Herp Atlas Newsletter Autumn 1999

Atlas Project to End

As many of you know, the Herp Atlas will end on 31 December 1999, bringing to a close ten years of surveying effort to document the distribution of the amphibians and reptiles in New York State. The atlas now contains nearly 50,000 species reports from more than 1,500 volunteers. If you have not mailed in your survey cards yet, please do it soon. And remember that we accept reports regardless of how old they are.

This may be the twelfth hour, but now is the last chance to fill in gaps in species distribution. Many blocks need only a few of the common species to reach the goal of 15 species per block. Please get in touch with us if you would like to know about locations near you that need just a little more work.

Volunteers to be Acknowledged in Final Publication

The results of the atlas will be published in a book. We'd like to acknowledge the hard work of all of the volunteers who helped make the Herp Atlas Project possible. When the book is published, the names of the volunteers who contributed at least one survey card will be listed. ***Your name will appear in the book as it appears on the mailing label of this newsletter***. If you want to make a change of any sort, please get in touch with us soon.

Life After the Herp Atlas

The Herp Atlas Project is coming to an end after ten long years. What are you going to do with yourself next spring? Why not participate in the North American Amphibian Monitoring Program? Volunteers establish ten stops along a survey route near their home. The route is then driven during three specified periods in the spring. At each of the ten stops, volunteers listen for calling frogs and fill out a survey form indicating which species they hear and at what intensity. Training materials are provided and a tape of frog calls is available. Don't worry if you don't know frog calls; they are easy to learn! If you are interested, contact Dr. Russell Burke at Hofstra University at (516) 463-5521 or via e-mail at: Russell.L.Burke@Hofstra.edu for a route on Long Island.

You can also participate in the NYS Breeding Bird Atlas 2000. New York State's first Atlas of Breeding Birds was published in 1988 and it's time to begin the survey again. This five-year project will begin in January 2000. Volunteers will be assigned one (or more) block(s) to survey. For each block, volunteers will be asked to identify as many bird species as possible and determine whether breeding for each species is "possible," "probable" or

"confirmed." For information on how to participate when the project begins, check the DEC's website later this year at.

The Herp Bookshelf

Another great book is now available for the herp enthusiast. This one is geared toward the beginner or younger naturalist and was written by one of our volunteers, John Behler. Look for National Audubon Society's "First Field Guide. Reptiles." This book presents fascinating facts about life history and behavior of reptiles and is a guide to the identification of more than 150 species.

Acknowledgments

In addition to funding from New York State, support for the New York State Amphibian and Reptile Atlas Project has been provided by the following:	
Biodiversity Research Institute	Return a Gift to Wildlife Tax Checkoff
Harvey and Bernice Weinstein	Sabin Conservation Fund
Hudson River Estuary Management Program	Society for the Study of Amphibians and Reptiles
Institute for Ecosystem Studies	State University of New York at Cortland
Mohonk Preserve	The New York Chapter - The Wildlife Society
New York Cooperative Fish and Wildlife Research Unit at Cornell University	U.S. Fish and Wildlife Service Federal Aid to Endangered Species (Section 6)
New York Natural Heritage Program	U.S. Fish and Wildlife Service Partnerships for Wildlife
New York Turtle & Tortoise Society	Upstate Herpetological Association

NYS Amphibian & Reptile Atlas Project
NYSDEC
Bureau of Wildlife
625 Broadway
Albany, NY 12233-4754

Herp Atlas Newsletter Spring 1999

Focus on Snakes

In each of the spring newsletters since 1995, we have highlighted one group of herps, starting with frogs & toads, then turtles and, last spring, salamanders. Now we move on to snakes, the most misunderstood of the herps. There are 17 species of snakes that occur in New York State. Surprised? Many people would guess that there are fewer than that, probably because only 8 of the 17 species occur statewide. They are the water snake, brown snake, redbelly snake, eastern garter snake, ribbon snake, ringneck snake, smooth green snake and milk snake. Of these, the garter snake is the most common, as well as the most easily recognized. The remaining 9 species occur in restricted areas of the state. All 17 species are listed below along with their status on the state endangered species list (E = endangered, T = threatened, SC = special concern).

You can find snakes by searching in sunny areas where rock piles and other loose debris provide hiding places. Snakes can be harder to identify than other herps, though, because they tend to move away quickly and also because not everyone is willing to grab one in order to confirm its identity. Binoculars can be handy for looking at identifying characteristics. It also helps when you know what species to expect in the habitat and area of the state where you are searching. Check your field guide for this information.

Unfortunately, snakes are often killed by people who assume that they are dangerous. Three nonvenomous species that are often mistaken for venomous snakes are the water snake, the milk snake and the hognose snake. The water snake is generally found near water and has a thick dark body with large dark blotches on the back. The milk snake is light colored with reddish brown saddles on the back and a "Y" or "V" shape on the head. Its habit of shaking its thin tail and striking when threatened often leads people to think that it is a rattlesnake. The stout bodied hognose snake is the only species in New York that flattens

its head and hisses when threatened. If this display does not scare away predators, the hognose snake will writhe as if in pain, turn on its back and play dead. A good rule to remember when identifying snakes is that nonvenomous species have round pupils. Venomous species have vertical pupils as well as pits (small holes) on the face, in addition to the nostrils.

We have three species of venomous snakes in New York: the massasauga rattlesnake, the timber rattlesnake and the northern copperhead. The massasauga occurs only in two small, isolated populations in western New York. The timber rattlesnake occurs in the lower Hudson Valley, parts of western New York and the southern Adirondacks while the northern copperhead occurs only in patches in the lower Hudson Valley.

With the great diversity of snake species in New York, and the relative ease with which they can be found, this is a great group of herps to be on the lookout for. As usual, if you find a species that you cannot identify, send us a picture and we'll be glad to let you know what it is. Good luck!

New Atlas of County Highways Available

The New York State Department of Transportation has published a 1998 edition of the New York State Atlas. Along with each county map, there is a shaded map showing the relief of the area as well as a map showing the names and locations of each of the 7.5 minute topographic quadrangles in the county. The Atlas also clearly delineates publicly owned recreation areas, hydrographic and physiographic features, as well as a lot of other useful information. The Atlas is available through bookstores or from the NYSDOT for $40.

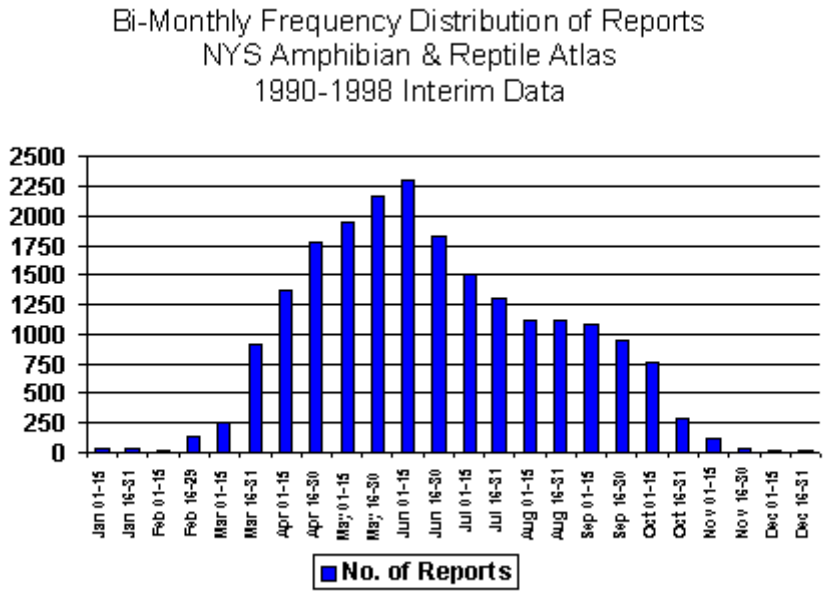
Request for Photographs

We are interested in receiving photographs of amphibians and reptiles that can be used in the publication of the Herp Atlas, on our website or in other Department publications. The photographs should be of excellent quality and should clearly show characteristics that identify the species. We also need photographs that show various developmental stages (e.g. tadpoles, gilled salamanders, egg masses or nests), sexual dimorphism (e.g. front claws on turtles, vent of breeding salamanders), subspecies characteristics (e.g. midland vs. eastern painted turtle), color variation (e.g. striped or checkerboard pattern on garter snakes), or key characteristics (e.g. costal groove on salamanders, post orbital ridges on toads). Prints, slides or digital photos are acceptable, but they must be original. Credit will be given when photographs are used. Please include your name, species name, the county

and town and date where the photograph was taken. Submit photos with a completed Herp Survey Card. Photos will be returned.

Our Website is Your Tool for Success

The Herp Atlas website can be a great resource for folks who want to do some directed herping this year. The address is: http://www.dec.ny.gov/animals/7140.html. Here are some suggestions on what to do with the information you'll find there: 1. Look at the species maps on our website and fill in gaps where common species are missing. 2. Expand the known range of rare species by searching blocks directly adjacent to those that are filled in.

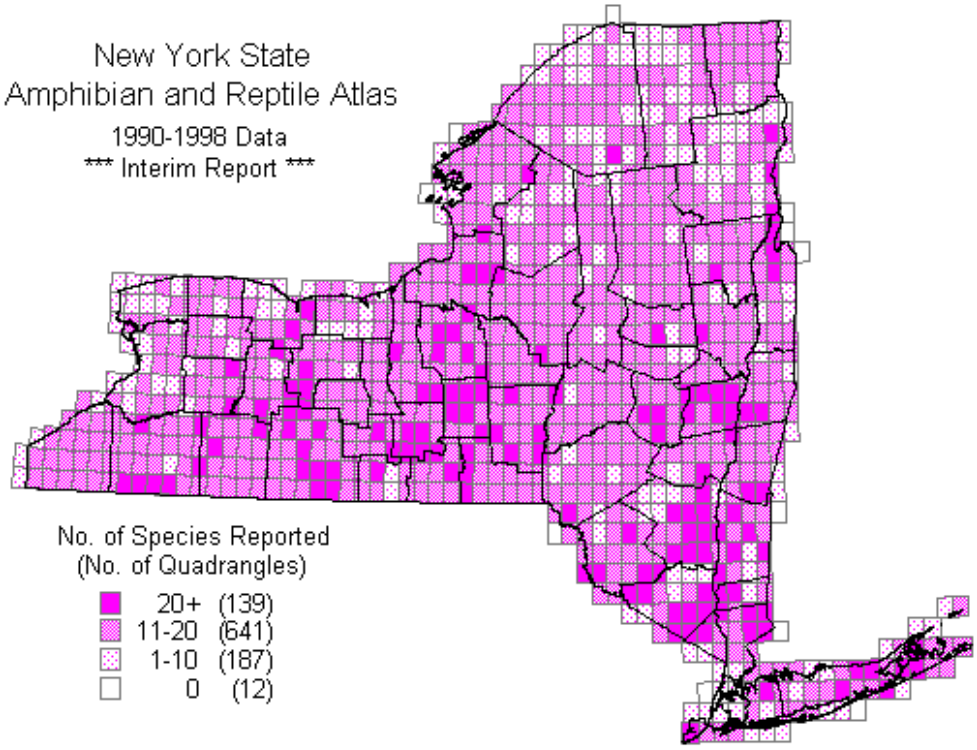


Cabin Fever?

Does the graph showing the bimonthly frequency distribution reflect activity of the species or of the volunteers who are reporting? Perhaps some of both. Chorusing frogs, basking and nesting turtles and warm, spring, "get out of the house" type weather all come together to give us a broad activity peak beginning in early April and extending until early July. But even with our frigid winters and sweltering summers, if you know when, where and how to look, you can continue to atlas. Start looking before you hear the first spring peeper this year. You might be surprised how hardy and active some of these cold-blooded critters really are when the temperature tells you it is still winter.

The Final Year

This year marks the final field season for this ten year effort. Our enthusiastic volunteers have been using every opportunity to report their observations. In early December we had several reports of basking snakes and calling spring peepers. The New Year had hardly begun when we started to get calls from volunteers with their first herp sighting of the year. The extended January thaw brought reports of frogs and salamanders. On Long Island tiger salamanders were laying egg masses by the first week of February and spotted salamanders were active as far north as Tompkins County. In 1998, we added 350 volunteers to our list of contributors. Our 1400 contributors submitted a record 14,000 species reports. Our general goal of 15 species per quad will be reached if we make this final year another record year. But while our latest interim map shows that we have some coverage from all parts of the state there is still a need to report even the most common species and plenty of opportunities to fill in significant gaps. For those of you who would like to focus on these gaps, please write and request one of our interim reports. And finally, we expect some atlasers will keep looking until midnight, New Year's Eve when the atlas comes to an end. Thanks to all for making this a great Atlas!



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New York Natural Heritage Program	The New York Chapter - The Wildlife Society
Harvey and Bernice Weinstein	

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Alvin R. Breisch, Project Director

John W. Ozard, Computer Systems Design

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This issue of the newsletter was printed courtesy of Harvey and Bernice Weinstein.

New York State Amphibian & Reptile Atlas Project

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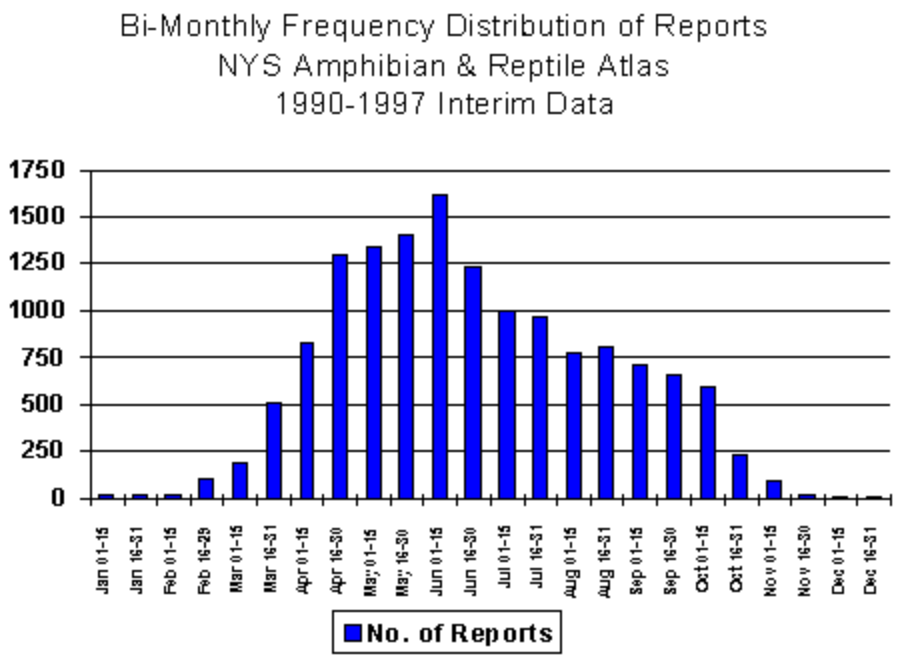
REMEMBER...Send in your survey cards as you complete them. This will allow us to track our progress more efficiently and not become backlogged in the fall. Thanks!

Herp Atlas Newsletter Autumn 1998

Late Summer and Early Fall Herping



It is easy to get excited about herps in the early spring. We are all anxious to get outside when the air begins to warm in late March and early April. Soon, the ice recedes from ponds and you can't wait to hear the first wood frogs calling. Salamanders are also easy to find as they are crossing roads en route to their breeding pools, and spring peeper calls fill the air. Later in the spring and early summer, reptiles become active and a sequence of frog calls can be followed as one species finishes breeding and another begins. But what about late summer and early fall? This, too, is actually a great time of year to look for herps and we'd like to encourage you to try it this year.

John Ozard recently created bi-monthly frequency distribution reports to provide an indication of our volunteers' activity throughout the year. The bar graph to the right shows the number of herp survey cards that were submitted during 24 two-week periods from January through December. As you can see, most of our volunteers go out searching for herps in the early summer and then their activity level drops off as the season progresses.

With the end of the summer upon us, and knowing that this is the second-to-last season for the Atlas, we'd like to encourage you to take some time to look for herps this fall. The cool

nights and sunny mornings that are typical of this time of year create the perfect scenario for basking snakes and turtles. Young turtles hatch from their nests during late August and early September, and fall rains bring salamanders to the surface to forage. There is still a lot of great weather ahead of us; let's make the most of it by exploring for herps!

*** CORRECTION ***

The spring newsletter was printed courtesy of the Upstate Herpetological Association whose name was incorrectly printed as the Upstate Herpetological Society. Thanks again to UHA for supporting the Herp Atlas.

Yet Another Internet Update

In addition to the links through SUNY Cortland and the New York State Museum, we can now be located through DEC's web page. In November the address will change to: http://www.dec.ny.gov/animals/7140.html. You will now find preliminary distribution maps based on Herp Atlas data for the 70 species in New York. There is also a link to our e-mail address where you can send us questions or comments.

NY Natural History Conference V

The New York State Museum is hosting the New York Natural History Conference V on October 14th through 17th. This is a great opportunity to learn about current research on the natural history, anthropology, geology, and history of New York State and the Northeast. Find out more by visiting the Museum's home page at: **www.nysm.nysed.gov**.

Your Library

There are several new publications of interest to naturalists in New York. "The Amphibians and Reptiles of the Great Lakes Region" by James H. Harding, (University of Michigan Press. 1997. 378 pp) is not only a beautifully illustrated book, but a bargain as well at only $19.95. This book covers most of the species found in New York, including some you might not expect such as tiger and marbled salamanders, Fowler's toad and five-lined skink, which are found only in the eastern part of the state. The Peterson Field Guide series has issued a revised third edition of Conant and Collins' Field Guide to Reptiles and Amphibians. The distribution maps have been placed with the species description and photos have been added to supplement the illustrations. For those of you with a technical interest, The American Museum of Natural History has published "Hybrids and Genetic Interactions of Mole Salamanders (*Ambystoma jeffersonianum* and *A. laterale*) in New York

and New England" by J.P. Bogart and M.W. Klemens (1997. 78 pages). Good reading and herping.

This issue of the newsletter was printed courtesy of The New York Chapter - The Wildlife Society

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Herp Atlas Newsletter Spring 1998

Focus on Salamanders

This spring, as in the previous three years, we are asking our atlasers to focus their efforts on locating and reporting members of a specific group of amphibians and reptiles. This year we have chosen members of the Order Caudata. These are the salamanders. In the early spring, species such as the spotted salamander make their way from their woodland habitats to ponds where they mate and lay eggs. This is an especially good opportunity to find and identify these species because they are moving about in relatively large numbers. Other species of salamander, such as the two-lined salamander, can be found by turning over rocks and other debris in clean woodland streams and several meters away from the stream.

Moisture is essential for the survival of all amphibians in order to facilitate respiration. Pools of water are necessary for egg-laying and for the development of larvae. In several species, such as the blue-spotted salamander, mating occurs when males deposit spermatophores on the bottom of the pond in early spring. This tiny jelly-like pyramid has a packet of sperm on top, which a female picks up in her cloaca. Fertilization occurs internally and the eggs are laid and left to develop unattended. In other species, such as the marbled salamander, eggs are laid at the end of summer in small depressions on land in anticipation of fall rains that will fill the depressions and allow the eggs to develop.

Eighteen salamander species occur in New York State; they are listed below with their status on the state endangered species list in parentheses (E=endangered, SC=special concern).The largest is the eastern hellbender which measures approximately 30 to 51 cm in length. Hellbenders are rather grotesque looking animals with many folds of loose skin on their sides, a very flat head and tiny eyes. They can be found under large rocks in the Susquehanna and Allegheny River drainage. The four-toed salamander is the smallest salamander that occurs in New York, measuring approximately 5 to 9 cm in length. Commonly associated with sphagnum, this little salamander can be identified by an alabaster belly sprinkled with tiny black dots and, of course, only four toes on its hind feet (other salamanders have five). What salamander species can you find?

eastern hellbender (SC)	mountain dusky salamander
mudpuppy	redback salamander
marbled salamander	northern slimy salamander
Jefferson salamander (SC)	Wehrle's salamander
blue-spotted salamander (SC)	four-toed salamander
spotted salamander (SC)	spring salamander
eastern tiger salamander (E)	red salamander
eastern newt	two-lined salamander
northern dusky salamander	longtail salamander

Strategy for a Successful 1998

We have completed the eighth year of the ten year atlas project to document the distribution of amphibians and reptiles in New York and we are happy to report that it was a record year. We received over 9500 species reports -- that's over 1/3 of all the reports we received since the atlas began in 1990. Although this is an impressive number, we must do better if we are to have adequate statewide coverage by the end of 1999.

Many people have asked whether they should bother to submit records of common species from areas they "are sure" someone else must have covered. Well, with all the tens of thousands of hikers trampling through the Adirondacks, we did not have a single report from the Mount Marcy quadrangle, the most frequently hiked area in the Adirondacks, until 1997. The green frog, our most frequently reported species, has been reported from only 77% of the blocks. So the easy answer is that we'd like you to send a survey card for every observation you make -- the computer can sort them and check for duplicates much faster than anyone can by hand.

If you want to participate in a more focused manner and help us fill in the gaps, follow these guidelines:

1. Report your first record of the year for each species of frog or toad calling in a block.
2. Report all roadkill snakes and turtles.
3. Report all observations of frogs or salamanders depositing eggs.
4. Report all observations of turtles nesting.
5. Report all observations you think are significant (e.g., feeding, being fed upon, hibernating, mating, etc.).
6. Report all observations of the following species:

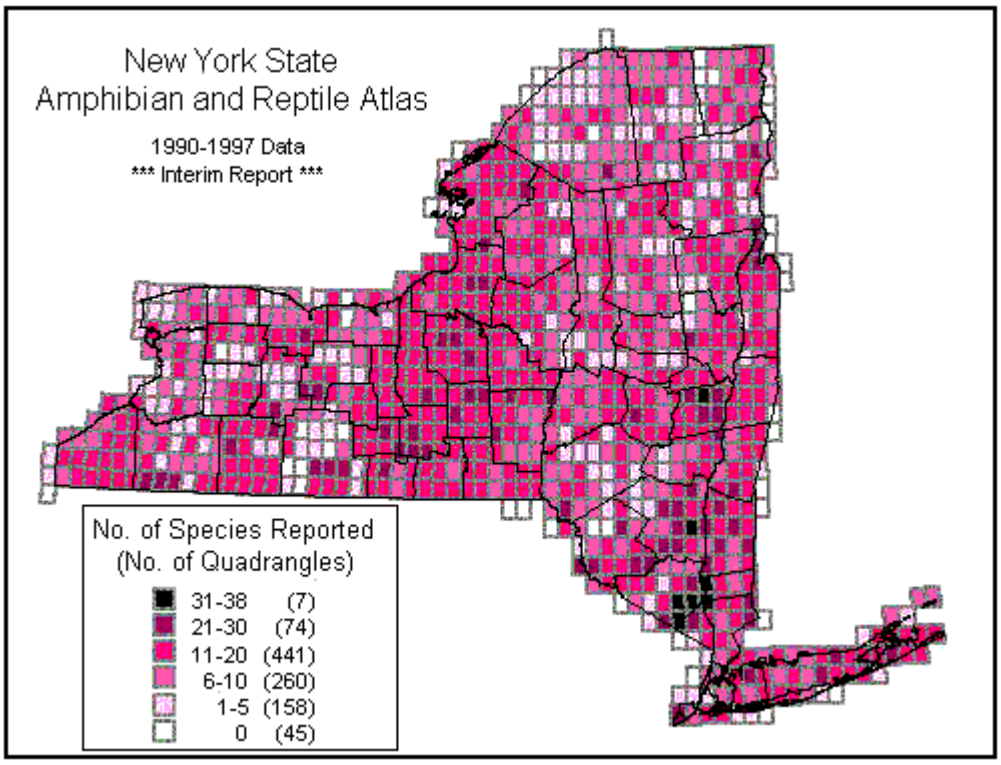
Report *All* Occurrences of These Species		
hellbender	Fowler's toad (except Long Island)	ribbon snake
mudpuppy	northern cricket frog	hognose snake
marbled salamander	musk turtle	worm snake
four-toed salamander	spotted turtle	black racer
spring salamander	Blanding's turtle	smooth green snake
red salamander	spiny softshell	black rat snake
longtail	all lizards	copperhead
spadefoot toad	queen snake	timber rattlesnake

We now have at least one record for 940 blocks (95%) and 919 towns (93%). The quad with the most species reported is ROSENDALE in Ulster County with 38 species. Only 303 quads statewide have 15 or more species, which is the number we expect in most blocks that have received a moderate effort. Plan your field season by requesting interim reports for your area (see announcement on next page) and help us make this a banner year!

Internet Address Update

We reported in the last newsletter that you could learn more about the Herp Atlas through our DEC web site. It hasn't happened yet, but until it does, you can get limited information at **www.cortland.edu/herp/** or at **www.nysm.nysed.gov.bri.html** or at the DEC home page (see next page for address). NY Natural History Conference

Do you want to learn more about natural history in New York State? Visit the NYS Museum's web site at: www.nysm.nysed.gov. The Museum will also be hosting the 5th New York Natural History Conference from October 14th-17th. Find out more about the conference by visiting the museum's home page.



Interim Reports - a Hot Item

Get yours now!

Once again this year, we have prepared interim reports that compile the data we have received from our volunteers through January 1998. The map printed above is one of these reports. It shows our progress by the number of species reported so far in each quad in the state. Another report has distribution maps for each species. These maps show a preliminary range for each species in the state. Finally, we have produced a report that lists the species that have been reported in each quad. This information can be very useful to volunteers in planning where to conduct searches this year to help fill in the blank spots. Please write and request the interim reports for your area or for any species in which you are particularly interested.

Deformed Frogs in the News

The North American Reporting Center for Amphibian Malformations is helping to document occurrences of deformed amphibians and welcomes your reports. In New York, Stan Sessions, Hartwick College Professor, has been studying these malformations for years. To learn more about deformed frogs or to report an observation, visit these two web sites: www.npwrc.org/narcam or http://www.hartwick.edu/x27497.xml

Remember... Send in your survey cards as you complete them. This will allow us to track our progress more efficiently and not become backlogged in the fall. *Thanks!*

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NYSDEC

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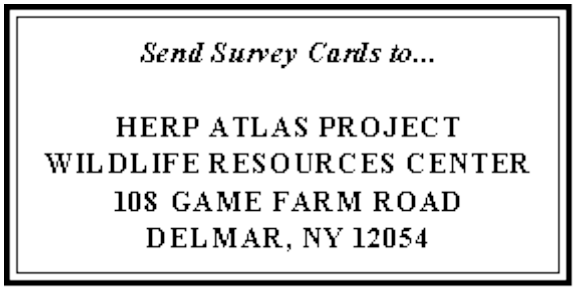
Herp Atlas Newsletter Autumn 1997

Send Us Your Survey Cards!



Now that the field season is coming to a close, we want your survey cards! Each fall and early winter we try to enter all of the data from the survey cards of the current season. We hope to have all of the current data entered by the end of January, but we can't enter *your* data if we don't have *your* survey cards! We now have over 2,000 reports entered in the database with about 4,800 more reports waiting to be entered. When sending in records, don't worry about whether it has been reported already from that particular block. It is easier to let the computer separate that information later on.

Don't hesitate to contact us if you have any questions regarding how to complete your survey cards. Also, if you do not have a copy of the new volunteer handbook (light green with an amphibian holding the world on the back cover) and would like one, let us know.

Sometime early next year we hope to produce interim reports using the data that have been collected since the Herp Atlas began in 1990. These reports allow us to see the progress that is being made and focus our atlasing efforts. Last year we saw that there were many places in the state that had not been surveyed very well. We assigned atlasers to survey these areas in an attempt to fill in the gaps. These "block busters" have done a great job. The new interim reports should reflect very few blocks without any species reports, but half the blocks will still have fewer than 15 species, our target number for each block. With the support of our DEC regional staff from the Cortland office and several colleges in central New York, we have raised our goal in central New York to 20 species per block.

Thanks to All of The Block Busters Who Worked So Hard to Help Fill Those Gaps!!

Changes to Names of New York State Herpetofauna

The fourth edition of "Standard Common and Current Scientific Names for North American Amphibians and Reptiles" by Joseph T. Collins was recently published and there have been some changes that involve New York State species.

Most of the name changes to the list involve a subspecies becoming recognized as a species. The genus of one of our snake species was also changed. These changes are listed below.

1. *Ambystoma t. tigrinum* has been elevated to *A. tigrinum*. All of the other subspecies of *tigrinum* are now subspecies of *A. mavortium*, which does not occur in New York.
2. *Desmognathus f. fuscus* is now *D. fuscus*.
3. *Necturus m. maculosus* is now *N. maculosus*.
4. *Bufo woodhousii fowleri* is now *B. fowleri*.
5. *Rana u. utricularia* is now *R. sphenocephala utricularius*.
6. *Scaphiopus h. holbrookii* is now *S. holbrookii*.
7. *Pseudemys r. rubriventris* is now *P. rubriventris*.
8. *Opheodrys vernalis* is now *Liochlorophis vernalis*.

To purchase a copy of this publication contact Robert D. Alridge, Publications Secretary, Department of Biology, Saint Louis University, St. Louis, MO 63103.

Photographic Documentation - a useful tool

Let's face it... identifying amphibians and reptiles isn't always easy. Almost everyone knows that toads have warts and frogs do not, but how do you determine whether the toad is an American toad or a Fowler's toad? If you need a little extra help, why not send us a photo of the species in question? We'd be happy to help you to figure it out. The purpose of this article is to let atlasers know the importance of focusing on the specific characteristics needed to identify each of the herp groups. In the case of the toad, the back, the belly and the top of the head are the important areas to photograph. There are two critical elements of successful photographic identification: (1) include a scale - lay a ruler, coin, pen, etc. next to your subject, and (2) clearly capture the identifying characteristics of the animal in the photo.

In New York we have three species of frog with spots on the back: the northern and southern leopard frogs and the pickerel frog. There is a difference in the shape and pattern of the spots, but in some cases these differences are not always distinct. The color of the inner thigh is the more reliable characteristic to separate pickerel frogs from leopard frogs while the white spot on the tympanum separates the two leopard frogs. Most photographs

do not show these important areas. Use your field guide to learn which body parts need to be focused upon.

Most of the adult salamanders can be identified with a simple photograph of the dorsal and ventral sides (how many other parts of a salamander are there, anyway?). The color in the photograph must be true. Many larval salamanders and tadpoles are, unfortunately, almost impossible to accurately identify using only a photograph.

When photographing turtles, make sure you include the extended head and neck (this may take some patience!). Measurements also help. Turtle measurements include only the shell and not the body. The easiest way to measure the carapace (top of the shell) is to place the turtle on a piece of paper and draw a line at the front and back of the shell. Remove the turtle and measure the distance between the lines. The plastron (bottom of the shell) should also be measured from tip to tip, front to back. A third measurement is the shell height, which can be important in identifying box turtles.

In general, the markings on the belly and back of New York's snakes are fairly distinctive. Markings on the head are important in some cases, as when trying to tell a (greenish) brown snake from a (spotted morph) garter snake. In some species (water snake, garter snake), each scale on the snake's body has a distinctive ridge down its center; these are referred to as "keeled" scales. Also, the scale immediately before the cloaca, the anal plate, can be either divided (ringneck snake) or single (ribbon snake). Venomous snakes have vertical pupils and a pit on either side of the face.

This is just a sampling of the characteristics you'll need to consider when making a positive identification; your field guide can provide you with more details. Don't forget: when identifying species, you also need to consider the geographic location where it was found, but that is another whole article...good luck!

The Herp Atlas Hits the Web

This summer we worked with the New York Cooperative Fish and Wildlife Unit at Cornell to produce a poster showing the status of the Herp Atlas. You can view this poster at http://www.dnr.cornell.edu/gap/herppost.html. We are also working on a website with SUNY Cortland that will focus on involving school kids with amphibians and reptiles and the Herp Atlas. The web site address is not yet available, but all sites will be linked to the DEC home page.

This issue of the newsletter was printed courtesy of the Institute of Ecosystem Studies, Millbrook, NY.

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John Ozard	Computer Systems Design
Kim Hunsinger	Project Coordinator
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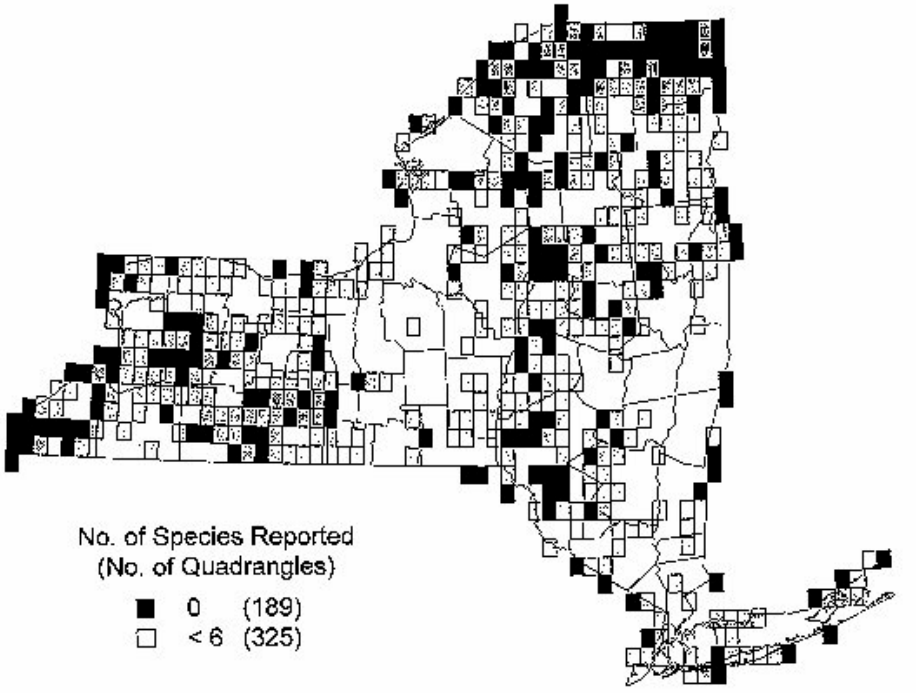
Herp Atlas Newsletter Autumn 1996

New Map Identifies Areas to be Atlased

We have only 3 more years to complete the Atlas and we have a lot of gaps to fill. With the field season rapidly winding down, we thought it would be timely to provide a quick update. As you can see from the map, there are still a lot of quadrangles with no species reported. Over half of the quadrangles have 5 or fewer records. To date, the most diverse quad, in Dutchess County, has 37 species reported. There are 19 species that are statewide in distribution. It should be possible to find each of them in at least 90% of the quads. Depending on which area of the state you are in, you should be able to find 3 of 20 additional species in a quad (see article in Newsletter # 2). As a goal for 1997, we would like to work towards atlasing 15 species in each of the shaded quads on the map. Since they all have 5 or fewer species, almost anything you send in will be a new record. We welcome duplicate records for a quad that give us additional information concerning activity dates and life history. If you don't live or herp in one of the shaded quads, don't despair. Many of the unshaded quads are inadequately surveyed. We will provide a list, on request, of what has been reported in a specific quad. Because we have limited ability to photocopy and mail reports, please keep your request to a minimum. Please be patient with us if we are slow to respond. As your enthusiasm for this project grows, we are having more difficulty getting approval to keep our staff employed (see following article).



Herp Atlas Project Loses Staff

This summer we were very busy traveling around the state offering seminars and workshops to potential herp enthusiasts. It has been a very successful season for recruiting volunteers and for gathering data. There have been a tremendous number of survey cards coming in and we have spent a lot of time checking and entering them into the database and responding to requests for volunteer packets and additional survey cards. Unfortunately, though, the atlas staff was reduced by half at the end of September when both Kim and Alison were laid off.

One implication of this change is that we will not be able to answer your letters as quickly as we have in the past. Basic requests will likely be answered by a temporary clerk, but others will be placed in a file until there is time and staff to deal with them. Please, though, keep sending in your survey cards and don't be afraid to send in letters; they will be answered eventually.

Fear not! The herp atlas world has not all turned to doom and gloom. Kim is taking this opportunity to work on a graduate degree, but we hope will be able to return to work on the Atlas in January and possibly in the spring. Alison will hopefully be re-hired in December.

Behold! The Herp Atlas will go on!! Remember, this is just a small setback and we will be ready to jump into another great season when the spring of 1997 rolls around. Hope you have a great fall and winter. For now, make sure you have mailed in all of your survey cards for the season.

Herp Atlas Staff	
Alvin Breisch	Project Director
John Ozard	Computer Systems Design
Kim Hunsinger	Project Coordinator
Alison Preville	Quality Control

Volunteer Handbook Available

This summer we produced a comprehensive handbook for Atlas volunteers. This handbook is intended to answer most of the question that you may have concerning your atlasing efforts. It contains the instructions, topographic quadrangle index, a list of recommended herpetological references, a list of acceptable town names and examples of common mistakes that are made on survey cards. Drop us a line if you would like to receive a copy of this spiffy new handbook.

This issue of the Newsletter was printed courtesy of the State University of New York at Cortland.

Acknowledgments

We would like to thank the following people and organizations for their financial contributions which have helped launch and now sustain the Atlas Project.

- U.S. Fish & Wildlife Service Federal Aid to Endangered Species (Section 6)
- U.S. Fish & Wildlife Service Partnerships for Wildlife
- Return a Gift to Wildlife Tax Checkoff
- Andrew Sabin
- New York Cooperative Fish & Wildlife Research Unit at Cornell University
- Biodiversity Research Institute
- New York Turtle and Tortoise Society
- SUNY Cortland

Herp Atlas Newsletter Spring 1996

Focus on Turtles

This spring, we'd like to ask our atlasers to focus their efforts on observing and reporting turtles. New York State has 12 native species of land & freshwater turtles and five species of sea turtles. Only two of these species (snapping and painted) occur statewide, however, and many are fairly rare, so this should be a bit of a challenge. Turtles are most easily located by visiting a pond, lake or river on a sunny day when many individuals are likely to be basking. A good way to identify a species is to approach the area quietly by foot or canoe and use binoculars or a spotting scope. Note the shape of the carapace (top shell) and any patterns or colors on it, colors and patterns on the feet and head and overall size. The shells of basking turtles often appear plain green or brown from a distance because of algae growth, so getting a good look at other physical characteristics may be crucial to a proper identification.

Rarest of all of our turtles is the bog turtle, occurring only in Seneca, Dutchess, Columbia, Ulster, Putnam and Orange Counties. The carapace, head and legs of a bog turtle are plain brown, but the species can be easily recognized by orange patches on either side of the head and by its small size; a full grown adult measures about four inches in length. Bog turtles are suffering from loss of wet meadow habitats.

The Blanding's turtle and the box turtle both have a plastron (bottom shell) that is hinged. This affords them excellent protection from predators because they can pull in their head and legs and close the plastron so that no flesh is left exposed. Other turtles have a solid plastron that is joined to the carapace by a "bridge" on either side of the animal. These turtles can still retract their head and legs, but remain somewhat vulnerable because their flesh is not fully protected.

The box at the right lists turtles that occur here in New York State. The status of those that are on the state endangered species list is indicated in parenthesis (E = endangered, T = threatened, SC = special concern). Additional protection is given to some species by New York State's Environmental

snapping turtle
musk turtle
eastern mud turtle (T)
spotted turtle (SC)
bog turtle (E)
wood turtle (SC)
eastern box turtle
diamondback terrapin (SC)
redbelly turtle
map turtle
red-eared slider
painted turtle
Blanding's turtle (T)
eastern spiny softshell
green turtle (T)
Altantic hawksbill (E)
loggerhead sea turtle (T)
Atlantic ridley (E)
leatherback sea turtle (E)

Conservation Law. Under this law, the wood turtle, bog turtle and the box turtle are considered small game species, but have no open season. Public Health Law prohibits the sale of turtles with a carapace length measuring less than four inches. When you're out looking for turtles, please remember that a license is required to collect or possess (or sell) any protected species. The use of devices to capture turtles such as traps, dip nets, pitfalls or seines requires a special license from the Department of Environmental Conservation. It is illegal to take turtles with a hook and line.

There are plenty of habitats and plenty of ways to observe turtles. Here's hoping that you will get out there and find them. Many turtles make their first appearance in the spring when the air and water temperatures reach 50° F. We had our first reports for 1996 from Long Island in March. Have fun!

Measuring, Sexing and Aging Turtles in the Field

Since we are encouraging atlasers to focus on turtles this year, we thought some information on collecting data on animals in the field would be helpful. Taking standard body measurements and determining sex are important parts of this procedure. When dealing with turtles, we use calipers to take four measurements: the carapace length, shell height and width, and plastron length. If the turtle is uncooperative (legs & head flailing), try holding it on its back; this usually encourages them to pull in their appendages. Snappers, softshells, musk and mud turtles often try to bite, so be careful.

Sex can be determined in a variety of different ways, depending on the species. In general, the plastron of a male is somewhat concave while a female's plastron is flat. This permits better contact during mating. Male turtles generally have long, thick tails with the cloaca positioned relatively far from the edge of the plastron. Females, on the other hand, have a short tail with the cloaca close to the base.

In painted turtles, the claws on the front feet of the male are much longer than those of the female. Male box turtles usually have red eyes, while females have yellow ones. In spotted turtles, females have a light-colored lower jaw and orange-red eyes; males have a dark lower jaw and brown eyes. Behavior can be an indication of sex, too. If you see a painted turtle or a snapping turtle walking on land during the summer, you can be fairly certain that it is a female. She is likely to be looking for a sunny spot to lay her eggs. Some field guides provide a bit of information on determining sex, or least give the expected size for males and females. Although it only covers six of our turtle species, the Stokes Guide to Amphibians & Reptiles does provide details on determining sex.

We're Progressing in Leaps & Bounds!

Last spring, in our very first newsletter, we encouraged our volunteers to focus their efforts on observing and reporting frogs and toads (*Focus on Frogs*). This turned out to be quite a success. In the last interim report, spring peepers had been reported in 229 quads. This time around, the number has increased to 370, meaning that spring peepers were reported in an additional 141 quads during 1995 alone. The number of quadrangles with green frogs reported increased by 130 and quadrangles with bullfrogs and wood frogs by 94 and 95 respectively. The average number of additional blocks where 7 common species were reported was 94.

While progress has been made as a result of efforts to focus on this particular group of species, much work remains. Each of the species mentioned above is common and occurs statewide and should therefore be easy to report in each of the 100 topographic quads. There are still 615 quads with no peepers reported, 591 quads with no green frogs reported and 691 quads with no bullfrogs reported. So, while we are asking you to focus your efforts on turtles this year, don't forget to keep an eye out for those frogs as well!

Updated Interim Reports Available

John Ozard, our computer guru, has completed an updated set of interim reports. These include data from 1990 through 1995. One of the reports is a set of maps showing the preliminary range of each species as records have indicated.

Another report lists the species that have been reported in each topographic quadrangle. We also have an updated map of the state showing the number of species that have been reported in each of the 985 topographic quadrangles. If you would like a copy of any of these reports, please contact us at the following address: NYS Amphibian & Reptile Atlas Project, NYSDEC, Bureau of Wildlife, Delmar, NY 12054-9767.

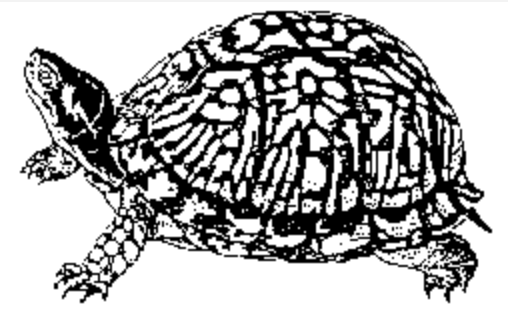
There are still a number of quadrangles with NO species yet reported (oh my!), including much of Clinton and Franklin Counties, central Herkimer County, central and southern Delaware County into northern Sullivan County, as well as Allegeny, Chautauqua, Wyoming and Niagara Counties. We hope that you will request copies of these county reports and use them to focus on areas that still need attention.

A Visitor from the Past
by Tom Tyning

I was on comfortable and soothing ground the other day. The woods were familiar as was the trail, mostly worn because I had tread on it for over twenty years. I have searched this area for plants and animals, collecting information, photographing butterflies and wildflowers and mostly using it as a great refuge from day to day life. Like most people I have my own special getaway where I am as comfortable as I am anywhere, including home.

So it was to my utter pleasure that I encountered one of my oldest acquaintances at this site very recently. I was walking along, not particularly focusing on any one thing. A few birds vocalized only rarely. A turkey vulture swooped low over the treetops. The first of the woodland asters had opened their flowers. But for the most part it appeared to be just another quiet walk in the woods. Then I looked down at my feet.

After my eyes focused I still could not quite tell if this was an apparition or had I finally discovered one of the great patriarchs of North America - an adult box turtle. Here, on the bed of oak leaves and lowbush blueberry, in the dappled afternoon light, a box turtle fits into its environment like most other species. The caramel-colored shell, alternately dotted and then streaked with cream spots and swirls, makes for one of the better camouflaged animals we have. I am always impressed when I find one crossing a highway. Here, in my own"backyard" and under more natural conditions, I was ecstatic. My excitement was to be enhanced, however, when something about this animal seemed familiar.



I kneeled down to take a closer look. The dark head held two glowing, coral-red eyes, indicating that this was most likely a male. Female box turtles tend to have brown eyes. Its high domed shell, a characteristic of the eastern box turtle, was pitted and ragged along the edges. This is typical of old turtles and none in this country grow older than a box turtle. Accurate estimates of up to 125 years or even more have been made on New England box turtles. As I stretched to see more detail of the animal, which I left untouched, a tiny hole along the front, left margin of its shell struck me. This was indeed an animal I had known. Back in 1974, I was in the Forestry and Wildlife Department at the University of Massachusetts and under the tutelage of Dr. Wendell Dodge, and others. Dodge was one of

the pioneers of radio telemetry and he was helpful, if not amused, when this local undergraduate announced that he wanted to put a radio on a box turtle and follow it for a couple of years. This was the turtle I had found almost twenty years ago and it was a mature adult then. The transmitter antenna was affixed to the turtle's shell by drilling two small holes on the edge of the shell. I spent a great deal of time with this fellow, following it on its short, but almost daily jaunts. I watched it feed on blueberries and mushrooms. Each night the turtle dug into the leaf litter, usually next to a fallen tree and actually created a small, dome-shaped den, called a form. Its entire activities were confined, during the time I followed this animal, to a small area - perhaps an acre or less. But after the study was over and the transmitter removed, I could not for the life of me find that animal again, no matter how hard I looked or how familiar I was with his habits. I had even followed him to where he dug three inches into the soil and spent the winter. Over the past many years I have checked and re-checked that exact spot as well as most other locations where he spent his time - but to no avail. I was sure that my old friend had passed on, one of the last of a declining species in Massachusetts. That is, until the other day, when at least one of us was extremely pleased with the reunion. It's hard to determine what a turtle thinks. After two decades, this box turtle was sitting within fifty feet of where I first found him. He probably thought I had not seemed to have gone very far either.

Learn About the Marsh Monitoring Program

The Marsh Monitoring Program is a cooperative effort of the Long Point Bird Observatory, Environment Canada and the U.S. Great Lakes Protection Fund to gather baseline information on the health of marshes by surveying populations of birds and calling amphibians in marshes throughout Ontario and the Great Lakes States. A goal of the project is to assess the progress and success of marsh rehabilitation efforts, and to monitor population changes and habitats over the long term. The program uses volunteers who set up a route and monitor it. If you are interested in participating in this effort, you can get information by writing to Program Coordinators Amy Chabot or Natalie Helferty at Long Point Bird Observatory, P.O. Box 160, Port Rowan, Ontario, Canada, NOE 1MO.

ACKNOWLEDGEMENTS

In addition to funding provided by New York State, financial support for the Amphibian & Reptile Atlas Project has been provided by the following:

- U.S. Fish & Wildlife Service Federal Aid to Endangered Species (Section 6)
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- New York Cooperative Fish & Wildlife Research Unit at Cornell University
- New York Turtle and Tortoise Society

This issue of the newsletter was printed courtesy of the New York Turtle and Tortoise Society.

NYS Amphibian & Reptile Atlas Project
NYSDEC
Bureau of Wildlife
625 Broadway
Albany, NY 12233-4754

Herp Atlas Newsletter Autumn 1995

Where We Stand

Well, atlasers, another field season has passed. Hopefully, you have all turned in the survey cards you so tediously filled out this summer. If not, please do! We have tabulated some preliminary results for the year and for the project to date. As of the printing of this newsletter, the database holds a grand total of 11,000 species records and about 5,500 survey cards (current and historic combined). This year we received about 4,000 new records. That may sound like a lot of records (and it IS), but our goal for 1995 was to receive **10,000** new records. We fell *significantly short*!

But, but, but, you say, why was the goal for 1995 so high? Was this unreasonable? We don't think so. The province of Ontario is also conducting a survey of amphibians and reptiles which has been ongoing since the mid-1980's and continues today. Since the beginning of their study, the Ontario atlasers averaged 10,000 records per year. We figured, if *they* can do it, why can't *we*? Well?? Why can't we? There's no reason. Although we fell short of our goal this year, there is always next year. AND, we can do it!! Be sure to read about wintertime herping in this newsletter (*Winter Vacation - a look at overwintering herps*) and see what you can find after the snow begins to fall.

Check out our New Logo!!

As we promised in the first newsletter, here is the result of our logo contest. The new Herp Atlas logo was created by atlaser Lynn Webb of Pine Plains. It was chosen from several great entries. The new logo will be incorporated into a letterhead and we hope to make T-shirts available in the future. Thanks very much to all of those atlasers who sent in ideas for the logo.

NY Natural History Conference

The New York Natural History Conference IV is scheduled for April 24-27, 1995 at the state museum in Albany. We plan to be there to present a poster on the Atlas. We invite you all to stop by for a chat.

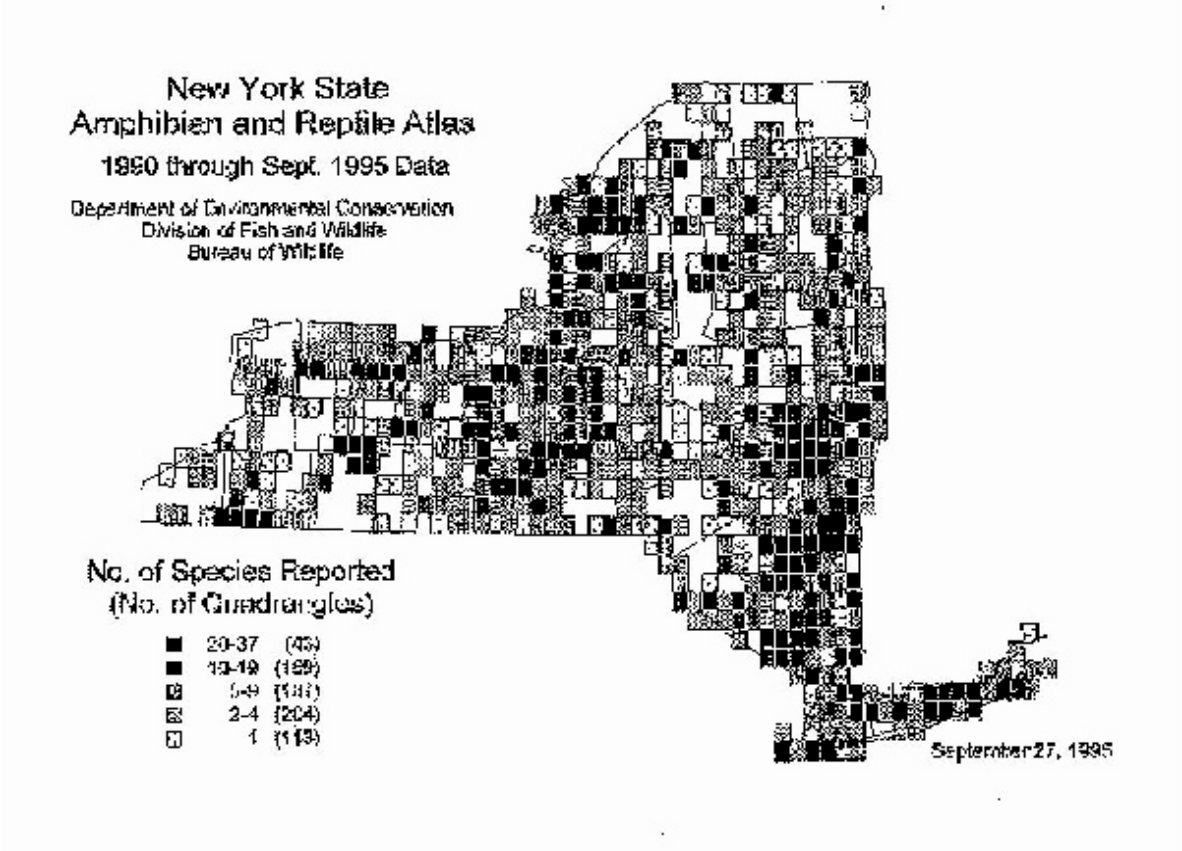
Top Atlaser Identified

A report produced in the spring of 1995 listed the number of survey cards that have been submitted by each of the volunteers. We learned that Rich Kelly of New Hyde Park has

submitted about 175 survey cards. This is the most cards submitted by any non-DEC volunteer. Here's a quick biography on Rich.

Rich Kelly grew up in New Hyde Park (Nassau County) and currently lives there with his wife Pat and son Brian. After graduating from Shalmut High School in Mineola he went on to study Economics and Business at Hofstra University. He currently works for NYNEX, forecasting telephone lines in Manhattan. While at Hofstra, Rich took a class in ornithology with Paul Buckley. Observing birds and butterflies are two of his hobbies, along with looking for herps. His primary interest, however, is studying and collecting shells. He reports having a collection of over 3,600 species of marine shells from North America and Hawaii, as well as a couple hundred species of land shells from North America.

Rich's herping experience began when he found a hatchling snapping turtle on a trip to Maine when he was a child. He continued this hobby through boy scouting and later in life through friends who shared his interest. Al Lindberg of Muttontown Preserve first introduced Rich to the Amphibian & Reptile Atlas Project. How does Rich manage to submit so many survey cards? "PPerseverancequot; he says. His favorite spot to look for wildlife is Pound Ridge in Westchester County.



The New Map is Here

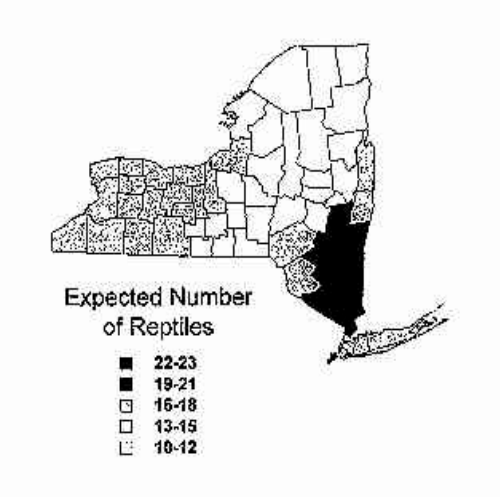
The map on this page shows that we've made significant progress in 1995. So far this year we've added 4,000 species records to the database, but that falls well short of the 10,000 records we had hoped to get. There is still time to submit your records if you've been hoarding them; please do this as soon as possible.

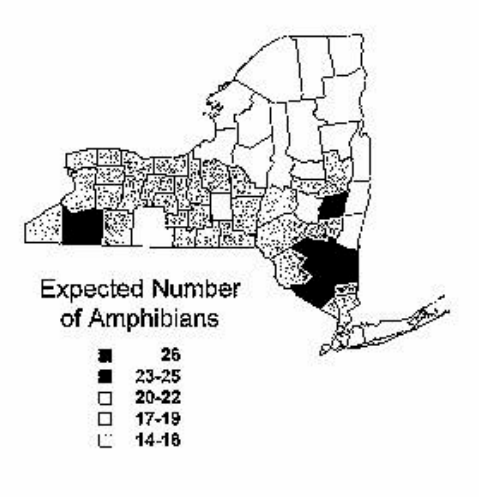
We now have at least one species reported from 72% of the atlas blocks. But what that means is that for 279 blocks no one has submitted a report even for the most common species. No bullfrogs, green frogs or spring peepers? No garter snakes, painted turtles or snapping turtles? It shouldn't take much effort to get 5 species in every block. By next spring we will have a more complete status report available for every atlaser so that you can quickly see where the gaps are, and then get out there and start filling them.

Many atlasers have asked what is "completing a block." To date, the block with the most species is the Rosendale Quadrangle in Ulster County with 37 species. Even there we believe additional effort will result in finding a few more species. But we expect different parts of the state to have different numbers of species. Long Island has several species not found elsewhere in the state, but overall it has a low species diversity. The Adirondacks, Tug Hill and the St. Lawrence River Valley also have a low diversity. The lower Hudson River Valley and the Alleganies have the richest herpetofauna in the state. In very general terms the expected number of amphibians and reptiles for each county are depicted on the following two maps. Individual atlas quads are expected to have slightly fewer species, but lets work toward "completing" blocks by recording at least 80% of the expected number.

We have four more years to reach this goal. Just because the weather is getting cooler doesn't mean we have to stop looking for herps and wait for next spring; there are records in the database for every month of the year. Following a warm, late October rain a group of us atlased 16 species during a 2 hour search. Another time we had a warm rain the last week of December and found green frogs and bullfrogs on the road. And my daughters came inside last January to tell me the spring peepers were peeping! We had a lot of response this year when we "Focused on Frogs." There are still gaps, of course, but overall we have made real progress. In 1996 let's continue to work toward completing the frogs while we set additional goals. More on that in the next issue.

Completing a block... *these maps indicate how many species occur in each county. Our goal is to report 80% of the expected number.*





Winter Vacation: *A Look at Overwintering Herps*

Throughout autumn and into the first weeks of winter, we can readily observe the activities of wildlife around us as they respond to the cooler temperatures and shorter days. We are familiar with the activities of most mammals, but what happens to the turtles, snakes, salamanders, frogs and toads which we've been observing for the past months? How do they avoid the rigors of winter? Do they hibernate, or are they active beneath the ice on the pond and the frozen ground? The answers to these questions cover a wide variety of possibilities from true hibernation to no change in behavior at all.

As temperatures fall and days shorten, snakes move to sheltered areas such as rocky outcrops, quarries, mammal burrows or basements. Timber rattlesnakes, copperheads and black racers may hibernate together at historic den sites, along with an occasional milk snake. Once snakes arrive at the den they may linger for weeks, sitting in shallow retreats on cold days, emerging on warm days, and finally retreating deeply for an extended winter stay. Fissures extending deep into the ground at den sites provide protection from freezing temperatures. It is unknown just how deep various species of snakes go and what their activity level is during the winter. Water snakes normally spend the winter in the mud at the bottom of the pond or inside muskrat or beaver lodges.

Unlike snakes, a few turtles remain somewhat active through the winter. Painted turtles and snapping turtles can sometimes be seen through clear ice swimming or crawling on the bottom of the pond. Only very cold temperatures cause them to burrow into the soft mud on the bottom. Spotted turtles, on the other hand, are not seen very much from July through late March or early April. Their attempt to gain refuge from mid-summer heat seemingly

blends right into retreat from the cold in autumn and winter. Wood turtles hibernate communally in muddy stream bottoms, beneath trees whose roots have been exposed or in complexes of fallen trees along streams. Some turtle hatchlings spend the winter in the nest and emerge the following spring rather than in the fall. This may occur when the summer has been especially dry and the ground is very hard, or when nesting occurs later than usual.

Most amphibians spend the winter tucked safely underground, below the frost line. Green frogs and bullfrogs, however, use muddy pond or stream bottoms for winter protection. On warm winter days, though, they may be seen swimming beneath clear ice along with red-spotted newts. Newts remain active all winter, as do mudpuppies and hellbenders. The most fascinating cold weather adaptation occurs in spring peepers and treefrogs. These species spend the winter under the leaf litter, roots, rotting logs and bark on the surface of the forest floor where temperatures can drop to 10 to 15 degrees F! Spring peepers and treefrogs deal with this harsh environment by actually allowing their bodies to freeze. They are even able to freeze and thaw and freeze again, several times, without sustaining damage to their tissues. Peepers can do this because they have glucose in their system which acts as an antifreeze, protecting the cells from damage and limiting dehydration. Adult treefrogs have large amounts of glycerol in their blood, while juvenile treefrogs have both glycerol and glucose. Wood frogs are also capable of this freezing trick.

Now you know.... you CAN find herps in the dead of winter, if you just look. So, when the first frost comes (hasn't it already?!), and the snow begins to fly, don't put those herp survey cards away. Make sure you take them with you on those winter adventures and send us records year round! If you would like to read more, check the Stokes Nature Guide to Amphibians & Reptiles by Tom Tyning.

Acknowledgments

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This issue of the newsletter was printed courtesy of the Sabin Conservation Fund.

NYS Amphibian and Reptile Atlas Project
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ATLAS STAFF

Alvin R. Breisch	Atlas Administrator
John W. Ozard	Computer Systems Design
Kimberley C. Hunsinger	Atlas Coordinator
Alison Keeble-Preville	Data Control

Be A Recruiter

Do you know anyone who would like to be a volunteer for the Atlas? Your co-workers? Your scout troop? Your 4-H club? The folks at church? Your neighbors? Go ahead and talk it up. You already know how much fun it is and you are one of the best people to introduce the atlas to folks who don't know about it. Anyone can be a herp atlaser! Let us know if you need some new volunteer packets.
Good luck!

Herp Atlas Newsletter Spring 1995

Working Toward a Goal

The objective of the Amphibian and Reptile Atlas is to document the distribution of all species of amphibians and reptiles found in New York by 1999. This project began in 1990 as a mole salamander study. In that first year, the focus was on Ambystomid salamanders, but many volunteers indicated a willingness to contribute records for all species of herps. To date the atlas has almost 500 active volunteers and over 7,000 species records entered into the database. We also have a backlog of a couple thousand records to enter, primarily from 1990 and 1991 when we used a different report form.

Reports from 1990 to 1999 are considered to represent the current distribution of New York's amphibians and reptiles. We also are collecting records from before 1990 which will constitute the historic distribution. Historic records are being collected from museums, literature and unpublished field notes. If you have any pre-1990 records, please transfer them to herp cards and send them along to us.

If we are able to get complete coverage of the state, we will have reports from nearly 1,000 atlas blocks. To date, at least one report has been submitted from each of 599 blocks and one block has 33 species reported. We haven't yet set a reporting goal, but we expect 40 species to be reported from some blocks. Others, however, especially in the northern part of the state and Long Island, may only have 20 species. Some species are notably hard to find, such as the worm snake and the stinkpot, and therefore are rarely reported. To date, we have not received a single report of longtail salamander.

Focus on Frogs

Take a look at the maps below showing where spring peepers and wood frogs have been reported. Pretty surprising, isn't it, since these common species should be found in just about every town in the state! That's why we would like to ask you to give special attention to reporting these forgotten critters. This season, make it a point to locate all species of frogs, whether by seeing adults or tadpoles, hearing calls or finding egg masses. Also, be sure to keep a lookout for salamanders, turtles, snakes and lizards.

The Life of a Herp Atlas Card

What happens to your herp cards when you send them in? Survey cards are subjected to a series of steps to ensure that the records we accept are complete and accurate. The first step is proofreading. If all of the necessary information is not provided, we may contact the observer by telephone or letter. An observer may also be asked for more information if the species reported appears to be out of its normal range, or if it is a particularly rare species.

Next, the "detailed location," is used to locate the exact site of the observation on a map (we use and recommend DeLorme's New York State Atlas and Gazetteer). The proofreader makes sure that the town, county and quad have been filled in properly.

The card is then entered into the atlas computer database, a specialized program set up on FoxPro. This program allows us to store every piece of information on the card. This information can then be manipulated to produce a variety of interesting and informative reports.

When a thousand or so records have been added to the database, they are printed out. Each printout is then matched with the survey card from which the information came and corrections are made directly on the printout, which is then used to make corrections to the database. The herp survey card is then marked as having been double-checked and is stored in a permanent file.

Blue Card Blues

Just a reminder on the proper way to fill out herp cards. Some of the problem spots are:

Date and Observer: These 2 categories are sometimes not filled out, especially when an atlaser sends in several cards at once. Also, dates such as "Spring" or "August" do not provide enough information to be included in the database.

Town: Look closely at your gazeteer for town borders. The name appears in capital letters, while the various villages within the town appear in lowercase letters.

Quad: The atlas project is using the 7.5 minute topographic quadrangles as established by the U.S. Geologic Survey. Tiny tick marks (look closely!) on each page of the DeLorme atlas identify each quad. The name of the quad can be found by using the topo quad index (contact us if you need one).

Detailed Location: This field should describe an area in such a way that anyone can locate it on a map. Intersections of roads, bodies of water, mountains and villages work the best. Good examples: "Route 14 between Route 357 and Willard School Road" or " south end of Bonner Lake (2 miles west of village of Fullerville)."

Verification Codes: There are *two* categories for verifying your herp record: (1) Method of Documentation and (2) Type of Evidence. Please be sure to include *at least one code* from each category.

Species: Only submit records for species that you can identify with 100% certainty. Each species should be recorded only once on any one card. Multiple individuals should be noted in the "Notes" section.

Keep those cards coming...the more the better!! Our goal for 1995 is to collect 10,000 records. If you would like extra copies of the volunteer instructions for yourself or for friends, please contact us.

1994 Interim Reports

The herp atlas staff was very busy early this year entering the data from your 1994 herp cards and compiling interim reports. We would now like to make this information available to you. Here's a run-down on what has been produced:

1. *Species Distribution Maps* - A New York map for each species indicates the blocks in which that species has been reported thus far. See the examples of species maps on page 1 and summary map on this page.
2. *Species Reported by County and Town* - This report lists which species have been reported in each town in New York. The towns are listed by the county in which they occur.
3. *Species Reported by County, Town and Quad* - A more specific version of the previous report, this report lists the species which have been reported in each quad in New York.

Do you wonder what species have been reported from the area in which you work? We will be glad to send you a report. This will guide you in filling in some of the blanks which have shown up on the map. Please send requests to: New York State Amphibian and Reptile Atlas Project, NYSDEC, Bureau of Wildlife, 625 Broadway, Albany, NY 12233-4754.

Thank You
by Al Breisch

We've grown a lot since 1990, but with very little funding. I'd like to take this opportunity to recognize all the folks who have helped out in this great effort.

Thanks to Gene McCaffrey who encouraged me to start the atlas without waiting for "official" approval, which got the ball rolling. The first two years, my daughters, Ariana and Kirstin helped with folding letters, stuffing envelopes and attaching address labels. John Ozard contributed his expertise to develop the computer database and to prepare progress reports. Mark Fitzsimmons reviewed and commented on the format of the survey cards and instructions to the volunteers.

Mary Bailey, Marla Briggs, Tammy Stalioritis, Lorraine Connor, Donna Dyer and Sandy Miller all assisted with data entry and proof reading records. Walt Sabin also did a lot of proof reading. For 3 months, Alison Preville was hired as a clerk and worked to get us caught up with the large backlog of survey cards. Kim Hunsinger has worked for a year keeping up with the day to day tasks of coordinating the atlas project.

Finally, grants from the U.S. Fish & Wildlife Service Federal Aid to Endangered Species have provided support for the atlas and this newsletter. But, most of all, we wouldn't have anything to report were it not for all of the enthusiastic volunteers submitting cards...*Thanks to everyone*!

NYS Amphibian and Reptile Atlas Project
NYSDEC
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