Extension of the Known Range of the Gray Treefrog, *Hyla versicolor*, in Northwestern Ontario

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I present the first documented records of Gray Treefrog, *Hyla versicolor*, from the Red Lake area of Kenora District in northwestern Ontario. A photograph of *H. versicolor* was taken at a locality west-northwest of the town of Red Lake in 2007 and another east of Red Lake in 2009. *H. versicolor* choruses were heard at 11 localities east and southeast of Red Lake in June 2008, and were tape recorded at 5. These seven documented records are 46–56 km north-northwest of the previous most northern voucher, west of the town of Ear Falls, and they represent the most northern locations known for *H. versicolor* in Ontario.

Key Words: Gray Treefrog, Hyla versicolor, distribution, Ontario.

It can rarely be determined with certainty whether observations of plants and wildlife at locations beyond their "known" range truly represent range extensions into previously unoccupied areas, or they represent simply the first reported observations in areas by someone knowing the significance of the sighting. True range extensions could arise due to changes in weather conditions making previously unoccupied habitats more conducive (Grayson and Bloch 2009). Climate change can interact with species-specific biological factors to influence expansion or contraction in distribution (Hellmann et al. 2008; Douglas et al. 2009; Bradley et al. 2009). Given these factors, and the fact that declines in amphibian and reptile populations have been identified worldwide, including in Canada (Green 1997; Seburn and Bishop 2007), it is important to document observations that are, or at least appear to be, extralimital records.

Here, I present noteworthy observations of Gray Treefrogs (Hyla versicolor) from Kenora District in northwestern Ontario. Evening surveys in June 2008 conducted by the author and opportunistic wildlife observations in September 2007 and July 2009 by others resulted in records of H. versicolor in the Red Lake area (Figure 1, Table 1). Specimens were photographed (see Figure 2) at 2 localities, and choruses were heard at 11 others. Habitats varied from roadsides, flooded ditches and ponds, to extensive wetlands in mainly coniferous/deciduous forested areas (Table 1). Taped recordings of *H. versicolor* choruses were made at 5 of the 11 localities. The digital images and taped recordings have been submitted to the Royal Ontario Museum (ROM), Toronto, Ontario, Canada, as vouchered records. Voucher identifications have been verified by R. D. MacCulloch.

Weller (2002) reported the occurrence of *H. versicolor* at Manitou Falls Generating Station, located at the western terminus of Highway 804 west of the town of Ear Falls. At the time, this represented the most northern record in Ontario, and it extended the documented range over 110–130 km northward from

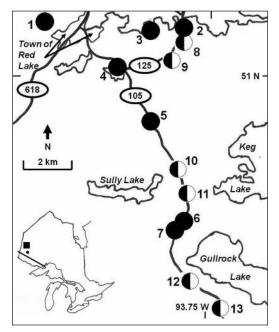


FIGURE 1. Map showing locations for Gray Treefrog, *Hyla versicolor*, in the Red Lake area of Kenora District. Solid square in inset map indicates location of survey area relative to the province of Ontario. Solid circles represent vouchered records (photographs or taperecorded calls). Half-filled circles represent unvouchered observation records. Numbers refer to locations in Table 1. Diagonal line in inset map represents the approximate northern limit known prior to the Manitou Falls record reported in Weller (2002), and the small solid dot represents the record reported in Weller (2002) at Manitou Falls.

the Kenora–Dryden area. The seven vouchered records reported here extend the documented range of *H. versicolor* an additional 46–56 km north of the Manitou Falls record. It remains uncertain whether the range of *H. versicolor* extends farther north than the Red

segment number).					
Location					
Description	GPS	Date / Time / Conditions	Habitat	Evidence	Documentation
Vouchered records					
1. WNW of Red Lake	51.0245°N 93.8424°W	4 September 2007 / daylight / NR	Forested, residential	1 observed	ROM dm00201
2. E of Red Lake, Hwy 125	51.0234°N 93.7654°W	16 June 2008 / 22 00 h, dark / ~15°C	Flooded roadside ditch	2 calling	ROM 46446(1)
3. E of Red Lake	51.0213°N 93.7828°W	19 July 2009 / daylight / NR	Garden, residential	1 observed (Figure 2)	ROM dm00202
4. SE of Red Lake, Hwy 105	51.0057°N 93.8001°W	16 June 2008 / 22 30 h, dark / ~15°C	Flooded roadside ditch	2 calling	ROM 46446(2)
5. SE of Red Lake, Hwy 105	50.9838°N 93.7831°W	17 June 2008 / 22 45 h, dark / ~18°C	Beaver marsh	Many calling, $CI = 3$	ROM 46446(5)
6. SE of Red Lake, Hwy 105	50.9489°N 93.7636°W	17 June 2008 / 22 25 h, dark / ~17°C	Small roadside pond, forest	Several calling, $CI = 2$	ROM 46446(4)
7. SE of Red Lake, Hwy 105	50.9480°N 93.7643°W	17 June 2008 / 22 15 h, dark / ~17°C	Beaver pond	Many calling	ROM 46446(3)
Observations (unvouchered records)	(sp.				
8. ESE of Red Lake, Hwy 125	51.0170°N 93.7679°W	16 June 2008 / 22 20 h, dark / ~15°C	1	Several calling $(CI = 2)$ from distant location	Ι
9. ESE of Red Lake, Hwy 125	51.0088°N 93.7766°W	16 June 2008 / 22 30 h, dark / ~15°C	Large wetland	3 calling from distant location	I
10. SE of Red Lake, Hwy 105	50.9697°N 93.7687°W	17 June 2008 / 22 35h, dark / ~18C	Forested	Many calling (CI = 3) from distant location	I
11. SE of Red Lake, Hwy 105	50.9566°N 93.7618°W	17 June 2008 / 22 30h, dark / ~18C	Forested	Many calling (CI = 3) from distant location	I
12. SE of Red Lake, Hwy 105	50.9235°N 93.7542°W	17 June 2008 / 22 00h, dusk / ~18C	Forested	Many calling (CI = 3) from distant location	I
13. SE of Red Lake, Hwy 105	50.9160°N 93.7398°W	17 June 2008 / 21 50h, dusk / ~18C	Typha marsh	Many calling $(CI = 3)$ from distant location	I

TABLE 1. Records of *Hyla versicolor* in the area of Red Lake, Kenora District, Ontario, over the period 2007–2009. Compass directions are in relation to the town of Red Lake. Locations were determined with Garmin GPS using NAD83 format. NR = not recorded. CI refers to "calling index", used in the amphibian marsh monitoring program (Bird Studies Canada 2008*) to quantify intensity of calling. Documentation is in the form of digital photographs (e.g., ROM dm00201) or taped calls (e.g., ROM 46446(1), with brackets indicating tape

Lake area in northwestern Ontario. Access to areas north by public road is very limited, but there is a network of private logging roads in the area. Surveying for *H. versicolor* along these roads may prove successful. I encourage naturalists and staff of conservation organizations and wildlife agencies to incorporate searches for *H. versicolor* into future wildlife surveys in the Red Lake area, and to document the results.

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FIGURE 2. Adult Gray Treefrog (*Hyla versicolor*) nestled in the fold of a rhubarb leaf in a rural garden east of the town of Red Lake, Ontario, on 19 July 2009. (Photo by P. Dittrich).

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