Dear RAARP Participant,

We had a great reporting year and exciting things are happening in New Hampshire that will benefit our reptile and amphibian populations. Keep up the good work and check out the 2010 summary to see how your reports compared to others.

Remember that **photos** and **exact locations of sightings** are extremely important for biologists to verify your reports. If you are unable to take a photograph, note a description of the size, coloration, distinctive patterns or markings, and habitat. This information substantially increases our success in verifying reports. Recordings or descriptions of their calls are also helpful.

**WHAT’S NEW??**

**2011 is Year of the Turtle**

Turtle conservation groups in partnership with PARC are designating 2011 as the Year of the Turtle. Visit [www.yearoftheturtle.org](http://www.yearoftheturtle.org) to find the monthly Newsletter, calendar, photo contest information, and recent press releases.

**NH Black Racer snake project underway**

During 2010 the NHFG Nongame & Endangered Wildlife Program initiated a multi-year black racer monitoring project to document the species' habitat-use, movement patterns and population status in the state. Twelve racers from 7 sites (towns of Webster, Hopkinton, Weare, Deerfield and Raymond) were monitored with radio telemetry and an additional 41 snakes were individually marked with PIT tags (microchips inserted under the skin) so they could be identified if captured again (an important component of population surveys). Monitoring is slated to continue during 2011 at the current sites and at least 5 new sites across the state. The data collected from the study will allow us to prioritize and implement conservation actions such as land acquisition and habitat management. Your black racer observations are extremely valuable to us.

**New RAARP Reporting Form**

We request that you submit your reptile and amphibian observations on a new reporting form. The new form is included with this package and available for download on our website. Why? – The new reporting form matches the format of the web-based reporting and the new form is intended to gather all of the important data we use for conservation purposes. Now you can report multiple species on one form as long as they are at the same location (same habitat type and within ~ 50’ of each other).
Web-based reporting

We encourage you to submit your future reptile and amphibian observations through NH Wildlife Sightings (other species groups can be reported as well). Mapping tools allow observers to pinpoint the location of their wildlife observation. Digital photographs can be uploaded as part of your submissions. Detailed instructions are available on the website. [http://nhwildlifesightings.unh.edu/](http://nhwildlifesightings.unh.edu/)

We will continue to refine the website reporting so please let us know if you have suggestions or problems using the site. If you are unable to access the internet or have trouble using the website, you will still be able to submit records as you have in previous years via hard copy forms (see new form on website) or email ([RAARP@wildlife.nh.gov](mailto:RAARP@wildlife.nh.gov)). If submitting reports via email, please make sure that you provide adequate details on your observations (see format on new reporting form).

**Hints to using website:**

- You’ll need to sign up for a *User Name* and *password* the first time you use the site; write these down in a safe place so you can easily access them for future use.
- Mapping the location of your observation - You can either enter coordinates (if a GPS unit was used to record the location of the observation) or use an online mapping tool to zoom in and click on the location of the observation. You will also be asked to estimate how accurate your mapped location is (e.g., how close to reality is the point you placed on the map). Even if you enter your location as GPS coordinates, you should confirm that it was mapped correctly by zooming in using the mapping tool. You won’t be able to submit a record using the website without mapping a location. If you have trouble using the mapping tool, you can always submit records via hardcopy (preferably with maps indicating location of observation) or email.
- A ‘Site’ is a unique location where an observation was made. Give your ‘Site’ a detailed description so that you will know which area the Site name refers to. If you have multiple wildlife observations at a single Site (defined as within ~ 0.25 acre and within same habitat type; for example a small residential lawn, a vernal pool, or other similarly sized habitat), you will be able to add species observations to previously entered ‘Sites’ without remapping the location.
- **Red text** means you are required to enter information for that field.
- Upload your digital photographs if available but limit your photos to the best 2-3 photos per observation. Uploading many large files may slow or reject your submission.
- After you save your observation it should show up in a table on your home page. If you click ‘Save’ Record and the page doesn’t change, make sure that you have entered all required (red) fields.
- You can edit your submitted observations until NHFG has reviewed and assigned a vouchering category. However, because this vouchering process can happen at any time, it is critical to verify the accuracy of your record before it is submitted. Once your record is reviewed for vouchering, you will be locked out from editing.
Welded Plastic Netting a Wildlife Threat

Fish and Game has recently initiated efforts to discourage the use of welded plastic netting for erosion control by construction interests in New Hampshire. Said netting can entangle snakes and other wildlife, with lethal consequences. During 2010, we documented black racers and eastern hognose snakes that had gotten tangled in this mesh. Favored materials for erosion control consist of a biodegradable woven mat. Photo (left): Northern Water snake tangled in green plastic erosion control netting. Photo by Steve Parren, Vermont Fish & Wildlife

Blanding’s turtles—Genetics study planned – Need assistance with samples

The NH Fish & Game Dept., along with biologists from Maine, New York, Pennsylvania, and Massachusetts are planning a study to assess the population genetics of Blanding’s turtles across the Northeast. In anticipation of these projects, we are beginning to collect samples. If you find a dead Blanding’s turtle (e.g., roadkill), please let us know ASAP (RAARP@wildlife.nh.gov, 603-271-2461) along with the detailed location information. We will store dead specimens at NHFG Headquarters, Concord. We will NOT be taking samples from live turtles at this time so please do not collect or handle live turtles. (It is illegal to possess Blanding’s, wood, spotted, and Eastern box turtles.)

NHFG Snake, Frog, Turtle, and Salamander Pages Available

To assist with identification, NHFG created a web page with information and photographs on snakes, turtles, frogs, and salamanders. Calls of NH frogs can be listened to on this website as well. Also, town distribution maps can be viewed for each species. To find these pages, go to the NHFG website. (http://www.wildlife.state.nh.us/Wildlife/Nongame/reptiles_amphibians.htm).

Attached you will find the 2010 report summary.

It was a GREAT year!!! Thank you for your participation in RAARP and have a great season!

Sincerely,

Michael Marchand
Nongame & Endangered Wildlife Program
# 2010 Summary Reports

We have entered 633 reports for 2010 so far for a total of 8841 records entered since RAARP’s start in 1992. **GREAT JOB!!!**

# of observations submitted in previous years:

## Summary of 2010 Reports Submitted to NHFG

### AMPHIBIANS

<table>
<thead>
<tr>
<th>Frogs/Toads</th>
<th># of Reports</th>
<th>Salamanders</th>
<th># of Reports</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Toad</td>
<td>20</td>
<td>Eastern Newt</td>
<td>29</td>
</tr>
<tr>
<td>Fowler’s Toad</td>
<td>4</td>
<td>Spotted Salamander</td>
<td>29</td>
</tr>
<tr>
<td>Wood Frog</td>
<td>30</td>
<td>Blue-Spotted X Jefferson Salamander</td>
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</tr>
<tr>
<td>Spring Peeper</td>
<td>16</td>
<td>Marbled Salamander</td>
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<tr>
<td>Gray Treefrog</td>
<td>19</td>
<td>2-lined Salamander</td>
<td>9</td>
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<tr>
<td>Green Frog</td>
<td>44</td>
<td>Northern Dusky Salamander</td>
<td>1</td>
</tr>
<tr>
<td>Bull Frog</td>
<td>28</td>
<td>Spring Salamander</td>
<td>4</td>
</tr>
<tr>
<td>Mink Frog</td>
<td>7</td>
<td>Red backed Salamander</td>
<td>17</td>
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<tr>
<td>Pickerel Frog</td>
<td>17</td>
<td>4-Toed Salamander</td>
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</tr>
<tr>
<td>Northern Leopard Frog</td>
<td>1</td>
<td>Mudpuppy</td>
<td>0</td>
</tr>
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<td><strong>TOTALS</strong></td>
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<td><strong>TOTALS</strong></td>
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### REPTILES

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<thead>
<tr>
<th>Turtles</th>
<th># of Reports</th>
<th>Snakes</th>
<th># of Reports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blanding’s Turtle</td>
<td>59</td>
<td>Common Garter</td>
<td>34</td>
</tr>
<tr>
<td>Spotted Turtle</td>
<td>14</td>
<td>Ribbon Snake</td>
<td>6</td>
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<tr>
<td>Wood Turtle</td>
<td>35</td>
<td>Eastern hognose snake</td>
<td>5</td>
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<tr>
<td>Eastern Box Turtle</td>
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<td>Milk Snake</td>
<td>24</td>
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<tr>
<td>Painted Turtle</td>
<td>67</td>
<td>Northern Water snake</td>
<td>32</td>
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<tr>
<td>Snapping Turtle</td>
<td>29</td>
<td>Red-belly snake</td>
<td>6</td>
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<tr>
<td>Musk Turtle</td>
<td>9</td>
<td>Racer</td>
<td>14</td>
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<tr>
<td></td>
<td></td>
<td>Smooth green snake</td>
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</tr>
<tr>
<td>Other (non-native):</td>
<td></td>
<td>Brown snake</td>
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</tr>
<tr>
<td>Red-eared Slider</td>
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<td>Ringneck snake</td>
<td>6</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>215</strong></td>
<td><strong>TOTALS</strong></td>
<td><strong>136</strong></td>
</tr>
</tbody>
</table>

**NOTE:** The numbers reported above represent the number of observations **REPORTED**. These observations have not been validated (especially for species like Fowler’s toad) and these reports do not necessarily represent distinct populations.
Targets for 2010

Check town distribution maps on NHFG website and help fill in the gaps.

Frogs/Toads:
Only a few Mink frogs were reported during 2010. Mink frogs have a northerly distribution (north of the White Mountains). I encourage our northern NH RAARP volunteers to report this species and if you don’t live up north, it would make a great get-away weekend. Listen for their call in June and early July (sounds like hitting 2 boards together). If you are fortunate to capture one, try to take a good photo!! Mink frogs can look very similar to our more common green frog.

Fowler’s toads can be difficult to verify; try to listen for their distinct calls during spring (calls can be listened to on the NHFG website).

We need verified reports of Leopard frogs; photos are crucial!! Most reports of Leopard frogs turn out to be Pickerel and green frogs. Focus searches during late summer in floodplains, fields, and agricultural areas along rivers. See the NHFG website for description of species.

Northern Leopard Frog  Pickerel Frog

Salamanders:
Jefferson and blue-spotted salamanders – breed in vernal pools in early spring
Four-toed salamanders – Associated with sphagnum wetlands. This species can be difficult to locate.
Marbled salamander - State endangered species; be sure to take a photo if you come across one of these and call NHFG ASAP. Towns most likely: Hollis, Brookline, Milford, Hinsdale
Spring & dusky salamanders – live in/near streams and seeps statewide but not easily viewed unless you are willing to flip some rocks in/near streams.
Mudpuppies – Known from Connecticut River but we need more records to determine distribution.

Turtles:
Blanding’s turtle were among the top reported species during 2010. This is probably due to a large amount of press regarding the species that generated much interest, but is also probably due to the species large size, and movement patterns which bring it into frequent contact with residential areas and roads. Continue to report them.

Keep the reports flowing for Spotted and Wood turtles. Even Musk turtles are underrepresented in RAARP reports.
We’re still searching for our first Eastern Box turtle population! We get occasional reports of individuals but still don’t know of any locations where more than one individual has been observed. Eastern box turtles are difficult to verify because of the number of released pets over the years. If you see one, we need to know immediately (via phone 603-271-3016). We have radio-transmitters ready to go so we can follow any box turtles in hopes of finding more.

Keep a look out for Red-eared sliders and other non-native turtles. Non-native turtles can compete with our native species and potentially introduce diseases. Pet turtles should NEVER be released into the wild.

**Snakes:**

**Hognose snakes** are state endangered and their sandy habitat continues to be developed in southern New Hampshire. To protect this species, we need to document the best places where they still occur. Photos are critical.

We initiated a **Black racer** study last year and the press associated with that project resulted in a number of new records. Continue to send these reports quickly after observed.

**Timber rattlesnakes**, state endangered, are extremely rare. Only known from one site in NH.

Ribbon snakes and smooth green snake were listed in the NH Wildlife Action Plan as Species of Greatest Conservation Need. Photographs are critical for Ribbon snakes. Check out the NHFG website to help with identification.

Ribbon snake - not common

Garter snake – common statewide