

The W.R.E.N.

Wapsi River Environmental News

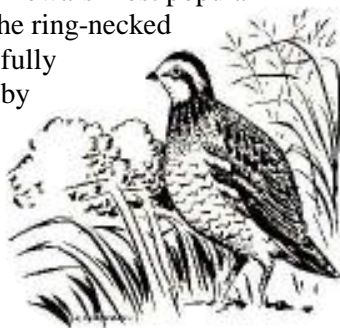
Fall 2002

Wapsi River Environmental Education Center

Wildlife Profile ~ Northern Bobwhite Quail

by Michael Granger, Naturalist

Let me introduce you to the northern bobwhite quail (*Colinus virginianus*), one of Iowa's most popular game birds, second only to the ring-necked pheasant. This small, beautifully colored bird may be located by its familiar "bob-white" whistle. The bobwhite's diverse habitat requirements, life history and their struggle for survival will truly win your heart.



The northern bobwhite belongs to the New World quails, which includes 33 species, most of which live in the western United States, but several tropical species are known. The group was once considered a subfamily of the pheasant family, *Phasianidae*, which included partridges, grouse, turkeys and pheasants. Recent scientific information has placed the New World quails in their own family – *Odontophoridae*.

The northern bobwhite is a typical quail species with a chunky body and short tail. The bird is described as being no larger than an eastern meadowlark. The body shape allows the bird to live in a variety of habitat cover types. Overall, the bird has a reddish-brown body and a gray tail. The underbody is pale and streaked with light stripes. Male bobwhite quail have a distinctive white throat patch and a white eye stripe. These markings are also present in the female, but buffy-yellow in color.

The bobwhite quail requires a diversity of grasslands, brushy fields, fencerows and cropland to meet the bird's many requirements. Where these habitat types meet, an

edge or transition area is present. As the percentage of edge areas increase in a region, the more attractive it will be to quail.

Grasslands, which include species such as bluegrass, brome grass, wild lespedeza, alfalfa and clover, provide food and cover. An abundance of insects and seed-bearing plants make short-grass fields bountiful food resource areas for nesting and raising young. Short-grass areas are preferred, for thick-matted grass habitats do not allow quail to move quickly, and tall-grass habitats do not allow quail to fly uninhibited when flushed.

Brushy fields and fencerows are necessary to provide protective shelter from enemies and severe weather. Osage orange, briars and overgrown weedy species provide ideal cover and allow for safe travel and refuge. Nest sites are often located 50 feet from a fencerow, allowing easy escape from predators.

Cropland also serves an important role in quail habitat. The bobwhite is primarily a seed-eating bird, and cropland areas provide important food resources, especially during the cold winter months. Where corn and soybeans are found, 60 percent of the diet may be made up of either of these crops.

The northern bobwhite quail usually lives no longer than one year, due to high mortality rates. Much of the year, from late summer to early spring, quail may be found in coveys. A typical covey is a grouping of 8-25 birds that forage, sleep and travel together. When the birds sleep, they will arrange themselves in a tight circle with their heads pointing out to watch for danger. It is also known

to be continued within this issue

WAPSI CENTER HAPPENINGS

by Bob Bryant
Director

Fiscal Year Attendance Record Set

Attendance for the 2002 fiscal year (July 1, 2001 - June 30, 2002) was approximately 32,541. This was an increase of 1,541 over the 2001 fiscal year. The increase in attendance was due to the increase in the number of school field trips.



Fall School Field Trips

It already appears we will have another busy fall. Quite a few schools have already scheduled their fall field trips. We encourage teachers to call early and take an active role in planning and conducting their field trip. The Wapsi Center has developed a field trip planner, which is very helpful in planning a field trip. If you are a teacher and want to schedule a field trip or get a copy of the field trip planner, give us a call at (563) 843-2855. Don't forget: *The Wapsi River Center is a place for all seasons.*

EDIWILD 2002 Teachers' Workshop, "Discovering our Biodiversity"

The EDIWILD (Educators in the Wild) Workshop (June 17-19) was sponsored by the following partnership: Wapsi River Center, Scott & Clinton County Conservation Boards, Nahant Marsh Educational Field Station, Putnam Museum and Scott and Clinton County Chapters of Pheasants Forever. The workshop used an interdisciplinary approach of teaching and emphasized local biodiversity to aid teachers in the incorporation of environmental education into the school curriculum.

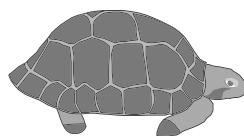


Thirty-nine teachers and environmental educators completed the workshop. Two hours of staff development or continuing education credit was available through Area Education Agency 9 and Drake University. The workshop is an annual event and will be offered again next year.

Wapsi Center Receives Donation From Marycrest International University

Marycrest International University, located in Davenport, IA, closed in May. We inquired about getting some of

the microscopes and dissecting scopes from their biology department for our aquatic lab. Most of the school's equipment and supplies were to be sold at public auction. However, since we were a public education facility and the equipment would continue to be used for local education, we were given the opportunity to select items from the science building that we could use. Not only did we get the microscopes and dissecting scopes, we also received lab chairs, metal storage cabinets, metal shelving, bookcases, base and wall cabinets, and a wide variety of lab equipment and supplies too numerous to mention.



Aquatic Lab Update

Last fall, the swimming pool was partially filled with lime to create a small frog pond with an island in the middle. We had a little leakage problem with the pond, but the leak was sealed off using a type of clay called bentonite. The water levels are holding steady now, and we have already got a variety of aquatic life showing up in the pond. The pond has already been used by some classes for pond studies. The island has been seeded with a wetland edge and wet prairie mix of forbes and grasses. The land next to the shallow end will also be seeded and landscaped with a small pool and waterfall. The pool and waterfall will be used to help circulate the water in the pond and to help maintain water levels.

The shower house will be converted into an aquatic lab. The items donated by Marycrest will go a long way in furnishing and equipping the aquatic lab. The Clinton County Conservation Board, as part of its annual financial commitment to the Wapsi Center, covered the cost of filling the pool and is helping set up the aquatic lab.

Wapsi River Center Looking To Fill Another AmeriCorps Position

The Wapsi Center has been notified it will have two full-time AmeriCorps positions instead of one. The AmeriCorps program runs 12 months, starting in September. Stephanie Byers, from Bettendorf, who was a summer intern at the Wapsi Center, will become the Center's AmeriCorps naturalist. The second position is for a naturalist/maintenance worker. Full-time AmeriCorps members receive a modest living allowance, health insurance, student loan deferment and receive a \$4,725 education award. There is no age limit. If you are interested in the naturalist/maintenance position or want more information, contact Bob Bryant at (563) 843-2855.



Ecology Day '02



Saturday, October 5 ~ 1:30 - 8:00 PM .

Wapsi River Environmental Education Center

Bring the whole family and take a step back into Iowa's past.

1:30-2:30 P.M. ~ *Historical Perspective of the Mississippi River* ~ Ron Deiss, speaker with the Army Corps of Engineers, will present a historical view of the river. His slide program and discussion will include photos from the famous Henry Bosse collection.

Children are invited to participate in some hands-on activities with Wapsi River Center naturalists during this discussion.

2:30-4:30 P.M. ~ *A Day in the Life of a Mountain Man* ~ Stan Bates will be depicting the lifestyle of an early 1800s mountain man. Participants will have the opportunity to tour his lodge, practice hatchet throwing and fire a flintlock muzzleloader.

2:30-4:30 P.M. ~ *The Lost and the Almost Lost* ~ Bob Bryant, Director of the Wapsi River Center, will present a program based on his series of articles being published in The W.R.E.N. The discussion will include excerpts from James Dinsmore's book, "A Country So Full of Game", and Bob's personal experiences. Mounted specimens and pelts will be available for observation during this program.

These are hour-long, concurrent sessions. Individuals can take part in both sessions, with each beginning at 2:30 and 3:30 P.M.

4:30-5:30 P.M. ~ *Prehistoric Indian Cultures in Iowa* ~ Bernie Peters, Vice-president of Quad City Archaeological Society, will present a slide show and discussion of the lifestyles, artifacts and culture of these ancient native peoples. Participants are invited and encouraged to bring any artifacts they might possess for identification.

5:30-7:00 P.M. ~ *Campfire Cooking* ~ Bring your appetite and enjoy supper cooked the old-fashioned way – over an open fire. This will be the last opportunity to purchase raffle tickets for the quilted, wallhanging of native Iowa birds. Drawing will be held at 7:00 P.M.

7:00-8:00 P.M. ~ *Program to be announced, watch local media.*

A great way to finish a day of environmental fun would be to participate in the Eastern Iowa Star Party's viewing.

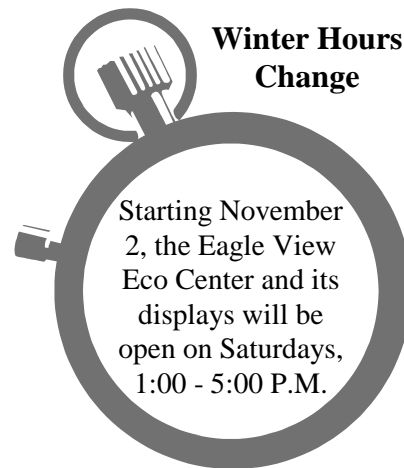
8:00-10:00 P.M. ~ The public is invited to the Eastern Iowa Star Party being held at the Monsignor Menke Observatory.

Fall Volunteer Workday



The fall volunteer workday is scheduled for Saturday, September 28, 9:00 A.M. - 3:00 P.M. For more details, see the calendar of events.

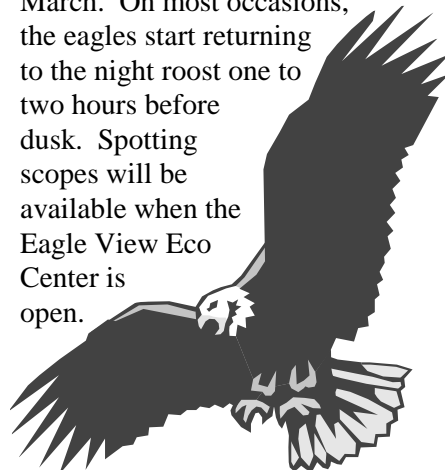
Winter Hours Change



Starting November 2, the Eagle View Eco Center and its displays will be open on Saturdays, 1:00 - 5:00 P.M.

Bald Eagle Viewing

Eagles have shown up in late November, but the best viewing has been December through early March. On most occasions, the eagles start returning to the night roost one to two hours before dusk. Spotting scopes will be available when the Eagle View Eco Center is open.



The Bog – Revisited

by Lisa Gerwulf, Assistant Naturalist



For those who recall the fall 2001 plant profile, I described the bog ecosystem and the ones found in Iowa. I was around the Forest City area in mid-April, and came across the signs for Pilot Knob State Preserve. I was in no hurry, so I began the trek to the preserve by

following a few winding, country roads.

I found the signs for Deadman's Lake and knew the bog was in the vicinity. First impressions can be very deceiving. What looked like a stagnant, rush- and cattail-infested puddle was actually, upon closer examination and the help of the DNR officer on duty, a 4-acre bog!

As I ventured out onto the spongy substrate, I recalled that the bog might have gone totally undetected if not for Grant and Thorne's study in the mid-1950s. I totally agree. Being accustomed to the bogs of Wisconsin and Minnesota, what I found at Pilot Knob was not what I expected. The water's color did have the characteristic trait of strong tea, but where was the lush mat of moss?

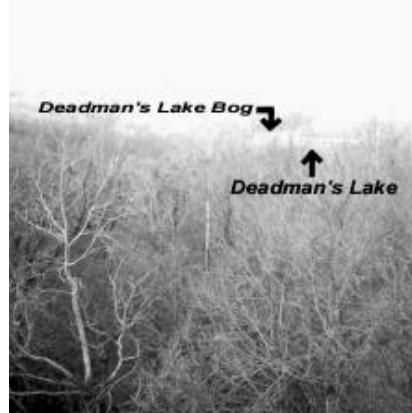
I don't know what I was thinking, expecting to see slender cotton grass or round-leaf sundew so early in the season. Both, I recalled, had been sighted at the bog,

according to Sylvan Runkel and Dean Roosa. I did come across what's been determined to be the shriveled remains of a skunk cabbage blossom. Pretty exciting! Especially since this ghost of a once lush and thriving ecosystem existed before Euro-American settlement.

Pilot Knob State Preserve is also home to a stone observation tower, reminiscent of the ones built by the Civilian Conservation Corps. The tower had two surveyor's markers embedded in the concrete surrounding the tower and boasted a magnificent view.



I was in the Pilot Knob area again in July, but was unable to visit. After looking back at the pictures in Wildflowers and Other Plants of Iowa Wetlands, I wish I



would have. I might have seen the rare but bog-prolific adder's tongue fern and a summer's growth of sphagnum moss. Ahh, what we do miss when we choose to travel the interstate instead of a winding, country road.

In Appreciation of Your Support of the Wapsi River Center

Erma Wiszmann

Brett Samuelson

Jean Wistedt

Connie Huber

Betty Hagge

April Kaisen

Dave Huber

Jeanne Bryant

Nancy Keiser

K.J. Rebarcak

Dottie Wala

Carl Gerwulf

Carol Rogers

Glenn Drowns

Mr. & Mrs. Larson

Stephanie Byers



Camp Conestoga

Mr. & Mrs. Kaufman

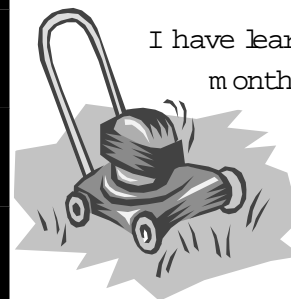
Scott County Pheasants Forever

Clinton County Pheasants Forever

Marycrest International University

Heib & Good-bye

Heib, everyone! My name is Stephanie Amussen. I filled the summer maintenance position at the Wapsi River Center towards the end of May. I am 16, reside in Donahue and have attended North Scott my whole life. Although I am leaving in August to go back to high school to finish my junior year, I plan to return next summer to continue the endless task of beautifying the Center.



I have learned so much these past months and have experienced so many new things that I am looking forward to the opportunities that lie ahead.

The Lost and Almost Lost

by Bob Bryant

Wapsi River E. E. Center, Director

Lost and Almost Lost is series of articles on Iowa's game animals and how they have fared during the settlement of Iowa. The series is based on "A Country So Full of Game" by James Dinsmore (1994). This book is a comprehensive history of the interaction of man with Iowa's wildlife. Find out what species of wildlife we have lost, what species we could lose, and what species were lost but reintroduced.

Most of the historic records of Iowa's wildlife pertained to the larger game animals, predators and furbearers. Very little documentation exists on the abundance and distribution of Iowa's smaller woodland wildlife species. This lack of written historic documentation is probably due to a variety of factors such as: lack of economic value, not being a game species, not considered a predator or pest, low abundance, being secretive or nocturnal species not readily seen, etc.



One of the smaller woodland game species with a fair amount of documentation is the ruff grouse. This native forest gamebird, preferring young deciduous forest and mixed hardwood, was found

throughout the state in the middle 1800s. Deforestation and grazing caused a dramatic decline in their distribution and numbers. By 1900, they were gone from southwest Iowa. In 1923, the state legislature closed the grouse season. By 1930, they were restricted to their present range in northeastern Iowa. A 1962 attempt to release ruff grouse into Shimek Forest, in southeast Iowa, was unsuccessful. Since then, ruff grouse from northeast and neighboring states have been successfully introduced into parts of south-central, southeast, north-central and east-central Iowa. One of the release sites was northwest of the Wapsi Center near Oxford Junction in 1987-88. In 1988, a friend of mine saw a grouse on two separate occasions at Sherman Park. I never did see one while I lived there. In 1990, we did jump some ruf grouse at the Wapsi Center, which is directly across the

river from Sherman Park. I have not seen one since. In 1968, a ruff grouse season was re-established in portions of northeast Iowa. Currently, ruff grouse hunting is still limited to that portion of the state.

One of Iowa's common furbearers at the time of settlement was the raccoon. The raccoon was not quite as important in the fur trade in the 1800s as it is now. Most of the early reports for raccoon come from trapping records. The raccoon is an omnivore (eats both plants and animals) that is very adaptable and has managed to maintain or increase its numbers in most areas. It remains one of Iowa's most common wildlife species and most sought-after furbearers.

Weasels (least, short-tailed and long-tailed) were frequently trapped in the 1800s, but little documentation exists on them as well. They tend to be shy and nocturnal. The weasel was considered a pest by many for their habit of raiding the chicken house and killing more than they could eat. The weasel population in Iowa has dropped mainly due to the decline in acreage and quality of forested areas. I have only been lucky enough to see two weasels at the Wapsi Center in eleven years, and have received several reports of sightings by hikers. This summer we did find a mummified, long-tailed weasel while cleaning out the pole building.

The opossum is among the few mammals increasing their numbers and expanding their range. Opossums, which are nocturnal, are found throughout Iowa, especially in woodlands and near streams. But you can find opossums just about everywhere, whether it's in the woods, open country or within the city limits. They are omnivores, eating just about anything.

Opossums are the only marsupials (pouched mammals) found in the United States. When the first European settlers came to North America, the opossum was found in what are now Central America, Mexico and the southeastern part of the United States. Since then, the opossum has been expanding their range to the north and west. By 1917, their range extended from New York over to northern Illinois and southwest to Texas. They have continued to expand their



to be continued within this issue ...



AUTUMN

September

4th ~ Trumpeter Swan Open House ~ 6:00 - 8:00 P.M. ~ Boock Farm ~ Join the Clinton County Conservation



Board for a quiet evening of waterfowl watching at Bob Boock's Nature's Acres Wildlife Refuge. Observe the six trumpeter swan cygnets that hatched in June. The birds will

be banded and trimmed by the DNR, in preparation for release next spring into the wild. This will also be a chance to observe the dozens of Canada geese and ducks, which make the Boock ponds their home. People are free to visit between 6:00 - 8:00 P.M. Bob Boock's farm is located 2 miles north of Wheatland on County Road Y32. The program is free and open to the public.

7th ~ Beautiful Butterflies ~ 10:00 A.M. ~ Wapsi River Center ~ Karen Beitzel, a local butterfly enthusiast, will share her knowledge about these beautiful insects and the lives they lead. If you have a butterfly net, please bring it, as equipment is limited.

7th ~ Star Party ~ Dusk ~ Sherman Park ~ Join the Quad Cities Astronomical Society at Sherman Park's north end to explore the night sky.

14th ~ Animal Tracking ~ 8:30 P.M. ~ West Lake Park, Park Terrace Campground (Gate #5) ~ By

looking at animal tracks, you can tell what animals live in your neck of the woods.

Join Michael Granger, Naturalist from the Wapsi River Center, for a lesson on animal tracks.



17th ~ Monarch Butterfly Tagging ~ 6:00 P.M. ~

Wapsi River Center ~ The monarch migration is in full swing and so is a national tagging program. The Clinton County Conservation Board tagged almost 100 monarchs



last year before the insects headed to Mexico for the winter. Come learn the ins and outs of tagging and then put your newfound knowledge to the test as you catch and tag some monarchs of your own. Please bring a net. There is a limited number of nets available.

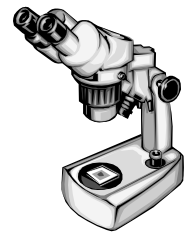
19th ~ Full-Moon Night Hike ~ 7:00 P.M. ~ Mockridge Preserve ~ Join a Clinton County naturalist for a moonlit



walk through this unique area. We will try owl calling, search for turkeys and seek some late wildflowers. Take Y44 north of Calamus, then take 215th Street west to 160th Avenue and turn north. Mockridge Preserve will be ¼ mile on the left.

21st ~ Microscopic Discoveries ~ 10:30 A.M. ~ Wapsi River Center ~ Join Bob Bryant, Director of the Wapsi

River Center, for a lesson on microscopic viewing. A butterfly's wing, a bird's feather and a leaf will be just some of the natural wonders to discover under a microscope. Since there is a limited number of microscopes, please call (563) 843-2855 in advance to register.



26th ~ Composting 101 ~ 6:30 P.M. ~ Clinton County Area Solid Waste Agency ~ Laura Liegois, Director of Operations and Education for the CCASWA, and Greg Wolf, Interpretive Naturalist for the Clinton County Conservation Board, will be hosting a composting program at the Recycling Center. Residents that attend the program will build their own worm bin that can fit under the kitchen sink (\$5 per bin). The bin will allow the worms to eat leftover kitchen scraps and turn them into rich compost. The Recycling Center (4286 220th Street) is located east of Elvira on County Road F12 and is 2 miles west of Clinton. Please call Greg at (563) 847-7202 by Friday, September 20, to register.

28th ~ Fall Volunteer Workday ~ 9:00 A.M. - 3:00

P.M. ~ Wapsi River Center ~ Help put a shine on the Wapsi River Center for fall field trips and the upcoming Ecology Day. The Wapsi Center staff will have a variety of tasks to suit all talents and skill levels. Tools and lunch will be provided. Please call (563) 843-2855 to volunteer.



28th & 29th ~ Hawk Watch ~ Effigy Mounds National Monument ~ These are two great days with live raptor presentations, hawk banding, observation areas, raptor ID, not to mention fantastic blufftop views of the Mississippi River, prehistoric Native American burial mounds and museum. All fees are waived for this weekend. Call Effigy Mounds at (563) 873-3491.

ACTIVITIES



30th ~ Calamus-Wheatland Invitational Cross-Country Meet ~ 5:00 P.M. ~ Wapsi River Center
~ The Wapsi River Center is the site for this annual high school event.

October

5th ~ Eleventh Annual Wapsi River Ecology Day ~ 1:30 - 8:00 P.M. ~ Wapsi River Center ~ Take a step into Iowa's historic past. The theme for this year's Ecology Day is "Discover Iowa's Past". Come join us for a wonderful learning experience for the whole family. See special section for more details.

5th ~ Clinton County Chapter of Pheasants Forever Banquet ~ 5:00 P.M. ~ The Millenium Ballroom ~ Pheasants Forever's Clinton County Chapter is holding its annual fund-raiser at the Millenium Ballroom in Goose Lake, IA. The group provides funds to local landowners and agencies for the establishment of wildlife habitat. Cost is \$40, which includes a one-year membership and dinner. Call John Clark at (563) 659-9571 for tickets.



5th ~ Eastern Iowa Star Party ~ 8:00 - 10:00 P.M. ~ Wapsi River Center ~ The Quad City Astronomical Society will hold its annual Eastern Iowa Star Party and invites the public to join them for a celestial celebration.

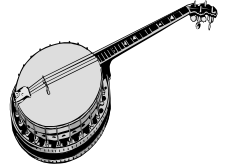
11th ~ Fall Colors Scenic Hike ~ 6:00 P.M. ~ Eden Valley Refuge ~ Hike the Blackridge Scenic Trail above Bear Creek in Eden Valley Refuge. We will be looking at forest changes and discovering why fall colors occur.



11th ~ Campfire Bonanza ~ 7:00 P.M. ~ Eden Valley Refuge ~ Join Naturalist Greg Wolf as he fills the night air with the sounds of laughter and music. Relax and have fun singing and telling stories as you settle around a roaring campfire. This event is geared towards the whole family.

12th ~ Eden Valley Bluegrass Jam ~ 1:00 - 9:00 P.M. ~ Eden Valley Refuge ~ It will be a toe-tapping time as musicians from the surrounding areas gather to bring the

bluegrass sound to listeners of all ages. The 20th Annual Bluegrass Jam will be held at the Eden Valley Refuge campground along Bear Creek. If inclement weather, the program will be held in the nature center. A potluck and chili dinner will start at 4:00 P.M.; bring table service and your lawn chair. This event is free and open to all. For more information, call Mary Benischek at (563) 391-0114.



13th ~ Blue Heron Fall Colors Eco-Cruise ~ 1:00 P.M. - Dusk ~ Rock Creek Marina ~ This will be the public's first opportunity to take an Eco-Cruise on the Blue Heron Pontoon Boat. We will run a cruise every



one and a half-hour until dusk. The trip will take passengers through the backwaters, side channels and the main Mississippi River channel in the Rock Creek area. You may call for reservations by October 10 at (563) 847-7202 for the 1:00, 2:30, 4:00 or

5:30 P.M. cruise. Persons without reservations may join the cruise as space allows. These cruises are offered free of charge; however, donations are welcome.

22nd ~ Hocus - Pocus Hike ~ 6:30 P.M. ~ Wapsi River Center ~ Come and enjoy a "spooktacular" night hike, exploring the origins, legends and myths of Halloween. Discover the truths about several misunderstood nocturnal creatures. Participants are asked to meet at Redtail Lodge.



24th ~ Spelunking ~ 6:30 P.M. ~ Eden Valley Refuge ~ Join a naturalist for an excursion into Werden's Cave. The Rocky Mountains, Mousetrap, Dragon's Tooth and the Popcorn Palace are among the sites and squeezes you can experience. Call (563) 847-7202 to reserve a hard hat.

November

2nd ~ Nahant Marsh Cleanup ~ 9:00 A.M. - Noon ~ Nahant Marsh ~ River Action and the Putnam Museum ask you to join local efforts at a cleanup at Nahant Marsh. Crews will be directed to points along the Concord and Wapello Avenues of entry to the newly developed Nahant Marsh



Educational Field Station. River Action will provide trash bags and gloves. The Field Station will be open to visitors from Noon - 2:30 P.M. Jennifer Anderson, Nahant Marsh Education Coordinator, will be on hand to provide information on educational opportunities available at Nahant Marsh. For more information about the cleanup, please call River Action at (563) 322-2969.

2nd ~ Star Party ~ Dusk ~ Sherman Park ~ Join the Quad City Astronomical Society at Sherman Park's north entrance and explore the night sky.

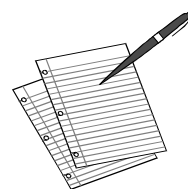
14th ~ Snowshoe-making Workshop ~ 6:30 P.M. ~ Wapsi River Center ~ Snowshoeing is a great way to get around in the winter. Whether you're a deer hunter or just want to escape the cabin, you will want a pair of handmade Ojibwa- or Alaskan-style snowshoes. We will walk you through the steps in crafting your own pair from a high-quality kit. Cost is \$73.00 per pair, bindings are \$25.00 per set. **Deadline for the snowshoe-kit orders is November 4; call (563) 847-7202 to order.**



16th ~ Homemade Bird Feeders ~ 12:30 P.M. ~ Wapsi River Center ~ Fall is a great time to get set up for winter feeding. Milk jugs, cartons and pop bottles will be magically transformed into useful feeders. Types of seeds, common winter inhabitants and homemade bird

treats will be discussed. Reserve your spot by November 13 by calling (563) 843-2855.

16th ~ Nature Writing & Journaling Workshop ~ 2:00 - 4:00 P.M. ~ Wapsi River Center ~ This workshop is designed for senior high school students and adults of all writing abilities. Joe Taylor, President/CEO for the Quad Cities Convention and Visitors Bureau, will facilitate the workshop. Participants will learn techniques for nature writing and journaling through hands-on writing exercises and explore the outdoors to gather information for nature writing. The workshop is free. Participants must provide notebooks, journals and pens. Please dress appropriately for the weather. Refreshments will follow the workshop. Pre-registration is required by calling the Wapsi River Center at (563) 843-2855.



December

1st ~ Christmas in the Village ~ Noon - 5:00 P.M. ~ Dan Nagle Walnut Grove Pioneer Village ~ Begin your holidays early with a historic walk through the beautifully decorated village. While there, make and take crafts, enjoy refreshments and visit with Santa. Admission is free!



The Lost and Almost Lost continued ...

range to the north and west and can be found in the more southern parts of Canada. They were introduced into California and are now found in Oregon, Washington and the southern part of British Columbia.

Dinsmore does not mention the opossum in his book, "A Country So Full of Game". Was the opossum not considered a game animal or furbearer and considered to have no value for its fur or food, or were there so few of them in Iowa in the 1800s? My dad was a hunter and trapper most of his life, and I remember him commenting how when he was a kid, he very seldom saw or got an opossum when he started hunting and trapping in the 1920s in northeast Missouri and southeast Iowa. By the time I started hunting and trapping with my dad in the early 1950s, opossums were commonly found, especially while coon hunting.

Another group not mentioned by Dinsmore is the tree squirrels. Four species of tree squirrels are found in Iowa. The eastern fox and the grey squirrel are found throughout the state. Both have adapted to Iowa's changing environment. The red squirrel is more of a

northern species, preferring pine and spruce forests, but will use mixed hardwood forests next to wetlands and along streams. The red squirrel has disappeared from Illinois, but still can be found in the northern half of Iowa. The flying squirrel needs a more mature mixed hardwood forest. As the acreage of mature forests has declined, so has the flying squirrel population. The grey squirrel has become very common in many towns, especially in city parks. Some rural areas are seeing a decline in fox squirrel populations and an increase in grey squirrels. This switch in species dominance has



taken place in certain areas of the Wapsi River Center. Some of you might be wondering about the black squirrels. They are the melanistic (black) phase of the grey squirrel.

Squirrel hunting continues to be a popular fall activity for both sport and food. The fox squirrel is the most commonly hunted. Flying squirrels are not considered a game animal or hunted.

In the next issue of The W.R.E.N., I will be writing about Iowa's prairie wildlife, starting with the buffalo.

Plant Profile ~ Arrowhead

by Greg Wolf, Naturalist

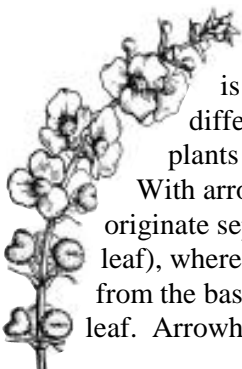
If you have ever looked at a pond or the edges of a river, a plant will stick out. The arrow-shaped leaves give this plant an interesting look. The arrowhead plant (*Sagittaria latifolia*) is a very common aquatic emergent that can be found all over North America. It has been an influential plant to the Native Americans, as well as the early pioneers. This member of the water plantain family (*Alismataceae*) is also a favorite in the wild edible community.



Arrowhead, also known as broadleaf arrowhead, Indian onion, duck potato, katniss, swamp potato, tule potato, tule root, wapattoo, waternut and white potato, is found all over the Midwest growing in shallow waters and saturated

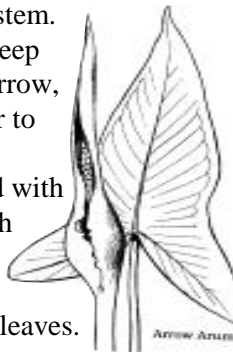
soils. So, a great place to look for them would be wetland bottoms, marshes, edges of ponds in shallow water, open bogs, wooded swamps, lake margins or in slow-moving streams.

The genus, *Sagittaria*, translated means "of an arrow" and the translation of the species, *latifolia*, means "wide leaf". These translations describe the plant well. Arrowhead has leaves averaging a foot long (2" to 16") and taking on the appearance of a wide, Y-shaped arrowhead on the top of a single long stem. The leaf is pointed at one end with a deep lobe at its base. Leaves can appear narrow, even grass-like. The leaves are similar to pickerel weed. A common mistake is



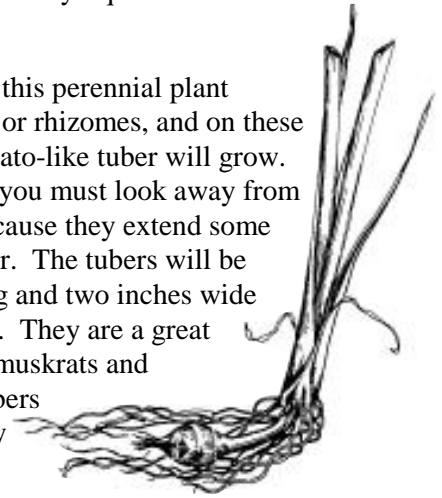
mixing arrowhead with arrow arum, which is poisonous. The difference between the plants is the veins in the leaves.

With arrow arum, the veins originate separately up the mid-vein (center of leaf), where the arrowhead, the veins originate from the base of leaf and fan out to the tip of the leaf. Arrowhead blooms from mid-July through



September. It has several clusters of three white flowers, arranged in whorls, placed upon a long naked stem. If stems are broken, a milky liquid will run from it.

The root system of this perennial plant consists of runners or rhizomes, and on these runners a white potato-like tuber will grow. To find the tubers, you must look away from the parent plant because they extend some distance underwater. The tubers will be about one-inch long and two inches wide and are great to eat. They are a great source of food for muskrats and waterfowl. The tubers are ready to pick by autumn time.



There are a few ways of preparing the arrowhead tubers to eat. The most common way is to boil them for about 15-30 minutes. Inside the tuber is a whitish-colored juice that tastes very bitter. By boiling, it takes that taste out of the tuber. Other ways of preparing them are to place them in an oven at 350 degrees for 30 minutes, roast them over a campfire for 15-30 minutes, or hung them to dry. **Here is a recipe to try:** Take one quart of tubers boiled and peeled. Add mayonnaise, a diced hard-boiled egg, onion and pickles to taste.

The arrowhead tuber was a staple for Native Americans to survive periods of harsh weather. The Native American women would harvest the tubers by entering the cold waters and supporting themselves by holding onto canoes. With their toes, the women would break loose the tubers; then the tubers would float to the surface of the water. The women would also take tubers from a muskrat cache (area for storing food), but would replace the stolen tubers with a more plentiful food. This replacing was done to avoid angering the power that oversees the welfare of the muskrat. Some tribes sliced the boiled tubers and strung the pieces on basswood cords to dry in the sun.

Lewis and Clark also utilized the tuber for food, along with other early pioneers. In Lewis and Clark's journal records, they referred to arrowhead tubers as "wapattoo".

to be continued within this issue ...

Kids' Corner:

This issue's Kids' Corner deals with terms used to describe the management of wildlife. Answers are found at bottom of page.

- | | |
|---------------------------------|---|
| a. conservation | — 1. unlimited harvest of wildlife for sale, now illegal (early 1800s) |
| b. preservation | — harvest |
| c. introduced/exotic species | — 2. animals which eat other animals to survive |
| d. market hunting | — 3. species protected by law which may be threatened with extinction |
| e. bag limits | — 4. food, water, shelter, space and arrangement |
| f. possession limit | — 5. wise use of resources |
| g. endangered/protected species | — 6. nonuse of resources (no hunting or development) |
| h. predators | — 7. removal of surplus wildlife |
| i. game | — 8. the time and the way in which wildlife may be harvested |
| j. habitat | — 9. wildlife harvest controlled by rules and regulations |
| k. refuges | — 10. wildlife hunted according to legal seasons and limits |
| l. season/methods | — 11. number of wildlife which may be taken in a day |
| m. harvest | — 12. number of wildlife which you may possess at any one time |
| n. regulated/sport hunting | — 13. areas managed to increase wildlife numbers |
| o. wildlife management | — 14. wildlife not native to an area/country |
| | — 15. science of helping the land produce and sustain healthy populations of wildlife |

Living Green.. by Renne Lietz

Globalwarming — we've all heard about it, the politicians' arguments about it, the theories, but what can we do about it?

The problem of globalwarming can be defined as an acceleration of a natural cycle. Our climate has gone through periods of globalwarming in approximately 80-90 year cycles. (Remember the heat wave of the 1930s?) This cycle has been earlier and warmer, due to excess carbon dioxide in the atmosphere released from burning fossil fuels such as gas, coal and oil. This carbon dioxide forms a "blanket" over our atmosphere, trapping heat energy from the sun closer to earth.

What can we do to help a truly "global" problem? Save energy! Starting with your car, make sure it is tuned up and running efficiently, and don't waste trips. Do you really need to go to the grocery store for just one item? Can you walk to the convenience store? Offer to share rides, rather than driving with just one person in the car.

Most of our electricity is generated and our homes heated by using fossil fuels. By making our homes more efficient (which saves us money!), we are releasing less carbon dioxide into the air. Most energy companies offer free audits of your home to show you ways to conserve. A good place to start is buying compact fluorescent light bulbs; they cost a little more, but burn longer with less energy usage. And turn off that light switch — the planet will thank you!



Wildlife Profile continued ...

that when the coveys of quail in an area suffer losses, the smaller coveys will join together.



In late March and early April, quail will pair up and begin nest construction. Quail nests consist of a grass-lined depression on the ground. Overhanging grass helps to conceal the nest. Egg production occurs several days after nest construction. A female quail will lay one egg each day until the clutch is complete. An average nest will contain 12-16, one-inch long eggs, off-white in color. When the final egg is laid, a 23-day incubation period begins. After incubation, all of the eggs will hatch on the same day. The quail is a "precocial" species, which means the young are fully independent when they hatch. Soon after hatching, the chicks leave the nest to forage with their parents. The chicks will be able to fly in 2 to 3 weeks. Recent findings show that female quail may have several broods in a season. A female may incubate the eggs on one nest or go select another mate and lay a second or third clutch of eggs. Male quail often assume the role of incubation and brood raising if the female leaves.

The distribution of the bobwhite in the United States is

east of the Rocky Mountains. Its range extends from Nebraska to Maine, south to Florida and west to include almost all of Texas. The state of Iowa lies on the northern edge of the bobwhite's range. The best quail habitat and largest populations are found in the two southern tiers of counties in Iowa. In the northern 3/4 of the state, the bird can be found where habitat conditions are ideal.

Bobwhite quail were originally uncommon on Iowa's vast prairie regions at the beginning of settlement. As the settlers changed the landscape, creating greater habitat diversity, quail numbers rose greatly. However, from the 1930s on, Iowa has experienced a gradual decline in the number of quail. Larger farm operations, fewer fencerows, the decrease in habitat diversity and severe winter weather are all issues the bobwhite quail will face in the future. It has been said that there will always be quail in Iowa, but their future will involve landowners providing adequate quail habitat as a part of their land management goals and practices.

Several practices may be done to increase quail habitat. Timber edge feathering involves cutting larger trees along the edge of woodland. This will begin the regrowth of brushy edge vegetation. Strip disking is done to break up sod areas to encourage the weedy growth desired by quail. The placement of carefully constructed brush piles (having a maze of cavities and escape routes within the structure) helps to provide hiding spaces from predators or refuge in bad weather. Standing corn and milo crops, with weedy undergrowth of foxtail and ragweed, will help quail survive harsh winter conditions. With proper planning and management, the northern bobwhite quail may become a more familiar sight in your area.

Plant Profile continued ...

"Wapato" was a common name used by many Native American tribes in the Midwest.

The Wapsipinicon River has much folklore surrounding how it received its name, but the more factual way is because of the arrowhead plant. A Native American named Wapsi-piniuk, which means "white potato", may be one source of the Wapsipinicon River's name – the reason being the plentiful supply of wapato (arrowhead plant) that

can be found along its banks.

The arrowhead plant is one of those aquatic plants that can be easily overlooked. It is a very important food plant for many wildlife species. Humans have learned to benefit from this plant as well. Arrowhead has influenced history with Lewis and Clark and Native Americans. The beauty of this plant can be shared by gazing at the wonderful flowers. If there is an opportunity to try arrowhead plant, I think you will be amazed.

WAPSI RIVER E. E. CENTER
31555 52ND AVENUE
DIXON, IA 52745
Tel: (563) 843-2855
Fax: (563) 843-2845

PRSRT STD
U.S. POSTAGE
PAID
DAVENPORT, IA 52801
PERMIT NO. 204



The Wapsi River Environmental Education Center is a joint project between the Scott and Clinton County Conservation Boards. "The W.R.E.N." is published quarterly by the Wapsi River Environmental Education Center and the Scott County Conservation Board.

Scott County Conservation Board

Members:

John "Skip" O'Donnell	Rich Mohr
Leone Bredbeck	Gene Weis
Carol Fennelly	

Director:

Roger Kean

Phone Numbers

Wapsi River Environmental Education Center
(563) 843-2855

Scott County Conservation Board
(563) 328-3281

Clinton County Conservation Board
(563) 847-7202

Wapsi River Environmental Education Center Staff

Scott County:

Bob Bryant, Director/Naturalist
Mike Granger, Naturalist
Lisa Gerwulf, Assistant Naturalist

Clinton County:

Mark Roberts, E. E. Coordinator
Greg Wolf, Interpretative Naturalist

Mailing List

If you would like to receive "The W.R.E.N." free of charge, please send a post card to the Wapsi River E. E. Center at the address above.

The Scott County Conservation Board in the provision of services and facilities to the public does not discriminate against anyone on the basis of race, color, sex, creed, national origin, age or handicap. If anyone believes they have been subject to discrimination, they may file a complaint alleging discrimination with either the Scott County Conservation Board or the Office of Equal Opportunity, U.S. Department of Interior, Washington D.C. 20240.