

# Protecting Lake Erie's Natural Heritage

<u>AN INTERVIEW WITH</u> <u>"THE SNAKE LADY"</u> Or, Frequently Asked Questions from the LEWS Study

Kristin Stanford, 24, is a graduate student at Northern Illinois University in the department of biological sciences. She is currently working on the LEWS telemetry study on Kelleys Island.

Q: Are you really "The Snake Lady?" A: That what I've been told!

Q: Who is this study being done for?

A: This project is supported by the U.S. Fish and Wildlife Service, the Ohio Department of Natural Resources, Division of Wildlife (DOW), and Northern Illinois University.

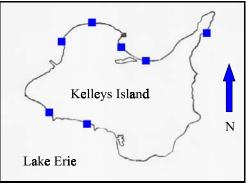
Q: How many snakes have transmitters, and where are these snakes at?

A: There are 20 snakes that have transmitters at several different locations on Kelleys Island (see map).

Q: What do the transmitters look like?

A: The transmitters resemble a large firecracker with a long antenna. They were surgically implanted by placing a small incision  $(\frac{1}{2}^{"}-1^{"})$  in the

abdomen of the snake and placing the transmitter just under the ribs. The antenna lies flat inside the snakes' body, just under the skin.



Snakes with transmitters are found at the marked locations.

Q: How long will you be doing this study? A: We will be monitoring the snakes' activity until they go into hibernation for the winter. Monitoring will then resume as they emerge from hibernation in the spring and through the summer. The project will hopefully continue through the spring of 2002.

Q: What do you hope to find from this study? A: The main goal of this study is to learn more about the water snakes' hibernation. This includes the location of these sites and other related infor-

mation concerning their entry into and waking from hibernation. This information will not be available until the fall. In the meantime, we hope to learn more about the snakes' daily/nightly activities and movement patterns during their active season.

Q: Is this going to be done on any other islands? A: In the next few years, similar work will be conducted on the three Bass islands.

Q: When you are tracking, how do you tell which snake is which?

A: Each transmitter emits a specific frequency and each snake has a unique transmitter. This allows us to decipher between the implanted snakes and specifically locate each one. However, if my implanted snake is lying together with several nonimplanted snakes, there is no easy way to tell which one has the transmitter.

Q: How many snakes are on the islands?

A: The population estimate in 1998 was 1,500 to 2,000 adult snakes on the Lake Erie islands, however we believe that the numbers are improving.

Q: Why do there seem to be so many snakes on the island?

A: Because of the snakes' semi-recent listing as a federally threatened species, people are becoming more aware of the snakes' presence and their protected status and are leaving them alone. It may also be a combination of an abundant food supply, plentiful shelter and hibernation sites, and mild weather.

Q: Why are the snakes state endangered and federally threatened?

A: It is important for people to understand that the world population of LEWS only occurs on 12 of the Western Lake Erie islands (8 U.S. and 4 Canadian islands) in an area less than 40 km in diameter. So on a geographic scale, this makes them very vulnerable to extinction because of their limited range. Decreases in adult populations over the last 20 years have occurred at several sites, especially on the Bass islands.

Q: Are LEWS poisonous? Do they bite? A: No, water snakes are not poisonous, but they do bite...and yes, it hurts!

Q: Why are some banded and some plain? Are they still the same kind of snake?

A: All the water snakes on the island are LEWS. They can be banded, unbanded, or an intermediate between the two extremes. The simplest way to explain the difference is to think of their patterns as being similar to our hair color or skin color.

Q: Do they lay eggs? How many babies do they have?

A: Water snakes give birth to live babies from late August to mid-September. The average number of offspring is around 30, but they can have up to 60!

Q: What do they eat?

A: The LEWS eats mostly fish and some amphibians.

Q: How did you get involved in this project?

A: My advisor, Richard B. King, has been working with the LEWS since 1980. He was contracted by the DOW to conduct this study. I am working on this project under a research assistantship for partial fulfillment of the requirements for the M.S. degree. However, my thesis will not be on the water snake.

Q: What are your career goals?

A: I hope to work for either the DOW or a state Department of Natural Resources as a wildlife biologist, however I am open to other options that may arise.

Q: Do you like Kelleys Island? A: Of course! Doesn't everyone?

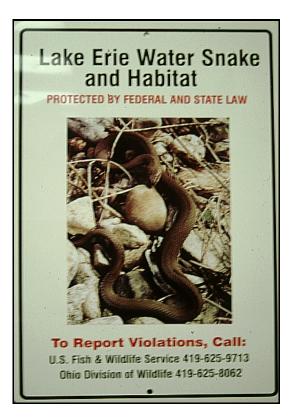


# October, 2000

### **NEW LAW ENFORCEMENT SIGNS**

Keep your eyes open for the latest edition to the Lake Erie water snake sign campaign... the law enforcement signs. Service employees spent several days in August meeting with island residents and hanging up the new signs. This new, larger sign, a counterpart to the very popular "Water snakes welcome here" sign, has the same picture but a different message. It reads, "Lake Erie water snake and Habitat Protected by Federal and State Law. To report violations, call: U.S. Fish and Wildlife Service (419) 625-9713 Division of Wildlife (419) 625-8062." The purpose of the new signs is to notify tourists, visitors, and others not familiar with island wildlife, that the snake is a protected species. The signs were strategically placed in areas that attract visitors, for example parks, boat docks, and ferry landings. If you notice that a sign has been tampered with or removed, please contact the U.S. Fish and Wildlife Service at (614) 469-6923.

> - Megan Sullivan, Wildlife Biologist, U.S. Fish and Wildlife Service



### ISLAND STUDENTS LEARNING ABOUT LAKE ERIE WATER SNAKE

Several years ago, the U.S. Fish and Wildlife Service and the ODNR Division of Wildlife sponsored a poster contest for all island students that generated quite a bit of interest in the Lake Erie water snake and its role in the heritage of the Islands and Lake Erie ecosystem. The contest attracted over 100 entries and revealed some terrific artistic talent of local young citizens. The winning poster design was used on the cover of a color poster and brochure as part of the water snake public education campaign. Another poster, using another of the winning poster designs from the competition, is currently being printed. Additional posters from the contest have been utilized in educational displays depicting the snake.

U.S. Fish and Wildlife Service and Division of Wildlife staff continue education efforts to inform island students and residents about the Lake Erie water snake. Last spring the two agencies sponsored a writing competition for island students. School-aged children from South Bass, Middle Bass, North Bass, and Kelleys islands could submit a poem or essay (or both) about the snake. Through this event, the wildlife agencies hoped to further provide a teaching mechanism for young island citizens to gain a better understanding and appreciation for the Lake Erie water snake and its historical and biological role in the lake's diverse aquatic environment. The competition was also a vehicle to increase exposure of talented young writers. All grades levels were eligible. Each essay could be no more than 250 words in length, poems no longer than 30 lines, and each had to have a central theme about the snake in its native environment of the Western Lake Erie islands. Seventeen entries were submitted: 8 essays and 9 poems. (Much of the participation came from Karen Wilhelm's fourth grade class at Put-In-Bay School.) Winners were recognized during an end-of-the-school year awards ceremony at the Put-In-Bay School May 25. North Bass students of Gwyn Addy also joined the assembly. One student from Kelleys

Island School won first place in both the poetry and essays categories. She was presented her plaques during a graduation/awards ceremony on Kelleys Island June 3. Besides the plaques, individual winners were also presented another item such as a book, hat, or canvas brief case. Every student who entered an essay or poem received a certificate of achievement, a pocket wildlife journal, and wildlife pencil. The agencies hope to incorporate some of the winning essays and poetry in future public education materials.

Winners of the writing competition are as follows:

#### Grades 3-5: Essay

1st Place: Nikolai Blumensaadt, Put-In-Bay School

2nd Place: Michael Glauser, Put-In-Bay School 3rd Place: Michael Overmyer, Put-In-Bay School 4th Place: Nate Seaber, Put-In-Bay School Honorable Mention: Jarred Dress, Put-In-Bay School

## Grades 3-5: Poetry

1st Place: Adam Bianchi, Put-In-Bay School 2nd Place: Robert Yelensky, North Bass School 3rd Place: Jacob Batt, Put-In-Bay School 4th Place: Jill Cerny, Put-In-Bay School Honorable Mention: Robert Courtney, North Bass School; Oliver Thwaite, Put-In-Bay School; Anna McCann, Put-In-Bay School

<u>Grades 6-8: Essay</u> 1st Place: Ashley Yelensky, North Bass School

<u>Grades 6-8: Poetry</u> 1st Place: Amanda Marez, North Bass School

<u>Grades 9-12: Essay and Poetry</u> 1st Place: Lindsay Van Orman, Kelleys Island School

-Melissa Hathaway, Ohio Division of Wildlife



# October, 2000



Several Lake Erie water snakes visit a snake sign at Stone Lab, Gibraltar Island. Photo: Dr. Jeffrey M. Reutter, Director, Stone Lab and Ohio Sea Grant.

## KNOW YOUR SNAKES

You're walking along and, suddenly, you are startled by a rustling in the brush near your feet. You get a glimpse of a slithering creature scurrying to escape harm and to avoid your seemingly huge foot. Was that critter a Lake Erie water snake or another type of snake? The Lake Erie islands are home to eight species of snakes, all non-poisonous, ranging from several inches to 5 feet! Each is unique in appearance, habitat, and lifestyle. Get to know the rest of your local reptiles with these brief species accounts...

Northern brown snake or DeKay's snake (Storeria dekayi dekayi) This small snake species is gray or brownish with two parallel rows of dark spots down its back. These snakes reach a maximum size of 15 inches. Brown snakes are usually found in moist areas and eat worms, slugs, snails, soft bodied insects, and small fish or frogs. If captured, these snakes do not bite, but secrete an

Northern ringneck snake (Diadophis punctatus edwardsii) The ringneck is a small snake, about 15 inches long. Its body is blueish-gray with a bright yellow or orange ring around its neck. These snakes are nocturnal and are commonly found on rocky wooded hillsides, forests, or grasslands. Ringnecks eat earthworms, salamanders, frogs, slugs, and lizards. They also secrete an odorous musk when captured. Ringnecks lay eggs in a communal nest in June or July, and the eggs hatch after 8 weeks.

Queen snake (Regina septemvittata) This slender, aquatic snake is dark brown or olive with a white or yellow stripe along the base of each side of its body. The queen snake is found in shallow and rocky streams, creeks, or wetlands and eats primarily soft shelled crayfish. Adults range from 15-24 inches, and females give birth to approximately a dozen young in late summer. These snakes are quick, and aggressive if handled.

**Eastern garter snake (Thamnophis sirtalis sirtalis)** This common snake has a dark body with three parallel, light colored lines. Melanistic (all black) specimens of the snake are also found on the islands. Garter snakes generally are 18-26 inches long, and inhabit moist areas. Garters eat frogs, toads, salamanders, earthworms, minnows, and mice. These snakes are easily tamed and commonly kept as pets. Females bear anywhere from 7-85 young between late June and August.

**Eastern hognose snake (Heterodon platyrhinos)** The hognose's most recognizable character-istic is the upturned snout used to dig up toads, its primary food. Coloration of the hognose is variable: yellow, tan, gray or reddish with squarish dark blotches on its back. These snakes are 20-30 inches long and are found in dry, sandy areas. When threatened, the non-poisonous hognose will coil, form a cobra-like hood, inflate its body, hiss, and strike–with its mouth closed! If it still feels threatened, the snake will "play

dead". Eggs are laid in June or July and hatch in August or September.

**Eastern fox snake (Elaphe vulpina gloydi)** This snake is hard to mistake with its yellow body covered in many large dark blotches. It ranges in size from 36-54 inches long. Fox snakes are found in prairies, farmlands, and wooded stream valleys. They eat meadow voles, mice, eggs, birds, and small rabbits. If startled, the snake will vibrate its tail in leaf litter, making a "rattling" noise, but will rarely bite. Female snakes lay 6-29 eggs in the summer which hatch in the fall.

**Blue racer (Coluber constrictor foxi)** Racers are pale blue with a greenish cast. They range from 36-60 inches in length. Racers are commonly found in grasslands, abandoned fields, and open woods. They eat large insects, amphibians, lizards, other snakes, rodents, and nestlings. Racers are quick, agile, and aggressive and will thrash and bite if handled. Ten to12 eggs are laid June through August and hatch in six to nine weeks.

For more information on snakes from this area, check your local library or these webpages: <u>http://www.dnr.state.oh.us/odnr/wildlife/</u> and <u>http://herps.ipfw.edu/center/accounts/snakes/hcs</u> <u>nakes.htm</u>

-Megan Sullivan, Wildlife Biologist, U.S. Fish and Wildlife Service



## POETRY AND ESSAY CONTEST WINNING ENTRIES

The next several pages are dedicated to the winners of the poetry and essay contest sponsored by the Division of Wildlife and U.S. Fish and Wildlife Service. Congratulations to all of our winners and participants!

# Save The Great Snakes

Everyone try to save our snakes! Please leave the snakes where you found them. The snakes are gray in color and grow to 1 1/2 to 3 1/2 feet in length. They are not poisonous. They live on the cliffs and rocky shore lines of lime stone islands. The snakes eat fish and amphibians. They can be found in western Lake Erie, the main land peninsula between Catawba and Marblehead, Ohio, and Point Pelee, Ontario. Many snakes are killed by people who think they are poisonous. When the Lake Erie water snake is added to the list of endangered species, a recovery plan will be made to help the snake survive. Public education programs will be made for awareness of the snake's endangerment. Please do not kill our water snakes. Please help prevent the extinction of the Lake Erie water snake.

> Nikolai Beumensaadt, Grade 4, Put-in-Bay School. Mrs. Karen Wilhelm, Teacher; Winner, Grade 3-5 essay contest

#### Save Our Water Snakes

I like snakes. These live in lakes. They like loose rocks. They swim by docks. They are gray. They like the bay. They're out late April. They don't like maple. They don't like maple. They don't eat guppies. They don't eat guppies. They on't eat guppies. They're dying out. Without a doubt. Save our snakes. In our lakes. Adam Bianchi, Gra

Adam Bianchi, Grade 3, Put-in-Bay School. Mrs. Karen Wilhelm, Teacher; Winner, Grade 3-5 poetry contest

#### **Endangered!**

The Lake Erie water snakes live on the Lake Erie Islands and on the shores of the mainland. They eat fish and frogs. They can grow to be three feet long. They can live for ten or more years. You can recognize them by their gray color. Some have darker gray or brown cross bands. They are pretty much the same color of the rocks.

They are endangered because people are killing them. There is no reason to kill them. They won't hurt you. People are scared of them, but the snakes are much more scared of people. Please don't kill them if you see them by your house. They were probably just looking for food, and they won't come close to you.

They have lived here longer than the people, so it's like we're living on their land. If you kill them the food chain will get messed up. The snakes are just misunderstood animals.

Ashley Yelensky, Grade 7, North Bass Elementary School. Ms. Gwen Addy, Teacher; Winner, Grade 6-8 essay contest

## Join Me

Please stop killing our water snake My gosh!...For Pete's sake!

Help keep the snakes alive..... Being misunderstood they will not survive.

The Lake Erie water snake doesn't bite I want to make a difference with all of my might.

I want to save them, you see, So will you please join me?

> Amanda Marez, Grade 8, North Bass Elementary School. Ms. Gwen Addy, Teacher; Winner, Grade 6-8 poetry contest

### The Lake Erie Water Snake Vacation

The sun sparkled on the lake so brightly that it almost hurt your eyes. The small waves lapped calmly on the little rocky beach. A tiny lump appeared on the crest of a wave which quickly broke it. A head poked up out of the water with its long slender body gliding behind.

Splash!!!

The little snake's world was violently thrashed about. A rock rippled over his small body causing him to submerge with fear.

"Stop! Stop it Chris!" A small burst of flame red hair screamed. The little girl flung herself at her older brother in desperation.

"Chill out, I'm just playing." The tall thin boy laughed as he continued to fling rocks in the direction of the water snake.

"Don't you know what that is?"

"A snake."

"No, it's not just a snake. It's a Lake Erie water snake." She said matter of factly.

"OOOOhh! Who told you that the lifeguard?" He laughed sarcastically.

"Very funny Chris, Kelleys Island doesn't have any lifeguards! Haven't you seen all the signs around, or read any of the brochures around here? Do you EVER read ANY books? The snakes are federally threatened stupid!"

"Wow, big deal!"

"Yea, it is a big deal. It's actually really cool. Your lucky enough to see one in person. Lake Erie is the only place you can find them. They live in rocky places around the islands. Most people only get to see them in books!"

"Really? Wow, I guess that is kind of cool! Hey, now I'll be able to go home and brag to all my friends! Ha, I bet they didn't see anything as cool as the Lake Erie water snake on their summer vacation. Thanks lil' sis. Sorry for messing around with the snake, I won't do it again."

> "Promise?" "Promise."

Lindsay E. Van Orman, Grade 11, Kelleys Island Local School. Mrs. Patricia Seeholzer, Teacher; Winner, Grades 9-12 essay contest

#### The Lake Erie Water Snake

The water snake carelessly slips between rocks; He glides with ease on the crest of each ripple; He seems so peaceful and perfectly placed in this wet and rocky habitat,

Yet without warning he is thrown into a spiral of fear, of destruction;

Everywhere he turns he is swallowed whole. His life, his fate, his entire being rests within the hands of those who have the power to annihilate. Help him, stop this! Lindsay E. Van Orman, Grade 11, Kelleys Island Local School. Mrs. Patricia Seeholzer, Teacher; Winner, Grades 9-12 poetry contest



## **SHARE YOUR STORIES!**

Thanks to LEWS News readers Dave and Barbara Nostrant for sending us this picture of a LEWS on Middle Bass Island. She's a beauty!



Have you had any funny or interesting experiences with the Lake Erie water snake that you would like to share? Have you taken any good pictures of the snake that you would like to see in the next issue of LEWS News? If you have a story or picture that you would like to share with our readers, please send it to:

LEWS News U.S. Fish and Wildlife Service 6950-H Americana Pkwy. Reynoldsburg, OH 43068-4127



Please include your name, address, and daytime phone number in case we have any questions. We are

looking forward to preparing the next issue of LEWS News, and we hope that you are looking forward to reading it!