010/112/da, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, specimen. WAYPT/Y 239, dense headless stand W of road, in-stand waypoint.

490) (same location) 2010/112/db, **Simuliidae** (Black Fly) (entomological). abundant mature, felt, seen. annoyingly abundant.

491) (same location) 2010/112/dc, *Dryocopus pileatus* (Pileated Woodpecker) (Bird). 1 adult, heard. drumming from across highway.

moved 1.17 km SSE.

492) **Highway 101, 12.9 km S Laniel at Hwy 101.** UTM 17TPB 322 983.7 46.92772N 79.26324W. TIME: 1342. AIR TEMP: 13, light overcast, calm. HABITAT: rdside/swampy Spruce/Birch forest. 2010/112/e, **visit** () (event). natural history, drive. WAYPT/Y 240, good overnight stopping place. A wide truck pull-around W of road - actually stopping places are no problem on this road, and we're led to waypoint this only because of the problems we had on Ontario Highway 17 coming into North Bay.

moved 0.16 km NNW.

493) **Highway 101, 12.7 km S Laniel.** UTM 17TPB 321.2 985.1 46.92894N 79.26423W. TIME: 1349. AIR TEMP: 13, light overcast, calm. HABITAT: brushy swamp. 2010/112/fa, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, specimen. WAYPT/Y 241, tall wispy-head stand W of road.

494) (same location) 2010/112/fb, *Pseudacris crucifer* (Spring Peeper) (herp). 1 call, heard. 1 bout of calling from wetland E of road.

moved 19.5 km SE.

495) **Highway 101, 8.1 km N Riv. Gordon.** UTM 17TPB 470.5 859.3 46.81266N 79.07232W. TIME: 1400ca. AIR TEMP: 13, light overcast, calm. HABITAT: rocky outcrop/rockcut rdside/wooded-brushy area. 2010/112/g, **visit** () (event). natural history, driveby. WAYPT/Y 242, rocky outcrops on both sides of road. . . . E side of highway brush-hogged for several km N & S.

moved 2.4 km S.

496) **Highway 101, 5.7 km N Riv. Gordon.** UTM 17TPB 469.3 835.2 46.79106N 79.07467W. TIME: 1401. AIR TEMP: 12, light overcast, calm. HABITAT: roadside brushy swamp. 2010/112/h, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 243, 15 m, tall nrly headless stand at E side of highway. . . . right at the edge of the shoulder.

moved 1.36 km S.

497) **Highway 101, 4.4 km N Riv. Gordon.** UTM 17TPB 467.4 821.8 46.77899N 79.07750W. TIME: 1408. AIR TEMP: 13 ca, light overcast, calm. HABITAT: roadside brushy swamp. 2010/112/ia, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 244, headless stand right at E side of highway.

moved 0.24 km S.

498) **Highway 101, 4.1 km N Riv. Gordon.** UTM 17TPB 467.4 819.3 46.77682N 79.07763W. TIME: 1408. AIR TEMP: 13 ca, light overcast, calm. HABITAT: roadside brushy area. 2010/112/ib, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 245, headless stand right at E side of highway.

moved 0.11 km S.

499) **Highway 101, 4.0 km N Riv. Gordon.** UTM 17TPB 467.4 818.3 46.77584N 79.07770W. TIME: 1408. AIR TEMP: 13 ca, light overcast, calm. HABITAT: roadside brushy area. 2010/112/ic, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 246, headless stand right at E side of highway.

moved 0.79 km S.

500) **Highway 101, 3.3 km NNW Riv. Gordon.** UTM 17TPB 467.3 810.3 46.76870N 79.07805W. TIME: 1409. AIR TEMP: 13 ca, light overcast, calm. HABITAT: roadside brushy swamp. 2010/113/a, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 247, headless stand on E side of highway.

moved 0.58 km S.

501) **Highway 101, 2.7 km NNW Riv. Gordon.** UTM 17TPB 467.8 804.6 46.76353N 79.07756W. TIME: 1409. AIR TEMP: 13 ca, light overcast, calm. HABITAT: roadside brushy area. 2010/113/ba, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 248, 40 m headless stand right at W side of highway.

502) (same location) 2010/113/bb, **visit** () (event). natural history, seen, driveby. AKS photo for painting of interior of van. Blog text: "15 May finds us on Highway 101, north of Temiskaming, Quebec. Fred has just marked the waypoint # 248 on the GPS, and Adam glances at me in the rear view mirror. I am actually doing this painting in the back seat as we drive, knowing that there will be no time to stop to paint today - we're on our way home. I have to raise my brush when the road gets too bumpy, but for the most part I've developed a technique of bracing the corner of the canvas on my lap board and one of the fingers of my painting hand on the edge of the canvas while holding the back of the stretcher firmly with my left hand - and applying paint between the bumps! I am referring both to the real scene and to a photo I've downloaded to my laptop.

"We have been making regular stops, however, to take specimens and mark the locations of stands of the tall reed *Phragmites* (Reed) whenever we see them along the roadsides. Fred hits the "mark" button, Adam stops the van, Fred gets out to collect a sample and Adam follows him with the camera while I write the habitat description. Most of them appear to be the native type, with dark reddish nodes or joints along a smooth stem and a smaller, thinner banner of seed "glumes" than the rough stemmed invasive kind. Some day the natives may be recognized as separate species, but for now they are all called *Phragmites australis* (Reed). Despite the invasive having been in Canada for over 100 years they are only considered subspecies although they don't seem to hybridize. When we went west in 2000 before the difference between the natives and the invasives was formally recognized we saw differences among the natives which may require taxonomic recognition, and it's going to be one of the goals of our summer travels to gather specimens so this situation can be studied.

"There is no *Phragmites* (Reed) in my scene - just a pleasantly curving, ordinary-looking stretch of road. It was exciting to pass from the clay belt onto the shield. The first sign of that were peoples' houses. Some were built with round granite stones shaped by the glaciers, and some with flat broken pieces. As I was still wondering where they had brought the stones from we passed over a height of land and there were granite outcroppings and erratics by the roadside. More than enough rock for everyones' houses!

"It was also exciting as we came far enough south for the <Sugar Maple> trees to survive and saw hillsides pink and fluffy with flowers and young leaves. I haven't yet painted them, but their stout trunks and gnarly character made them worthy subjects for the Group of Seven. "

moved 0.23 km S.

503) **Highway 101, 2.5 km NNW Riv. Gordon.** UTM 17TPB 468.2 802.3 46.76149N 79.07715W. TIME: 1410. AIR TEMP: 13 ca, light overcast, calm. HABITAT: mixed woods roadside brushy area. 2010/113/c, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 249, 10 m headless stand back from E side of highway.

moved 0.12 km S.

504) **Highway 101, 2.3 km NNW Riv. Gordon.** UTM 17TPB 468.4 801.1 46.76043N 79.07692W. TIME:

1411. AIR TEMP: 13 ca, light overcast, calm. HABITAT: roadside. 2010/113/d, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 250, 10 m headless stand on W side of highway.

moved 0.69 km S.

505) **Highway 101, 1.7 km NNW Riv. Gordon.** UTM 17TPB 468.1 794.3 46.75425N 79.07757W. TIME: 1412. AIR TEMP: 13 ca, light overcast, calm. HABITAT: mixed woods roadside swamp. 2010/113/e, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 251, 10 m headless stand back from E side of highway.

moved 5.0 km SSW.

506) **Highway 101, E side Temiscaming dam.** 31L/11, UTM 17TPB 452.1 747.1 46.71222N 79.09992W. TIME: 1419. AIR TEMP: 13 ca, light overcast, calm. HABITAT: lawnpark & tourist facilities on Ottawa River Hydro dam. 2010/113/em, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 252, tiny wispy-headed stand in little fountain. . . . in municipal park beside dam.

moved 0.09 km SW.

507) **Highway 101, E side Temiscaming dam.** UTM 17TPB 451.6 746.4 46.71159N 79.10063W. TIME: 1419. AIR TEMP: 13 ca, light overcast, calm. HABITAT: Ottawa River Hydro dam. 2010/113/fa, **visit** () (event). natural history, seen, driveby. WAYPT/Y 253, E span of dam.

moved 0.40 km SSW.

508) Canada: Ontario: Nipissing District: **Highway 63, W side Temiscaming dam.** UTM 17TPB 450.1 742.7 46.70826N 79.10267W. TIME: 1419. AIR TEMP: 13 ca, light overcast, calm. HABITAT: Ottawa River Hydro dam. 2010/113/fb, **visit** () (event). 1 natural history, seen, driveby. WAYPT/Y 254, W span of dam. . . . and we're welcomed to Ontario by a series of billboards about Ontario laws that differ from those in other jurisdictions, though mostly not from those in Quebec.

moved 1.45 km SSE.

509) **Highway 63, 0.5 km SSE Thorne at Hwy 63/Mc Dougal Creek.** UTM 17TPB 454.2 728.8 46.69568N 79.09782W. TIME: 1425. AIR TEMP: 13 ca, light overcast, calm. HABITAT: mixed woods in diffuse Ottawa River settlement. 2010/113/g, **visit** () (event). 1 natural history, seen, driveby. WAYPT/Y 255, lightly burned area W of road.

moved 5.5 km S.

510) **Highway 63, 0.6 km SW Eldee at gas station.** UTM 17TPB 458.6 673.7 46.64604N 79.09371W. TIME: 1426. AIR TEMP: 13, light overcast, calm. HABITAT: diffuse Ottawa River settlement. 2010/113/h, *Phlox subulata* (Creeping Phlox) (Plant). codominant herb, in bloom, seen, driveby. WAYPT/Y 256, pink patches all across sandy lawn. . . . sloping down to highway W of road.

moved 12.5 km SSW.

511) **Highway 63/533, 13.0 km SSW Eldee.** UTM 17TPB 413.2 557.6 46.54259N 79.15656W. TIME: 1437. AIR TEMP: 13, light overcast, calm. 2010/113/i, **visit** () (event). natural history, drive. WAYPT/Y 257, E on Highway 533 to Mattawa & Plethodon.

moved 10.4 km SE.

512) **Highway 533, 18.1 km S Eldee.** 31L/6, UTM 17TPB 499.9 500.7 46.48949N 79.04545W. TIME: 1448. AIR TEMP: 13, light overcast, calm. HABITAT: mature Sugar Maple/Yellow Birch forest. 2010/113/j, **visit** () (event). natural history, drive, walk. WAYPT/Y 258, parked here for search for Plethodon. Leaves of canopy are about 1/3 opened.

moved 0.27 km NNW.

513) **N of Highway 533, 17.8 km S Eldee.** UTM 17TPB 499.1 503.3 46.49183N 79.04636W. TIME: 1459. AIR TEMP: 13, light overcast, calm. HABITAT: 25 cm deep, 30 m vernal pool in mature Sugar Maple/Yellow

Birch forest. OBSERVER: Frederick W. Schueler, Adam Zieleman. 2010/113/k, moss (not listed) (). specimen. WAYPT/Y 259, a selection of submerged & awash mosses. We walked back here at AKS suggestion, NOAmphibia eggs or adults seen, crystal-clear water, collected a selection of the submerged and awash mosses.

moved 0.13 km SSE.

514) **Highway 533, 17.9 km S Eldee.** UTM 17TPB 499.5 502 46.49066N 79.04591W. TIME: 1459-1554. AIR TEMP: 13, light overcast, calm. HABITAT: mature Sugar Maple/Yellow Birch forest on N-facing slope. 2010/113/la, *Plethodon cinereus* (Eastern Redback Salamander) (herp). 11 adult, under cover, captured. 9 redback, 2 leadback, turned smaller logs. . . . and broke up smaller rotten logs. Redbacks(9):1 in red-rotten log, 1 under superficial cover on top of log, 2 in small log, 3 inside white-rotten logs, 1 big one under little log, 1 dark-mottled one retained for photography. leadback(2):1 under soggy flake of wood, 1 large one in white-rotten log.

515) (same location) 2010/113/lb, *Arion cf subfuscus* () (herp). few adult, juvenile, under cover, captured. a few found - no snails seen.

516) (same location) 2010/113/lc, **Lumbricidae** (Earthworm) (invertebrate). many adult, juvenile, under cover. fair number of diverse small worms in & under small logs. Though the logs aren't pasted to the mineral soil as they were at the Shaw Woods, and there's a fair layer of leaf litter.

517) (same location) 2010/113/lc, **cf Lumbricus terrestris** (Nightcrawler) (invertebrate). several adult, juvenile, under cover. fair number of large worms inside some small logs.

518) (same location) 2010/113/le, *Trillium erectum* (Red Trillium) (Plant). common herb, in bloom, seen. in bloom, scattered, NO:*Trillium grandiflorum* seen.

519) (same location) 2010/113/lf, *Erythronium americanum* (Trout Lily) (Plant). common herb, in fruit, seen. scattered clumps, in green fruit.

520) (same location) 2010/113/lg, *Taxus canadensis* (Canada Yew) (Plant). abundant shrub, seen. widespread clumps.

521) (same location) 2010/113/lh, **Simuliidae** (Black Fly) (entomological). abundant mature, felt, seen. annoying enough to drive AZ back to the van.

moved 30.1 km SE.

522) **Highway 533, 2.6 km NW Mattawa.** 31L/7, UTM 17TPB 749.9 334.4 46.33397N 78.72617W. TIME: 1635. AIR TEMP: 13, light overcast, calm. HABITAT: mixed woods. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler, Adam Zieleman. 2010/114/a, *Sciurus carolinensis* (Grey Squirrel) (Mammal). . WAYPT/Y 260, black pelage, HEADING:N across road.

moved 2.6 km SE.

523) Mattawa: **Highway 17 turn in Mattawa.** 46.31746N 78.70215W TIME: 1637. AIR TEMP: 13, light overcast, CLMM. 2010/114/b, **reference** (cartographic reference) (event). drive. continue straight along Highway 17.

moved 0.48 km ESE.

524) **Highway 17, 0.5 km E Mattawa Highway 17 corner.** UTM 17TPB 773.6 315.6 46.31639N 78.69611W. TIME: 1638. AIR TEMP: 13, light overcast, calm. HABITAT: roadside in riverside town. 2010/114/c, *Polygonum cuspidatum* (Japanese Knotweed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 261, stand crushed by winter snow.

moved 39.6 km E.

525) **Highway 17, 23.3 km W Stonecliffe.** 31L/8, UTM 17TQB 165.6 256.4 46.25176N 78.19019W. TIME: 1706. AIR TEMP: 13, light overcast, calm. HABITAT: rside/wooded Shield. 2010/114/d, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 262, 10 m headless stand S of highway, near Gibson L.

moved 22.4 km E.

526) **Highway 17, 1.0 km W Stonecliffe.** 31K/4, UTM 18TTG 759.1 216.9 46.21385N 77.90484W. TIME: 1720. AIR TEMP: 13, light overcast, calm. HABITAT: rocky/grassy roadside. 2010/114/e, **Euphorbia** () (Plant). 1 stand herb, in bloom, seen, driveby. WAYPT/Y 263, low plants codominant on N side of highway for 60 m. W of Stonecliffe turnoff - perhaps some on the S side as well.

moved 9.0 km ESE.

527) : : **Highway 17, 8.2 km SE Stonecliffe.** UTM 18TTG 832.2 164.7 46.16928N 77.80784W. TIME: 1726. AIR TEMP: 13, light overcast, calm. HABITAT: brushy roadside. 2010/114/f, *Phragmites australis* **SUBSPECIES:australis** (not listed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 264, Mac Key Crk stand, N of highway.

moved 4.7 km ENE.

528) **Highway 17, 4.5 km WNW Highway 17/Swisha Rd(Hwy 63).** UTM 18TTG 876.7 178.9 46.18348N 77.75084W. TIME: 1729. AIR TEMP: 13, light overcast, calm. HABITAT: Shield roadside. 2010/114/g, *Cathartes aura* (Turkey Vulture) (Bird). 1 adult, seen, driveby. WAYPT/Y 265, overhead.

moved 9.7 km E.

529) Canada: Ontario: Renfrew County: Rolph: **Highway 17/Ottawa River, head of Meilleurs Bay.** 46.16966N 77.62657W TIME: 1731. AIR TEMP: 13, light overcast, calm. HABITAT: shallow Myrica-bordered Ottawa River bay. OBSERVER: . 2010/114/h, **visit** () (event). natural history, seen, driveby. vast area of bare mud S of new culverts. Last September "The highway here is being reconstructed with a huge circular metal culvert under Highway 17. "

moved 2.9 km ESE.

530) **Highway 17, 10.2 km NW Highway 17 Deep River.** UTM 18TTG 996.8 145.3 46.15690N 77.59404W. TIME: 1737. AIR TEMP: 13, light overcast, calm. HABITAT: brushy roadside. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler, Adam Zieleman. 2010/114/i, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 266, 8 m smallhead stand S of highway.

moved 4.2 km SE.

531) **Pt. Alexander, N of Highway 17, 6.0 km NW Deep River.** UTM 18TUG 28.6 117.8 46.13313N 77.55172W. TIME: 1740. AIR TEMP: 13, light overcast, calm. HABITAT: brushy roadside ditch/spread sand. 2010/114/ja, *Phragmites australis* (Reed) (Plant). herb, dead, specimen. WAYPT/Y 267, ca 20 m small-head, rough-stem stand N of highway.

532) (same location) 2010/114/jb, **Polygonum** () (Plant). common herb, specimen. sprouts from sandy roadside.

moved 0.06 km SSE.

533) **Pt. Alexander, S of Highway 17, 6.0 km NW Deep River.** UTM 18TUG 28.8 117.3 46.13264N 77.55152W. TIME: 1744. AIR TEMP: 13, light overcast, calm. HABITAT: berm of small artificial pond above brushy/grassy roadside. 2010/114/ka, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen. WAYPT/Y 268, sparse 10 x 10 m small-head, stand S of highway. W microrough stems.

534) (same location) 2010/114/kb, *Pseudacris crucifer* (Spring Peeper) (herp). few call, heard. calling briefly.

moved 8.7 km SE.

535) **Highway 17, 2.9 km SSE Deep River main intersection.** 31K/3, UTM 18TUG 84.8 50.3 46.07397N 77.47634W. TIME: 1753. AIR TEMP: 13, light overcast, calm. HABITAT: wooded/swampy area. 2010/114/l, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 269, 15 m small-head stand S of highway.

moved 1.6 km S.

536) **Highway 17, 4.5 km SSE Deep River.** UTM 18TUG 85.4 33.8 46.05919N 77.47491W. TIME: 1754. AIR TEMP: 13, light overcast, calm. HABITAT: Typha marsh. 2010/114/m, **Mammalia** (Mammal) (Mammal). 1 adult, DOR, driveby. WAYPT/Y 270, smallish Mammal.

moved 3.6 km SSE.

537) **Highway 17 at Black Duck Lake, 1.4 km NW Chalk River.** UTM 18TUF 95.4 998.8 46.02796N 77.46058W. TIME: 1756. AIR TEMP: 13, light overcast, calm. HABITAT: small lake. 2010/114/n, *Cathartes aura* (Turkey Vulture) (Bird). 2 adult, seen, driveby. WAYPT/Y 271, 2 circling around.

moved 1.38 km SE.

538) **Chalk River, Highway 17 intersection.** 46.01850N 77.44900W TIME: 1758. AIR TEMP: 13, light overcast, calm. HABITAT: trans Canada Highway commercial strip. 2010/114/nm, *Taraxacum officinale* (Common Dandelion) (Plant). abundant herb, in fruit, seen, driveby. in fluff.

moved 17.2 km SE.

539) **Highway 17, 2.4 km W Petawawa.** 31F/14, UTM 18TUF 205.5 849.5 45.89674N 77.31288W. TIME: 1807. AIR TEMP: 13, light overcast, calm. HABITAT: Jack Pine woods. 2010/114/o, *Mephitis mephitis* (Striped Skunk) (Mammal). 1 adult, DOR, driveby. WAYPT/Y 272, smallish, fresh on side of road.

moved 1.15 km SSE.

540) **Highway 17, 2.3 km WSW Petawawa.** UTM 18TUF 209.5 838.8 45.88716N 77.30732W. TIME: 1808. AIR TEMP: 13, light overcast, calm. HABITAT: brushy/piney roadside. 2010/114/p, **Euphorbia** () (Plant). 1 stand herb, in bloom, seen, driveby. WAYPT/Y 273, big area N of road, more a few 100 m E.

moved 2.4 km SSE.

541) **Highway 17, 3.5 km SSW Petawawa.** UTM 18TUF 218.4 816.6 45.86745N 77.29495W. TIME: 1810. AIR TEMP: 13, light overcast, calm. HABITAT: sandy roadside. 2010/115/a, *Pinus mugo* (Mugho Pine) (Plant). dominant tree, seen, driveby. WAYPT/Y 274, all along road here.

moved 1.9 km SSE.

542) **Highway 17, 5.0 km S Petawawa.** UTM 18TUF 228.3 800.5 45.85322N 77.28171W. TIME: 1811. AIR TEMP: 13, light overcast, calm. HABITAT: piney roadside. 2010/115/b, **Euphorbia** () (Plant). 1 stand herb, in bloom, seen, driveby. WAYPT/Y 275, dense patch N of road.

moved 3.1 km ESE.

543) **Highway 17, 3.0 km WNW Forest Lea.** UTM 18TUF 253.3 782.9 45.83799N 77.24885W. TIME: 1812. AIR TEMP: 13, light overcast, calm. HABITAT: brushy roadside at intersection. 2010/115/c, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 276, smallhead stand SE of intersection.

moved 1.05 km ESE.

544) **Highway 17, 2.0 km WNW Forest Lea.** UTM 18TUF 262.5 777.7 45.83355N 77.23684W. TIME: 1813. AIR TEMP: 13, light overcast, calm. HABITAT: grassy roadside. 2010/115/d, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 277, sparse smallhead stand S of road.

moved 7.2 km SE.

545) **Highway 17, 4.7 km NE Davis Mills.** UTM 18TUF 315.9 729.1 45.79122N 77.16648W. TIME: 1818. AIR TEMP: 13, light overcast, calm. HABITAT: grassy rdside/woody area. 2010/115/e, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 278, 30 m smallhead stand N of road.

moved 1.25 km ENE.

546) **Highway 17, 4.7 km SW Pembroke.** UTM 18TUF 327.6 733.3 45.79530N 77.15151W. TIME: 1819. AIR TEMP: 13, light overcast, calm. HABITAT: grassy rdside/grassy field. 2010/115/f, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 279, sparse whispy-head stand S of road.

moved 10.2 km ESE.

547) **Highway 17, 1.5 km SSW Greenwood.** UTM 18TUF 418.9 687.3 45.75608N 77.03262W. TIME: 1840. AIR TEMP: 13, light overcast, calm. HABITAT: roadside rockcut. 2010/115/g, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 280, big-whispy-head 10 m stand N of rd at rockcut.

moved 1.5 km ESE.

548) **Highway 17, 2.6 km NW Meath.** UTM 18TUF 432.8 680.7 45.75046N 77.01455W. TIME: 1841. AIR TEMP: 13, light overcast, calm. HABITAT: roadside Typha marsh. 2010/115/h, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 281, tall plume-headed 15 m stand N of road.

moved 2.0 km SE.

549) Westmeath: **Muskrat R at Hwy 17/0.6 km NW Meath.** 31F/11, UTM 18TUF 443.7 664 45.73568N 77.00000W. TIME: 1843-1904. AIR TEMP: 13, light overcast, calm. HABITAT: Phragmites stand at trampled fishing area, marshy lake outflow. 2010/115/ia, *Phragmites australis* (Reed) (Plant). codominant herb, dead, seen. whispy-head sparse 4 x 5 m stand, on SE side, trampled around edges. A hole or burrow in the stand is packed with a styrofoam container and Unionid shells. As in 2004, this stand (see 2002/211/g) now 'looks like' an ordinary small-head native 'type. '

550) (same location) HABITAT: trampled fishing area, river at outflow from lake, roadside, railway. 2010/115/ib, **Euphorbia** () (Plant). dominant herb, in bloom, seen. on railbed W of river.

551) (same location) 2010/115/ic, *Orconectes rusticus* (Rusty Crayfish) (Crayfish). 3 adult, juvenile, specimen. 2 partial carcasses dead in river & juv taken with shells.

552) (same location) 2010/115/id, *Dreissena polymorpha* (Zebra Mussel) (Mollusca). abundant adult, juvenile, shell, specimen. abundant on shore & on rocks & Unionids in river. Sample taken incidentally with Unionids, small or minute size. It's not clear what's pulled so many of these up unto the shore - fisherpeople or Beavers or Muskrats. The water of the river is strikingly clear. This is the first time we've seen this species here.

553) (same location) 2010/115/ie, *Pyganodon grandis* (Common floater) (Mollusca). many shell, specimen. many fresh shells on shore & in water, many broken. Largest 115 mm, nodular beak sculpture; specimens not counted.

554) (same location) 2010/115/if, *Lampsilis radiata* *SUBSPECIES:siliquoidea* (not listed) (Mollusca). 15 shell, specimen. fresh & older shells on shore & in water. Largest F 111 mm (7 pairs, 1 valve), distinctively M pair 89 mm, 1 pair & 3 valves intermediate in shape.

555) (same location) 2010/115/ig, *Elliptio complanata* (Eastern Elliptio) (Mollusca). common shell, specimen. many fresh shells on shore & in water, living ones on shore. . . . and along shore. Largest 108 mm, specimens not counted. Two held alive in rain barrel of Bishops Mills store building.

556) (same location) 2010/115/ih, *Helisoma campanulatum* (Bell-mouth Ramshorn) (Mollusca). common shell, seen, drift. many old shells on shore & in water.

557) (same location) 2010/115/ii, *Lymnaea stagnalis* (Great Pond Snail) (Mollusca). 1 shell, seen. old shell noted in the water.

558) (same location) 2010/115/ij, **Silphidae** (Silphid Beetle) (entomological). 1 mature, specimen. on dead Unionids on shore.

moved 12.9 km SE.

559) **Highway 17, 2.4 km NW Cobden**. 31F/10, UTM 18TUF 518.6 558.5 45.64239N 76.90062W. TIME: 1914. AIR TEMP: 13, light overcast, calm. HABITAT: grassy roadside & fields. 2010/115/j, *Marmota monax* (Woodchuck) (Mammal). 1 adult, DOR, driveby. WAYPT/Y 282, noted DOR.

moved 2.4 km SE.

560) Ross: **Cobden**. UTM 18TUF55 536 542 45.62791N 76.87775W. TIME: 1916. AIR TEMP: 13 ca, light overcast, calm. HABITAT: lakside town. 2010/115/ka, *Taraxacum officinale* (Common Dandelion) (Plant). abundant herb, in fruit, seen, driveby. in fluff all through town.

561) (same location) 2010/115/kb, *Syringa vulgaris* (Common Lilac) (Plant). common shrub, in bloom, seen, driveby. only 1 bush with flowers fully open. The first we've seen with open flowerheads as we've come south.

moved 0.99 km SE.

562) **Highway 17, 1.0 km SE Cobden**. UTM 18TUF 542.2 534.2 45.62103N 76.86961W. TIME: 1917. AIR TEMP: 13 ca, light overcast, calm. HABITAT: lawnish roadside. 2010/115/l, **Euphorbia** () (Plant). 1 stand herb, in bloom, seen, driveby. WAYPT/Y 283, in lawnish area S of road.

moved 6.8 km SE.

563) **Highway 17, 3.5 km NW Haley Station**. UTM 18TUF 584 480.8 45.57382N 76.81437W. TIME: 1922. AIR TEMP: 13 ca, light overcast, calm. HABITAT: Typha marsh. 2010/115/m, **Mammalia** (Mammal) (Mammal). 1 adult, DOR, driveby. WAYPT/Y 284, noted. Missed a *Marmota monax* (Woodchuck) a bit NW.

moved 5.7 km ESE.

564) **Highway 17, 2.6 km E Haley Station**. UTM 18TUF 637.4 461.8 45.55779N 76.74546W. TIME: 1925. AIR TEMP: 12, light rain, calm. HABITAT: Pine/grassy roadside. 2010/116/a, *Pinus mugo* (Mugho Pine) (Plant). dominant tree, seen, driveby. WAYPT/Y 285, for 300 m along road here.

moved 4.3 km SE.

565) **Highway 17, 4.9 km S Chenaux**. UTM 18TUF 671.3 434.7 45.53413N 76.70138W. TIME: 1928. AIR TEMP: 12, light rain, calm. HABITAT: swampy woods. 2010/116/b, *Erethizon dorsatum* (Porcupine) (Mammal). 1 adult, DOR, driveby. WAYPT/Y 286, crushed & flat in midroad, not fresh.

moved 3.6 km SSE.

566) **Highway 17, 2.7 km NW Highway 17/Bonnechere River**. UTM 18TUF 690.4 404 45.50685N 76.67610W. TIME: 1930. AIR TEMP: 12, light rain, calm. HABITAT: grassy roadside & fields. 2010/116/c, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 287, ca 40 m low dense stand with narrow upright heads. . . . N of road.

moved 2.3 km SSE.

567) **Highway 17, 0.5 km WNW Highway 17/Bonnechere River**. 31F/7, UTM 18TUF 700.9 383.3 45.48841N 76.66205W. TIME: 1932. AIR TEMP: 12, light rain, calm. HABITAT: roadside. 2010/116/d, *Marmota monax* (Woodchuck) (Mammal). 1 adult, seen, driveby. WAYPT/Y 288, on fencepost.

moved 1.05 km ESE.

568) **Highway 17, 0.6 km ESE Highway 17/Bonnechere River.** UTM 18TUF 710.1 378.2 45.48402N 76.65019W. TIME: 1933. AIR TEMP: 12, calm. HABITAT: grassy roadside. 2010/116/e, **Euphorbia** () (Plant). 1 stand herb, in bloom, seen, driveby. WAYPT/Y 289, on grassy bank S of road.

moved 0.61 km ESE.

569) **Highway 17, 1.2 km ESE Highway 17/Bonnechere River.** UTM 18TUF 715.4 375.3 45.48144N 76.64330W. TIME: 1933. AIR TEMP: 12, calm. HABITAT: grassy roadside & fields. 2010/116/f, *Odocoileus virginianus* (Whitetail Deer) (Mammal). 1 adult, seen, NOR, driveby. WAYPT/Y 290, HEADING:S from N side of road. Not actually on road.

moved 2.1 km SE.

570) **Highway 17 at SE Renfrew exit.** UTM 18TUF 731.1 361.1 45.46897N 76.62283W. TIME: 1935. AIR TEMP: 12, sunny, calm. HABITAT: grassy/brushy/treed rdsides. 2010/116/g, *Syringa vulgaris* (Common Lilac) (Plant). 1 stand shrub, in bloom, seen, driveby. clump NW of intersection in full bloom, rainbow to E.

moved 4.0 km SE.

571) **Highway 17, 5.5 km W Glasgow Station.** UTM 18TUF 761.6 334.4 45.44554N 76.58317W. TIME: 1938. AIR TEMP: 12 ca, cloudy, calm. HABITAT: grassy roadside & fields. 2010/116/h, *Erethizon dorsatum* (Porcupine) (Mammal). 1 adult, DOR, driveby. WAYPT/Y 291, in midroad, freshly DOR.

moved 9.0 km E.

572) Mc Nab: **Highway 17, 3.5 km E Glasgow Station.** 31F/8, UTM 18TUF 851.7 327.5 45.44081N 76.46790W. TIME: 1944. AIR TEMP: 12 ca, cloudy, calm. HABITAT: grassy rdside/woods. 2010/116/i, **Mammalia** (Mammal) (Mammal). 1 adult, DOR, driveby. WAYPT/Y 292, noted DOR.

moved 7.2 km ESE.

573) **Highway 17, 2.5 km WSW Arnprior.** UTM 18TUF 921 307.7 45.42415N 76.37886W. TIME: 1948. AIR TEMP: 13, light overcast, calm. HABITAT: grassy roadside & fields/rd construction. 2010/116/j, *Marmota monax* (Woodchuck) (Mammal). 1 adult, DOR, driveby. WAYPT/Y 293, freshly DOR in Highway 417 construction area HABITAT.

moved 1.27 km ESE.

574) **Highway 17, 1.9 km SSW Arnprior.** UTM 18TUF 932.8 303.1 45.42016N 76.36365W. TIME: 1950. AIR TEMP: 13, light overcast, calm. HABITAT: grassy roadside & fields/rd construction. 2010/116/k, *Marmota monax* (Woodchuck) (Mammal). 1 adult, DOR, driveby. WAYPT/Y 294, freshly DOR in Highway 417 construction area - head.

moved 25.1 km SE.

575) Canada: Ontario: Ottawa-Carleton Region: **Dwyer Hill Rd/March Rd(=Hwy 44).** UTM 18TVF 115.7 131.2 45.26800N 76.12683W. TIME: 2010. AIR TEMP: 12, cloudy, calm. HABITAT: Typha marsh/shrub swamp along rds. 2010/116/i, **visit** () (event). natural history, driveby. NO:Phragmites, NO:Euphorbia along Dwyer Hill Road to here. We're driving towards low bright rainbows caused by the patchy rain.

moved 1.42 km SE.

576) **Dwyer Hill Road, 1.4 km SE Highway 44(March Rd).** UTM 18TVF 125.1 120.5 45.25850N 76.11470W. TIME: 2011. AIR TEMP: 12, cloudy, calm. HABITAT: brushy swamp. 2010/116/m, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 295, 1 m headless stand W of road.

moved 8.5 km SE.

577) Goulbourn: **WNW Dwyers Hill Rd/Hwy 7.** 31F/1, UTM 18TVF 183.9 58.5 45.20340N 76.03872W. TIME: 2017. AIR TEMP: 12, cloudy, calm. HABITAT: highway construction in grassy/disturbed ground.

OBSERVER: . 2010/116/n, **visit** () (event). 1 stand survey, driveby. this is the *Phragmites* stand location, destroyed by recent. . . . construction of an overpass and interchange with the twinning of Highway 7.

moved 1.11 km SE.

578) **Dwyer Hill Road, 1.1 km SE Dwyer Hill Rd/Hwy 7.** UTM 18TVF 191.4 50.2 45.19603N 76.02910W. TIME: 2020. AIR TEMP: 12, cloudy, calm. HABITAT: swampy/marshy area. OBSERVER: Frederick W. Schueler, Aleta Karstad Schueler, Adam Zieleman. 2010/116/o, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 296, 20 m smallhead stand E of road.

moved 10.4 km SE.

579) **Dwyer Hill Road, 0.4 km SE Franktown Rd/Dwyer Hill Road.** 31G/4, UTM 18TVE 258.2 970 45.12452N 75.94284W. TIME: 2028. AIR TEMP: 12 ca, cloudy, calm. HABITAT: grassy rdside/paddock. 2010/116/p, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 297, 60 m tall smallhead stand E of road.

moved 1.25 km SE.

580) **Dwyer Hill Road, 0.3 km SE Kings Creek.** UTM 18TVE 266.4 960.5 45.11615N 75.93228W. TIME: 2029. AIR TEMP: 12 ca, cloudy, calm. HABITAT: swampy roadside. 2010/116/r, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 298, 20 m dense smallhead stand E of road.

moved 0.19 km NW.

581) **Dwyer Hill Road, 0.1 km SE Kings Creek.** UTM 18TVE 265.2 962 45.11743N 75.93387W. TIME: 2030. AIR TEMP: 12 ca, cloudy, calm. HABITAT: Typha-lined roadside. 2010/116/q, *Phragmites australis* (Reed) (Plant). 1 stand herb, in fruit, seen, driveby. 10 m small-head roadside stand E of road. Waypoint from previous survey.

moved 3.2 km SSE.

582) **Dwyer Hill Road, 1.8 km NW Dwyer Hill Siding.** UTM 18TVE 281 933.6 45.09207N 75.91332W. TIME: 2031. AIR TEMP: 12 ca, cloudy, calm. HABITAT: roadside woods. 2010/117/a, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 299, 10 m smallhead stand W of road.

moved 6.0 km SSE.

583) **Dwyer Hill Road, 0.4 km NW Roger Stevens Drive(Reg Road 6).** UTM 18TVE 310.9 881.1 45.04504N 75.87466W. TIME: 2036. AIR TEMP: 12 ca, cloudy, calm. HABITAT: swampy roadside ditches & woods. 2010/117/ba, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 300, plumed stands, 60 m E of road, 10 m W of road.

moved 0.15 km SE.

584) **Dwyer Hill Road, 0.2 km NW Roger Stevens Drive(Reg Road 6).** UTM 18TVE 311.9 879.9 45.04402N 75.87338W. TIME: 2036. AIR TEMP: 12 ca, cloudy, calm. HABITAT: swampy roadside ditches & woods. 2010/117/bb, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 301, 1 m headless sparse tuft E of road.

moved 0.13 km SE.

585) **Dwyer Hill Road, 0.1 km NW Roger Stevens Drive(Reg Road 6).** UTM 18TVE 312.7 879 45.04318N 75.87229W. TIME: 2036. AIR TEMP: 12 ca, cloudy, calm. HABITAT: swampy roadside ditches & woods. 2010/117/bc, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 302, 1 m headless sparse tuft E of road.

moved 0.73 km SE.

586) Rideau: **Dwyer Hill Road, 0.6 km SE Roger Stevens Drive(Reg Road 6).** UTM 18TVE 317.6 873.5 45.03829N 75.86603W. TIME: 2037. AIR TEMP: 12 ca, cloudy, calm. HABITAT: grassy roadside & fields. 2010/117/c, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 303, 10 m

smallhead stand W of road.

moved 2.3 km SSE.

587) **Dwyer Hill Road, 0.8 km WNW Brassils Crk/Dwyer Hill Road.** UTM 18TVE 327.7 853.1 45.02004N 75.85290W. TIME: 2038. AIR TEMP: 12 ca, cloudy, calm. HABITAT: grassy roadside & oldfields. 2010/117/d, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 304, 5 m low stand E of road.

moved 0.62 km ESE.

588) **Dwyer Hill Road, 0.2 km WNW Brassils Creek.** UTM 18TVE 333.4 850.7 45.01791N 75.84561W. TIME: 2038. AIR TEMP: 12 ca, cloudy, calm. HABITAT: forested roadside. 2010/117/e, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. tall, plumed roadside stand W of road, missed waypointing it. Waypoint from previous survey.

moved 0.64 km SE.

589) Rideau: **Dwyer Hill Road, 0.2 km ESE Flood Road.** UTM 18TVE 338.6 846.9 45.01457N 75.83898W. TIME: 2039. AIR TEMP: 12 ca, cloudy, calm. HABITAT: roadside. 2010/117/fa, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 305, stand E or W of road.

moved 0.19 km SE.

590) **Dwyer Hill Road, 0.4 km SE Flood Rd/Dwyer Hill Road.** UTM 18TVE 339.9 845.5 45.01329N 75.83731W. TIME: 2039. AIR TEMP: 12 ca, cloudy, calm. HABITAT: roadside. 2010/117/fb, *Phragmites australis* (Reed) (Plant). 1 stand herb, dead, seen, driveby. WAYPT/Y 306, stand E or W of road.

moved 4.2 km SE.

591) **Brassils Crk/Dwyer Hill Road, 0.5 km NW Burritts Rapids.** 31B/13, UTM 18TVE 367.8 814.3 44.98546N 75.80155W. TIME: 2042. AIR TEMP: 11, light overcast, calm. HABITAT: 2 nd growth woods, rubbly roadside, shallow limestone bedrock/rubble creek, water 29.5 C. 2010/117/g, **visit** () (event). natural history, driveby. end *Phragmites* & *Euphorbia* surveys at dusk, creek high.

moved 11.7 km ENE.

592) Canada: Ontario: Grenville County: North Grenville: **Highway 43, 0.6 km SW Co Rds 44/43.** 31G/4, UTM 18TVE 480 849.3 45.01793N 75.65956W. TIME: 2054. AIR TEMP: 11, light rain, calm. HABITAT: muddy flooded area S of highway W of commercial strip. 2010/117/h, *Pseudacris crucifer* (Spring Peeper) (herp). index 2 call, heard, driveby. WAYPT/Y 307, small chorus heard in driveby.

moved 5.0 km ENE.

593) N.Grenville: **Bo's, 19 D'Arcy Lane, 3.3 km ENE Kemptville Crk/Hwy 43.** UTM 18TVE 523 874.5 45.04086N 75.60522W. TIME: 2104-2222. AIR TEMP: 12, light rain, calm. HABITAT: marshy *Typha* ditch between lawn/garden & roadside in newly subdivided residential woodl. OBSERVER: Frederick W. Schueler. 2010/117/i, **visit** () (event). natural history, drive, heard. calling by Anurans too distant to make into records. After getting within 11.4 km of home, we came E along Highway 43 to pick up Adam's car, only to find its problems more complex than expected, and Bo & Catherine in Osgoode working on a house they are repairing there, so that we had to await their return before heading home.

So we sat and waited while Adama and a wandering neighbour discussed such secular topics as cars and their stereo systems, and food preferences, and AKS & FWS groaned with boredom & tiredness. There were *Pseudacris crucifer* (Spring Peeper) (index 3) and *Bufo americanus* (American Toad) calling in the distance to the north; the rain came and went as it has all the way down the Dwyer Hill Road.

moved 0.21 km NE.

594) **2.3 km NE Highway 416/Hwy 43.** UTM 18TVE 524.6 875.9 45.04218N 75.60328W. TIME: 2227. AIR TEMP: 11, light rain, calm. HABITAT: subdivision in swampy woods. OBSERVER: Frederick W. Schueler,

Aleta Karstad Schueler, Adam Zieleman. 2010/117/j, *Erethizon dorsatum* (Porcupine) (Mammal). 1 adult, AOR, driveby. WAYPT/Y 308, small, in midroad.

moved 20.4 km SSW.

595) (**Bishops Mills intersection streets**) TIME: 2354-2359. AIR TEMP: 9.5, clear, calm. HABITAT: streets in rural village & surrounding fields, facing 30 Main Street-6 St Lawrence St. OBSERVER: Frederick W. Schueler. FWS 10 May 152354/a, **Passeriformes** (Perching Bird) (Bird). 1 nestling, DOR. intact on Mill St at Store, streets wet from recent shower. Not a complete survey.

596) (same location) FWS 10 May 152354/a, **Passeriformes** (Perching Bird) (Bird). 1 nestling, DOR. intact on Mill St at Store, streets wet from recent shower. Not a complete survey.

moved 0.10 km S.

597) (**at home**) TIME: 2359-2402. AIR TEMP: 9.5, clear, calm. HABITAT: rural village, shallow soil limestone plain. FWS 10 May 152359/a, *Pseudacris crucifer* (Spring Peeper) (herp). index 1 call, listen. few calling faintly, highway noise.

598) (same location) FWS 10 May 152359/a, *Pseudacris crucifer* (Spring Peeper) (herp). index 1 call, listen. few calling faintly, highway noise.

599) (same location) FWS 10 May 152359/b, *Bufo americanus* (American Toad) (herp). index 1 call, listen. few faint calls, highway noise.

600) (same location) FWS 10 May 152359/b, *Bufo americanus* (American Toad) (herp). index 1 call, listen. few faint calls, highway noise.