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From: Jim Andrews
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Re: **Annual report for my Scientific Collection Permit SR-2015-02(a1)**

Date: February 5, 2016

This is my annual report as required for Scientific Collection Permit SR-2015-02(a1) expiring on 12/31/2019.

The Atlas Project 2015

During 2015 we entered 15 new reports of S1 species, 130 reports of S2 species, 136 reports of S3 species, and a combined total of ~1,600 new records. These reports were from all counties and 187 towns, cities, and gores. Reports came for a total of 363 different people.

Unusually late records gathered by or contributed to the Atlas Project during the fall and early winter of 2015

Some of the most interesting verified reports of 2015 have been the late season reports of both reptiles and amphibians. In December of this year we had reports of Eastern Red-backed Salamander, Eastern Newts, Green Frog, American Bullfrog, and Common Gartersnake active and moving on the surface. Spring Peepers were reported calling from multiple towns through December 24th. A Smooth Greensnake was found moving in the grass in Huntington on December 27th and most recently an American Toad was found moving in a yard in Huntington on January 10th. This is the first report of toad activity in January since the beginning of the Atlas over 20 years ago. Of course all of these reports were on warm days within our unseasonably warm fall and early winter. As a result of our data, we will be able to help document the current and future effects of climate change on reptiles and amphibians in Vermont.

Interesting reports from earlier in 2015

The report of Fowler's Toads singing from Stebbins Island in the Connecticut River (NH) was a highpoint in 2015 and strongly suggests the continued presence of this species in Vernon. We picked up three new sites for Four-toed Salamander and a new egg-laying site for Eastern Musk Turtle. There was also a very interesting report of Blue-spotted Salamander from Canaan in the extreme northeast corner of the state. This is a disjunct population that probably is more genetically linked to Canadian populations than to those in the rest of Vermont.

Missing Species

Three native species were not reported this year:

Fowler's Toad (State-Endangered) was last reported from Vermont in 2007; however, as mentioned above, reports of breeding on Stebbin's Island in NH near Vernon have been confirmed.

Boreal Chorus Frog (State-Endangered) was last heard in 1999. Sadly it has also disappeared from the NY Champlain Valley and much of its habitat in Quebec and eastern Ontario. Sadly, we do not know why. We work to remind our fellow Vermonter's that this species has disappeared.

North American Racer (State-Threatened) was reported in 2008, then again in 2014, but not this year.

Interesting reports from the 1800's

I continue to receive and enter historic reports sent to me by people who enjoy searching for historic records in old documents. Over the last three years, we have entered records dating back to 1834, with a total of 12 S1 species reports entered over the past three years from before 1900 and another 23 S1 reports from 1900 to 1990.

Outreach and related activities

During 2015, I gave ten presentations/workshops across the state from Bennington and Brattleboro to East Charleston. The workshop in East Charleston was intended to generate more record contributors from Orange County and has been very successful in doing so. An invited presentation at the Vermont Monitoring Cooperative's annual meeting helped to keep other professionals aware of our work and results.

Continued press coverage helps to keep the VT Herp Atlas in the public's awareness and we have had regular coverage this past year in newspapers, online, and on radio, including what has become an annual appearance on VPR's (and your) Vermont Edition.

Of course we continue to involve and guide working professionals, students, and lay people in direct experiences as colleagues, volunteers, interns, and by serving as informal or formal advisors. We continue to draw attention to spring summer and fall amphibian migrations and the threats of habitat fragmentation by roads, through promoting and participating in spring amphibian crossing nights. Increased awareness is needed to fund the projects and make the systemic changes needed to move us toward sustainable practices.

Excel files of all verified Hypothetical, S1 and S2 species (and Wood Turtles) found in Vermont and entered into the database between January 1 and December 31 of 2015, have been sent to Jodi Shippee of Vermont Fish and Wildlife.

No reptiles or amphibians were killed or harmed during these activities.

My targeted survey efforts

Since the fall was so unseasonably warm, I was able to continue fieldwork with volunteers through November. With the help of County Forester Jared Nunnery, we targeted Orange County but also visited many other towns including Barnard, Barre City, Brookfield, Brownington, Calais, Coventry, Glover, Greensboro, Halifax, Hardwick, Holland, Orange, Morrisville, Newport City, Plainfield, Randolph, Royalton, Somerset, Washington, Winooski, and Whitingham. We added important new records of common species from all of these towns. We also surveyed the entire Lake Champlain shoreline of South Burlington by boat in search of Northern Map Turtles but did not locate any.

No reptiles or amphibians were killed or harmed during any of these activities.

Drift-fences-monitoring and educational

Federal funding for the Vermont Monitoring Cooperative was drastically cut. They are operating at a skeletal level only. Consequently, we pulled all of our drift fences at Lye Brook Wilderness and Mt. Mansfield. Holes were filled in, plastic and metal buckets and aluminum fences removed but the ends of the fences were marked with stakes in case funding resumes at some point in the future.

The only drift fence remaining is on the south end of Snake Mountain in Bridport on land owned by the Payne family. That fence was used twice for my UVM class this last spring. There were no small mammals or amphibians killed or injured.

Other methods

Many active searches took place, turtle traps, salamander traps, and artificial cover were used and many non-listed species were handled, examined, measured and released on site within minutes. No herptiles or non-target vertebrates were injured and we were careful to minimize stress on herptiles. Herptiles were either caught to add to our distribution information or in the process of UVM or other conservation education field trips.

Collections or mortalities

No reptiles, amphibians, non-target mammals, or any other species were injured, killed, or collected for any reason under this permit.