



Meet the Nahant Marsh Summer Natural Resource Management Crew

By: Emily Young and Karri Folks

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www.nahantmarsh.org
Nahant Marsh Website:

- Educational information
- Photos
- Become a Member
- Marshy Facts
- Marshy Blog
- Calendar of Events
- This Newsletter
- Sign-up sheets for events
- And much more!!!

Each Summer Nahant hires on a summer natural resource management crew. This crew consists of crew leaders and conservation aides and is managed by Bob Bryant and Brian Ritter. The people working in the crew are a wide variety of people interested in wildlife conservation, environmental education, and natural resource management. This Year Nahant Marsh was fortunate to



2011 summer natural resource management crew (L→R: William Peek, Brandon Bleues, Lindsay Luloff, Brittany Ackerland, K.J. Rebarcek, Bon Bryant, Heather Arras)

have a Summer work crew consisting of 2 Crew Leaders and 4 crew members who will work closely with the Marsh on a variety of projects. The crew will be working on invasive

species control and removal, installing boundary signs, trail development and maintenance, timber stand improvement, flood clean-up, natural area inventories,

throughout the summer. Heather Arras (crew leader) will be keeping track of all the crew members projects and compiling results, Brandon Bluer (crew leader) will be working on

small mammal trapping as well as making carp exclusion fences, Lindsay Luloff will be working on wildlife photography, William Peek will be working on Sedge Identification in various location at the marsh, Brittany Ackerland will be trapping and identifying species of crayfish that live in the marsh, and K.J. Rebarcek will

assisting with research, beaver management, and some construction work. All of the crew have unique interest and special projects that they will be working on

be identifying different types of algae found at the marsh. Nahant Marsh appreciates and welcomes the summer work crew!!!

Plant of the season: Rattlesnake Master

(*Eryngium yuccifolium*)

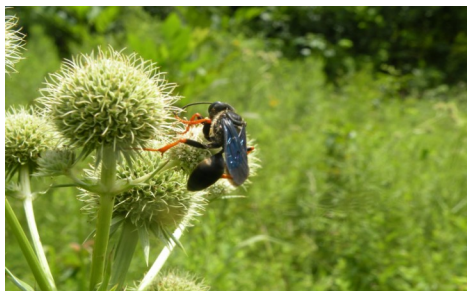
By: Karri Folks



The Rattlesnake Master gets its name because some Native Americans used its root as an antidote for rattlesnake venom. It is a warm-season perennial that is in bloom from June to September. The Rattlesnake master is often used for roadside plantings, prairie restoration, prairie landscaping, wildlife cover, and also in wildflower gardens because of its attractive appearance. The heads of the plant have a honey-like odor and grow 2 to 6 feet tall from a short, thick rootstock. The flowering heads attract many kinds of insects, including long-tongued bees, short-tongued bees, wasps, flies, butterflies, skippers, moths, and beetles.

These insects are attracted to nectar, although some of the bees may collect pollen. The coarse foliage and prickly balls of flowers are not popular as a source of food with mammals, although they have been known to nibble off the ends of the leaves.

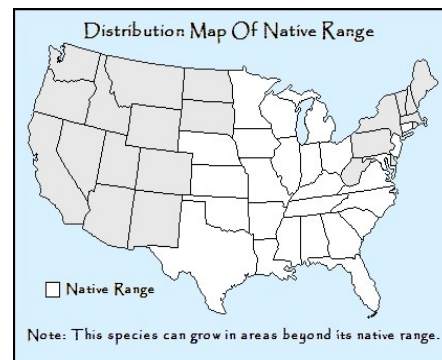
southeastern regions such as Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, South Carolina, Tennessee, Virginia and Texas (see map below). Habitats include moist to slightly dry black soil prairies, clay prairies, sand prairies, thickets, typical savannas, sandy savannas, and limestone. The Rattlesnake Master occurs in most of Illinois except for some western and southern counties (see map below)



Various insects enjoy Rattlesnake Master



A Monarch Butterfly visiting a Rattlesnake Master flower.



The Rattlesnake Master occurs throughout the United States in north-central regions such as Illinois, Iowa, Michigan, Ohio, Indiana, Kansas, Minnesota, Missouri, Oklahoma, and Wisconsin. It also occurs in

Interesting Facts:

This Rattlesnake Master is a member of the Carrot family.

The dried seed-heads of Rattlesnake Master were used in baby rattles by Native Americans.

The roots were thought to be an effective antidote to rattlesnake bite, this belief is incorrect.

Native Americans brewed a tea of the root to treat liver and bladder problems.

Rattlesnake Balm is made from the plants roots and used for soothing muscles, headaches,

Websites for more information:

<http://www.illinoiswildflowers.info/prairie/plantx/rattlesnake.htm>

<http://plants.usda.gov/factsheet/pdf/fseryu.pdf>

<http://www.minnesotawildflowers.info/flower/rattlesnake-master>



Mason Bee Hives

By: *Stephanie Townsend*



The Mason bee (*Osmia lignaria*) prefers to live in the hole of a wooden structure. These structures could be logs that beetles have already carved holes in or hives constructed by people. During spring is when the bees are most active. After mating with the female, the male dies. The female then locates a suitable burrow to start preparing to lay her eggs in. She will collect pollen all spring and fill the burrow with it. Once she collects enough, she lays her eggs in the burrow then seals it off with a “mud” that she produces. When she lays her eggs the female eggs are laid in the back of the burrow, while the male are laid in the front. Once hatched the feed on the pollen then begin to create cocoons. Meanwhile the adult female bee has moved on to another nest. Once springtime comes around again, the new bees hatch, males first. The males wait for the females to emerge from the burrow and the process starts all over again. (Bambara, 1997). As an independent project, I have built three Mason bee hives to set up in different locations around Nahant Marsh. The purpose of these hives is quite simple. Setting up a suitable habitat for the Mason bee (*Osmia lignaria*) will increase their population here. Mason bees (*Osmia lignaria*) are solitary bees but simi-

lar to the Honey bee (*Apis mellifera*) in the way that they are both excellent pollinators. I decided to work with Mason bees (*Osmia lignaria*) because they are less likely than a Honey bee (*Apis mellifera*) to sting, since they have no honey to protect. As Mason bees (*Osmia lignaria*) are such good pollinators they are known to greatly improve the growth of gardens, especially with flowered and/or fruit-bearing plants. Without insects such as these we would not be provided with such plentiful crops. By setting up these hives I hope to increase the number of Mason bees (*Osmia lignaria*) in the marsh, and in turn increase the production of fruits and flowers already found here at Nahant marsh. The natural prairies found in the marsh are filled with native flowers that would thrive from having these pollinators around. The hives I have constructed are made out of layered 2 X 4 boards, with four, 3/8 inch holes drilled into each layer. The layered 2 X 4 boards are framed in 1 X 6 boards on three sides. There is a slanted roof to protect the hives from the weather. I intend to wrap chicken wire around the whole hive to protect it from birds and squirrels disturbing the bees. Each drilled hole will be lined with wax paper. The wax paper is used to keep out mites and to provide easy

cleaning every season. It is important to clean the hives each season to keep bringing back healthy bees. If you do not clean the hive then mites may take over and even kill the bees. (Rosen, 2011) The hives will be set up in a few locations around the marsh, all facing the southeast. It is important to face them this direction because the bees are busiest during sunlight. Having the hives face this direction they will get the most sunlight they can during the day. After installing these hives I will check on them at the end of the summer season and at the beginning of next spring to insure that they are using the hives. After the first season of the Mason bees (*Osmia lignaria*) using the hives, I will compare the number of native flowers in the area surrounding the hives to the number of native flowers we have currently. If positive results are seen, then more hives could be installed or even installing different models of hives and comparing the production rates between the different models.

Websites For More Information:

-www.ces.ncsu.edu/depts/ent/notes/Other/note109/note109.html
 -www.masonbeevancouver.com/

Meet the Intern: Karri Folks

Hello everyone! I am Karri Folks, the new intern at Nahant Marsh Education Center. I am from Belleville, MI, a rural town near Ann Arbor, MI. I graduated high school in 2000, and attended Tuskegee University in Tuskegee, AL. I majored in Animal and Poultry Science and graduated with a Bachelors of Science degree in the summer of 2004. I decided I wanted to continue my education at Tuskegee and obtain a Masters of Science in Animal Science/ Molecular Immunogenetics. At Tuskegee my Masters Thesis research was studying the expression of cytochrome oxidase II in chickens fed a high fat diet. In my study I looked at the varying degrees of gene expression in chickens fed different diets and the development of the heart disease, atherosclerosis. I graduated with my Master's of science in the fall of 2007. After graduating I worked in a molecular imaging lab in at the University of Alabama, Birmingham as a research assistant.

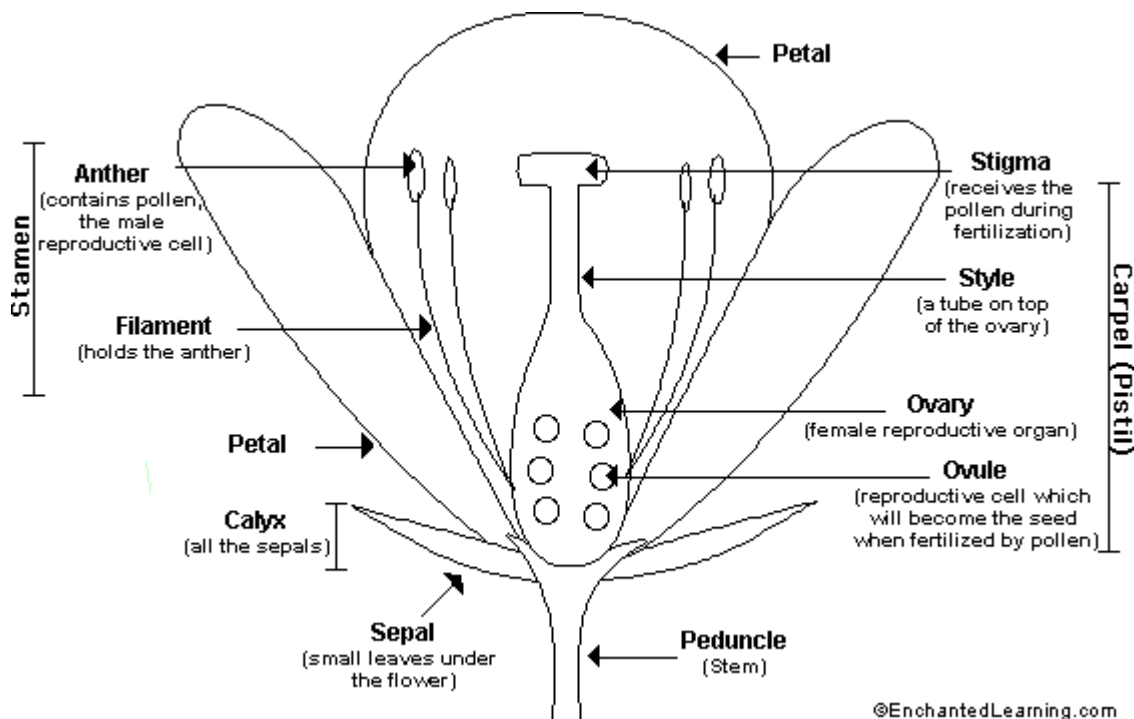


I am currently going into my second year as a graduate student at Western Illinois University in the Quad Cities. I am working on a Master's degree and the Post-Baccalaureate Certificate in Zoo and Aquarium Studies under Dr. Jeanette Thomas in Biology. My Master's research will be developing a booklet describing how to make various enrichment items for the animals at Niabi Zoo. My interests include traveling, taking care of my animals (my dog and hedgehog), since I am new to the area I like exploring Illinois and Iowa, visiting different Zoos and Aquariums in the local areas, and getting to know new friends. I am also an officer in the Aquaria Biology Zoology Society at WIU-QC, a WQPT-PBS College ambassador, and a senator in the Student Government

Association. I am hoping this internship will broaden my horizons in the areas of wildlife conservation and plant science as well as gain new perspectives in the area of science education. I am very grateful for the wonderful opportunity to work at the Marsh and look forward to meeting you all when you stop by!

Kids Corner!

Color Me!



Featured Bird: The American White Pelican (*Pelecanus erythrorhynchos*)

By: **Becky Horton**

The American White Pelican is one of the largest birds found in North America. It breeds inland and winters on the coast. It is usually found in shallow freshwater lakes, marshes, and wet prairies from the Mississippi River westward and from Manitoba, Canada down to the Mexico border during its breeding season. In the early Fall, it migrates to coastal lagoons for winter in California, Mexico, Florida, along the Gulf Coast and Central America.

When looking for an American White Pelican, you usually can find them by their large size. They stand at about 4 feet tall and have a wing span of about 9 feet. Adults are primarily white with black-edged wings that are only visible when the bird is flying, while juveniles have gray markings. They have large orange bills with an expandable pouch on the underside of the bill and short



Two American White Pelicans taking flight.
Source: <http://www.wildlifesouth.com/Locations/Florida/MerrittIsland.html>

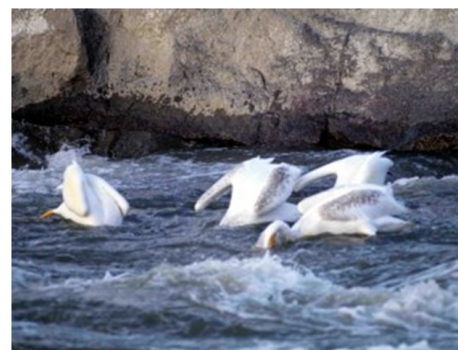
orange legs. In flight, they travel in a single line, with their heads upright.

Their primary food source is fish. They also eat crayfish, tadpoles, and salamanders. American White Pelicans are unique from their cousins, the Brown Pelican in that

they forage in groups and eat by dipping their heads in the water and scooping up fish in their large bills. The Brown Pelican dives for their food. The White Pelican usually forms a circle and swim inward forcing the fish to swim inward. They then simultaneously dip their heads in the water to catch the fish. They also form lines along the shore line and force the fish towards the shore to catch their prey. American White Pelicans can eat up to 3 pounds of fish per day.

American White Pelicans nest in colonies that are not prone to seasonal flooding. To build their nests, they sit in a small depression in the ground

and rake in soil, vegetation, and gravel with its bill. This builds a small wall around the nest. The females usually lay one to three eggs and both the male and female incubate the eggs using the webbing of their feet. In about a month the eggs will hatch. If the female lays more than one egg, only the strongest chick will survive since the other ones are not strong enough to compete for food. The chick's food consists of regurgitated food from the parent's bill pouch. When the chicks hatch, they are naked. Within 10 days, they are completely covered in white down feathers and by the time they are 17-28 days old, they leave their nest to join a pod of other pelican chicks. When the chicks are 10 weeks old, they leave the pod to live on their own.



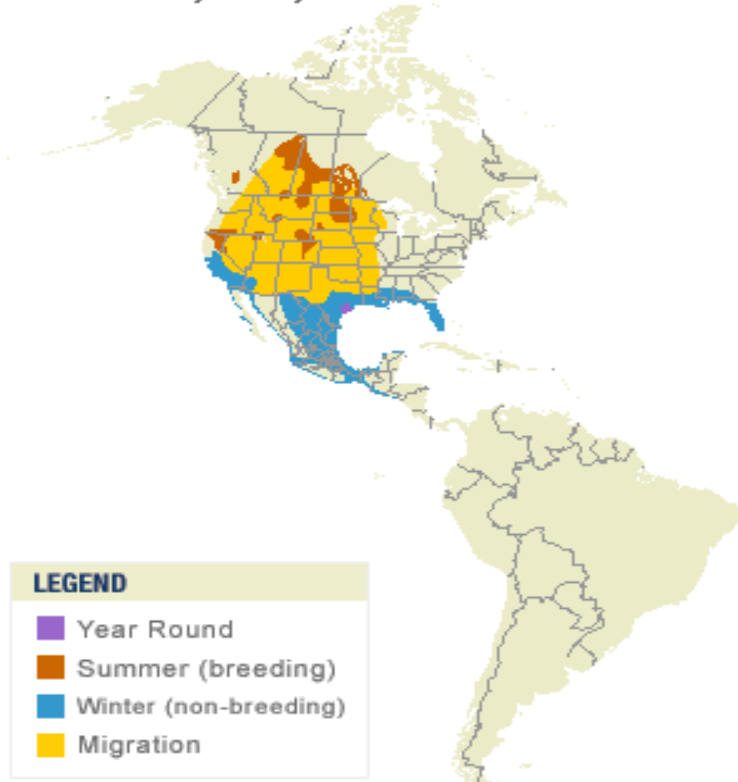
A group of American White Pelicans Eating.
Source: <http://www.perkypetwildbirdjournal.com/wild-bird/ny->

For more information, please go to:

http://www.allaboutbirds.org/guide/American_White_Pelican/lifehistory

<http://www.nhptv.org/natureworks/whitepelican>.

American White Pelican *Pelecanus erythrorhynchos*



LEGEND

- Year Round
- Summer (breeding)
- Winter (non-breeding)
- Migration

EICCD/ATEEC/Nahant Marsh

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Visit us on the web at:

www.nahantmarsh.org

Connecting People with Nature.



Nahant Marsh preserve is one of the largest urban wetlands on the Upper Mississippi River. It is comprised of marshy areas, mesic, wet, and sand prairie, and bottomland forest. A spring-fed quarry, known as Carp Lake, and the surrounding grounds, is part of the Nahant Marsh Preserve as well. Nahant Marsh was used for skeet and trap shooting from the 1960's to the 1990's. Because of the lead left behind, the marsh was declared an EPA Superfund site and was cleaned up in 1999. After that time, the site was declared a preserve and educational center. The building and 78 acres of land is owned and managed by the City of Davenport. The remaining land is held by the Nahant Board, a 501c3. The Educational programming is overseen by the Eastern Iowa Community College District. River Action, Inc. is also critical part of Nahant Marsh.

Getting to Nahant Marsh...

From Davenport, Iowa:

Take Highway 22 South and turn left on Wapello Avenue (last left turn before the I-280 overpass). Follow Wapello Avenue and you will see Nahant Marsh to your left, just before the railroad crossing.

From Illinois:

Take I-280 to Iowa and take the Highway 22/Rockingham Road Exit. Turn right onto highway 22 and right onto Wapello Avenue. Nahant Marsh is on the left, just before the railroad crossing

Summer Happenings at Nahant



March 14 –July 15, 2011
Nahant Marsh Photo Contest
Pictures need to be taken at Nahant Marsh and need to be submitted in a hard copy and a digital copy format.

June 20-23, 2011
EDIWILD
Monday-Thursday, All day
Nahant Marsh

July 11-15th, 2011
ISU Extension Day Camp
Monday-Friday, 8:00am-12:30

July 18-22, 2011
Junior Conservationist Day Camp for Kids
Monday-Friday, All Day
For children ages 8-12 years old
Nahant Marsh

August 8-12, 2011
Little Junior Conservationist Day Camp
Monday-Friday, 9:00am-11:30 am
For children ages 3-5 years old

August 13th, 2011
X-Stream Cleanup
Saturday, 9:00am-12p.m.
Nahant Marsh

Friends of Nahant Marsh
Friends of Nahant Marsh host a work day the first Saturday of every month from 9:00am to 12:00pm at the Nahant Marsh Education Center.
July 2, 2011
August 6, 2011

Volunteers are much needed and help for just an hour is valued!

For further information visit our website at www.nahantmarsh.org

