

The W.R.E.N.

WapsiRiver EnvironmentalNews Winter 2004

Scott: County Conservation Board's Environmental Education Newsletter

www.scottcountyiowa.com/conservation/wapsi.html

The Wapsi River Center is owned, managed and operated by the Scott County Conservation Board with programming and development assistance from the Clinton County Conservation Board.

Animal Profile ~ Gray Fox

by Michael Granger, Naturalist

Let me introduce you to a member of the dog family, which is like no other. While most people have seen a red fox, *Vulpes vulpes*, many are not familiar with the gray fox, *Urocyon cinerargenteus*. Both foxes are members of the canine family – Canidae.

The distribution of the gray fox covers the Northeast, Southeast and Southwest quarters of the United States. Due to their preference of warmer climates, the gray fox is also found in Mexico and Central America. The red fox, on the other hand, is well-adapted for colder climates and can be found not only within the range of the gray fox in the United States, but throughout Canada and as far north as Alaska.

To distinguish the two foxes in the field, one must observe their most striking difference, the color of their tails. While the red fox has a white-tipped tail, the gray fox has a black-tipped tail. This may be the only "tell-tail" sign for identification when you observe a small doglike animal disappearing into the roadside brush.

If you get a more substantial look at a gray fox, you'll notice that it is smaller than the red fox (often being described as similar to the size of a house cat). Thick black and white-banded guard hairs overlie a rusty brown undercoat, giving the fox the gray appearance of its pelt, for which the animal is named. Reddishbrown fur covers the sides of the neck, backs of the ears, underside of the tail and feet (the red fox has black fur on the feet). White fur covers the gray fox's neck generously, and is also found on the cheeks, belly and inside the ears.

All foxes have elliptical pupils, "cat eyes", which clue us in on their habits. Foxes generally are nocturnal animals. The gray fox is thought to be more nocturnal than the red, but they may be seen foraging during the day, if hunger drives them to do so. Gray foxes eat a variety of animals from mice, rabbits, snakes and birds. If you see a fox hunting, you will be amazed at its gracefulness. By walking on the tips of their toes, they seem to move effortlessly over the ground. Foxes may hunt by wriggling across the ground towards unsuspecting prey, and when within striking distance, the fox will rush and pounce, subduing the

prey. A fox may also catch prey by performing a whirling dance of stiff-legged, bounding leaps, striking the quarry with each pounce. Buried food caches are a sign of plentiful resources.

Gray foxes prefer deep woods and dense underbrush, but will hunt in open areas. Dens may be underground, in hollow logs, trees, under rock piles or rocky outcroppings. Mating occurs in February, and after a 53-day gestation period, 3-5 pups are born. After three months, the pups leave the den to hunt with their parents. The family will break up late summer, and the pups will be ready to start their own families the following spring.

Foxes have always been known for their elusiveness, doubling back on their trails, taking to water, hopping along fences and stone walls and going underground to elude capture. The gray fox has one more trick – they can climb trees. The gray fox has semi-retractable claws, which enable it to climb trees as well as a house cat. Often they will lie on a branch soaking up the warm sunshine. If chased, the gray fox will eventually escape up into a tree out of harm's way.

From the elliptical pupils, semi-retractable claws and elusive behavior, the gray fox acts more like a cat than a canine. One thing is for certain – foxes are survivors. Foxes, in general, have been persecuted for stealing an occasional chicken, and have long been terrorized with dogs and men on horseback in the name of sport. Today, to see a gray fox is a memorable experience. K.J. Rebarcak, a member of the Friends of the Wapsi Center volunteer group and an avid nature lover, recalls an animal she recently sighted while walking the trails at the Wapsi River Center: "...a doglike animal appeared in the middle of the trail, some fifty yards ahead of me. It was slightly larger than a cat, had a small pointed nose and sat and watched me as I walked closer to it. The animal had an overall dark gray color to it, and its bushy tail appeared to be black. Silently and quickly,

the animal ran into the bushes, not like a dog, but different – the animal seemed to flow off the trail, leaving no trace of its whereabouts."



Plant Profile ~ Osage Orange

by Lisa Gerwulf, Assistant Naturalist

What comes to mind as you read the following names: hedge, bois d'arc (wood of the bow), bodark, bowwood, rootwood, Naranjo chino, geelhout, hedge apple, horse apple, mock orange, Kansas orange, green brain, brain fruit, hedge ball, monkey ball, Irish snowball and American breadfruit?

It's quite possible that this myriad of names evokes fond memories of mock orange wars, rolling hedge apples into the street to see their sticky innards splattered upon vehicle impact, or dissected green brains lying about on foil trays. Or perhaps quail and pheasant hunting along "horse high, bull strong and hog tight" hedgerows or trying to lay a straight fence line with cockeyed hedge posts. The tales alone make this species a perfect profile candidate.

When dealing with this species, it truly is "all in the name". Osage is the name of the Native American tribe located in its native range. Orange is the color of the deep furrows in the bark, inner-bark, wood, twig pith, lenticels on twigs and papery skin on roots, not to mention the characteristic orange aroma of the fruit.

Here are the vital statistics on Osage orange (*Maclura pomifera*): A deciduous small tree or large shrub (depending on its surroundings) averaging 30 feet in height with a circumference of 4-7 feet (average 5.5 feet) and a crown spread up to 60 feet (average 25 feet). Rounded silhouette with gnarled branches that tend to zig-zag with sharp, stout thorns 0.5-1 inches long and a twisted, short trunk. It possesses a well-developed taproot, often

eaching depths of more than 27 feet! A lateral radius

of 14 feet is i possible when growing on shallow, fertile soils over limestone. It has alternating, lance-shaped leaves that are 2-5 inches long. The top is glossy, dark green, while the bottom is a dull, light green. The leaves turn bright yellow in the fall. The tree excretes a milky sap if the petiole (leaf stem) is torn. It's dioecious (seed-bearing flowers and pollen-bearing flowers are on separate plants). The female flowers are in dense, spherical heads about 1 inch in diameter, while the male flowers are racemes 1-1.5 inches long. These simple, green flowers bloom April through June.

Fruit of an Osage orange is classified as a drupe, or rather many small drupes compressed together. This multiple fruit is characteristic of the family – Moraceae. The convoluted, spherical fruit can grow to 8 inches in diameter (average 4-5 inches). The color ranges from dull, lime green to almost fluorescent chartreuse. The fruit develops September to October, stays on the tree long after the leaves have fallen and can often weigh over 2 pounds! When shipped as freight, the weighty fruits provided ballast for the steamships.

For human consumption, the fruit is non-edible for taste reasons only, since they are not poisonous. Squirrels (prize the seeds), deer (prefer tender twigs), rabbits, buffalo, horses, cattle (browse on leaves) and hogs are all known consumers. Cattle have been known to suffocate from a lodged fruit in the esophagus. Once the fruit freezes and thaws, the offensive taste disappears, and they become soft enough for a deer's mouth.

A single tree can produce 500-1,200 fruits and average 80 to a

bushel. When cut in half, a bitter, milky juice is evident and a pithy core, surrounded by up to 200 small seeds, can be seen. The seeds are almost 0.5 inch long and are covered by a shell. The number of hulled seed ranges from 7,000-16,000 (average 12,000-14,000) per pound. Gravity, water and animals disperse the seeds. Female trees begin seed production at age 10, with the optimal time at 25-65 years. They are wind-pollinated.

To obtain viable seed, the fruit is kept in a pile or barrel, allowing it to freeze and thaw over the winter months. If a barrel is used, the fruit is kept moist by letting 1-2 inches of water stand in the bottom. In the spring, the fruit is crushed and then mixed with water or wet sand to produce slurry that is then spread on prepared seedbeds or in shallow furrows. Seed will germinate promptly and will retain its viability for at least 3 years if stored in a sealed container at 41 degrees F. Osage orange will sprout vigorously from the stump and roots and can be propagated using stem or root cuttings. In fact, cuttings taken from the crown of mature trees produce thornless varieties (much sought after by landscapers). For an in-depth description of Osage orange propagation, check out "Planting the Osage" by Robert McMuririe or get your hands on the original "how-to manual" printed in 1850 by the Office of Agriculture.



The fruit of a female tree must be pollinated in order for the fruit to contain seeds. However, female trees often produce abundant seedless fruit when no male trees are nearby. This phenomenon is called parthenocarpy.

One cannot talk about the fruit of Osage orange without talking about its repellent properties. It appears (through both scientific and amateur studies) that the fruits will repel pests. Yes, the folklore of generations is true. Spiders and roaches top the list of those repelled. Others include crickets, fleas, boxelder bugs, ants and everyone's favorite – Asian lady beetles. Dr. Joel Coats and his assistant, Chris Peterson, have been researching the repellent qualities of Osage orange on German cockroaches at Iowa State University. To date, they are closer than ever to developing effective natural repellents from Osage orange extractions and are seeking patents. If you're still in doubt, you can always heft a fruit and squash the offending pest with it!

Let's take a look at the fruit from a different angle and consider it for its decorative purposes. Here's a "Stewart-ism" for you: try slicing the fruit with a serrated knife or fine-toothed hacksaw and drying them in a slow oven at 250 degrees F. for an hour. As the slices dry, mold them around a small ball of foil. The resulting green-edged, ruffled, dried fruit resemble a flower and make an interesting accompaniment to fall arrangements. Make sure to wear rubber gloves when working with the fruits; the milky juice can irritate the skin. Another crafty use is to place one of the fruits on or in a clay piece and fire to cone ten. The ash makes a beautiful glaze (a sunburst of red, gold and orange). Whole fruits have been painted gold and silver and added to holiday decorations as well.

Osage orange does best on rich, moist, well-drained bottomlands, but can live on alkaline, clayey, sandy and shallow soils overlaying limestone. It is very drought-tolerant and can tolerate extreme heat, as well as the occasional sub-zero cold spell. The tree will live 100-150 years. Remarkably, a dead tree will stand for a decade or more due to its decay-resistance and immunity to termites. Dead wood will even dull chainsaw blades!

Osage orange has been planted in the lower 48 states, naturalized in 39, but only native in 3 – Texas, Oklahoma and Arkansas. The largest example is found in Virginia. You might be wondering how the record-setting specimen ended up several hundred miles east of its original range? The explorations of Lewis and Clark are accredited for this feat. They sent fruit to Patrick Henry's daughter, who planted it at Red Hill.

Are you wondering if Osage orange can be found locally? That can be answered by a definitive, Yes! In fact, that's how this whole fact-finding mission started. I personally drive by seven on my way to and from work, five in Scott County and two in Clinton County. The best way to find this naturalized wonder is to take a "Sunday drive" on county gravel roads and look for well-grazed pastures. I'm sure you'll be able to find one.

Osage orange has been planted in greater numbers than almost any other tree species in North America, the reason being – it produces a workable living fence in 4-5 years! Considering that in the 1850s, seeds went for \$50 a bushel and contractors tended hedges for a dollar a mile, it was a valued and important component of a living fence. The living fences lead directly to the invention of barbed wire in 1874. This invention obviated the need for living fences, so then the wood became the source for most of the posts for the wire. Farmers stapled wire to the green posts because it was almost impossible to drive staples into the dried wood.

There were once estimated to be over 250,000 miles of Osage orange hedgerows, and considering most hedgerows stood about 40 feet tall and 30 to 40 feet across, they made quite an impressive barrier. In 1948, Kansas alone still had about 96,000 miles' worth. Clear-cut hedges, on a 10- to 16-year cycle, produced 4,000 posts per mile. About 3 million posts were sold annually in Kansas during the early 1970s.

Hedgerows became habitat islands for those creatures that prefer the forest to the prairie. They also provided habitat for many species that would not otherwise be found on the prairie and quite possibly became the only winter shelter available.

Presidents Theodore Roosevelt and Franklin D. Roosevelt encouraged the planting of Osage orange on treeless lands for posts and fuel, as well as stabilizing soils for erosion control. Osage orange is valuable firewood, rating almost as high as coal in heat production. The wood burns with a green flame and is unsuitable for fireplaces because of its constant spark emissions. Due to its regenerative properties and rapid growth, this renewable resource is a prime candidate for energy forests (lands set aside to grow wood repeatedly for home and industry heating).

The wood is so dense that a log will sink. Ironically, in 2000, a ship was constructed of Osage orange in Chestertown, MD. The wood has been used for ceremonial staffs, walking sticks, war clubs, police billy clubs, game calls, ballpoint and fountain pens, smoking pipes, artificial limbs, crutches, tree nails, knife and tool handles, insulator pins, "break away" pins for cultivators, machinery parts, pulley blocks, wagon parts (hubs, wheels, axles

and rims), railroad ties and even paver blocks for streets. Did you know that every town in the tree's original range has a street named Bois d'Arc? The "tone" of the wood has been said to rival rosewood for its acoustical value in making musical instruments such as harps, guitars and mandolins. Woodworkers marvel at its gemlike quality; however, metalworking tools are recommended. (Some gorgeous examples of woodworking can be found at the *Images* tab through the *Google* search engine on the Internet.) The most traditional use of the wood is for archery bows. At age 26, James Easter is an internationally sought bowmaker from Donnellson, Iowa. Check out his Web site www.osageorange.com to see some of his heirloom-quality craftsmanship.

Textile workers boil a brown-yellow dye from the sapwood, bark was used in making a khaki dye during W.W.I, root bark exudes a gold and yellow dye (which provided a base ingredient for green pigment) and chipped wood produced a brown pigment. Tannic acid, used in tanning leather, has long been extracted from the bark.

Osage orange has been used in strip-mine reclamation due to its ease in planting, tolerance of alkaline soil and resistance to drought. These qualities, plus rapid growth, long life and resistance to injury by ice, wind, insects and diseases, make Osage orange a valued landscape plant. Thornless, male varieties often called "White Shield" are sought-after in landscaping. A few sources of nursery stock follow: Arborvillage ~ P.O. Box 227 ~ Holt, MO 64049, www.spandlenurseries.com and www. wegrowit.com.

In the past, a root and water infusion was a remedy for sore eyes. Charles Goodnight, inventor of the chuck wagon, made a drink to cure gastric upsets caused by drinking alkaline water. In more recent years, an antibiotic compound has been isolated as a nontoxic food preservative as well as a non-toxic alternative to combating various fungal and bacterial infections.

From its archaic beginnings as a food source for super-sized creatures 100,000 years ago to its unending uniqueness and use, Osage orange has quite possibly made the ultimate contribution to our history and culture. In southeast Texas, there is an Osage orange called the Freedmen's Bois d'Arc. The year was 1865, and an unusual assembly gathered under its twisted boughs to announce the Emancipation Proclamation, which informed newly freed slaves of their rights and responsibilities as citizens.

Osage orange can invoke a love/hate relationship for many. Where one wishes to eradicate every last representative of the species because of the annual damage to tires, another takes a tongue-and-cheek approach to the same dilemma by trying to invent a "fix-a-flat" formula out of the fruit juice's rubber-like qualities. However you see it, Osage orange is truly a marvel of nature.



Wapsi Center Happenings

by Bob Bryant, Wapsi River Center Director

Fall Field Trip Attendance

The Wapsi River Center had its second busiest fall. Approximately 3,322 students, teachers and parents participated in 41 field trips this fall. This fall's near-record attendance was expected due to the attendance of two large schools, which hold their school's ecology day every other year. Attendance records indicate that the schools are spending a little more time than during past field trips.



If you are a teacher and would like to schedule a winter or spring field trip, we recommend that you call well in advance if possible. To set up a field trip, contact us at (563) 328-3286.

Don't let the cold and snow stop you from taking a field trip! The Wapsi River Center is a place for all seasons and offers numerous seasonal-oriented programs and activities.

Wapsi River Ecology Day

We lucked out again this year with great weather for Ecology Day. This was one of our better-attended Ecology Days, with 55 people participating. This year's theme was "Beginning Basics of Nature". The morning canoe trip on the Wapsi River, wild edibles, pond study and the evening hayride were very popular. The Quad Cities Astronomical Society's Eastern Iowa Star Party was held in conjunction with Ecology Day. Approximately 30 amateur astronomers attended the two-day star party.

Fall Volunteer Workday

The staff, Friends of the Wapsi Center and other volunteers went on the offensive to rid the Center of the autumn olive, a very invasive shrub. The Quad-City Times ran a very nice article with photos about autumn olive and the workday. We cleared 2 acres, which will eventually be planted to native prairie. The brush was chipped up and used to build up the archery range's backstop. There are still 15 to 20 acres of former

grassland to be cleared. Approximately half of that will have to be removed by heavy equipment.

Wapsi Center to Participate in United Neighbors AmeriCorps Program

The past two years the Scott County Conservation Board had been a member of the Eastern Iowa AmeriCorps program. Due to AmeriCorps budget cuts, the Eastern Iowa program was not funded. The Wapsi River Center had 2 full-time AmeriCorps naturalists last year and was to have two this year. The AmeriCorps naturalists assist with the Center's educational programming and maintenance. They played an instrumental role in the Center's increased educational programming and attendance in the last two years.

We are very fortunate to have the opportunity to become a part of the United Neighbors AmeriCorps program. However, we are currently only able to have 2 half-time positions. Staff-wise, this will be a step backwards, going from 2 full-time to 2 half-time. The Center's director and the Board's director are looking at options to help fund another part-time naturalist.

Center Gets Buffalo Display

The Thomas Proestler Company holds an annual golf tournament in memory of Mark McAndrews. We were very pleased to learn that the Wapsi River Center was selected to receive this year's memorial fund. One taxidermy mount the Center did not have was an American bison (buffalo). Through their donation, a



shouldermount bull buffalo is now on display in the main lobby of the Eagle View Eco Center. The Wapsi River Center would like to thank the Thomas Proestler Company and the Mark McAndrews Memorial Fund for their generous donation.

The Lost and Almost Lost

by Bob Bryant Wapsi River E. E. Center, Director

The Lost and Almost Lost is a 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.

The first bison came to North America from Asia, crossing the land bridge that once connected Siberia and Alaska approximately 25,000 years ago. These early bison were giant bison weighing up to 5,000 pounds, and sported horns up to 6 feet across. Over time, they evolved into the smaller, trimmer animals we are now familiar with. No one knows for sure how many bison there were when the first Europeans arrived. Most estimates put the number around 60 million.

In prehistoric times, the bison became the dominant animal on the North American continent and were part of one the largest communities of wild animals that the world had ever know. Bison were found throughout most of the contiguous 48 states. However, most the population was found between the Appalachian and Rocky Mountains and extended north into northern Canada and south into northern Mexico.

Historically, there were once four races of bison in North America. The Great Plains bison, which we are most familiar with, still exists in herds in some of our national parks, refuges, zoos, buffalo ranches, etc. They can weigh up to 2,000 pounds, chocolate brown in color and can stand 6 ft. tall at the shoulder hump. The wood bison of northern Canada still exists and is larger with the head placed higher on the shoulder. The pale mountain and the eastern bison are extinct. The pale mountain bison of Colorado was approximately the same size as the plains bison. The smaller eastern race, with a smaller hump and more blackish in color, was found in Maryland, Pennsylvania and Virginia.

The early French voyageurs saw in the bison something of the oxen of Europe. They called them *les boeufs*. This name easily became *buffle* to the English-speaking frontiersman, then *buffelo*, and finally *buffalo*. This was further enforced by the fact the great horned animals of Asia and Africa were already called buffalo. Buffalo is still the most commonly used name to this day.

During the 1700s, bison were still found across most of the continent except along the Atlantic coast. The early colonists saw bison as a source of food, leather, as well as a threat to crops. The eastern race of bison was not present in large numbers and could not withstand the gradual onslaught of civilization, which lead to their extinction. As settlers moved westward, they began to have more contact with the Great Plains bison which was associated with the tallgrass prairies and savannas of the Midwest. The numbers of bison gradually increased as they went west. In no way were these numbers of Great Plains bison near what would be encountered on the midshortgrass of the Great Plains. By 1814, the bison disappeared from Illinois. Numerous bison trails crisscrossed the prairies of Illinois. Best known were the trails from Vincennes, Indiana, which ran westward almost to the Mississippi River. Two bison killed in southwest Wisconsin in 1832 were probably the last bison east of the Mississippi River.

Missouri never had a very large bison population. By 1840, remnant populations remained in the southeastern and northwestern parts of the state and they soon disappeared. Missouri's more rugged terrain and forested areas are probably responsible for it having a smaller bison population than neighboring states, except for Arkansas.

Iowa, like Illinois, had bison throughout most of the state. The greatest numbers of Iowa's bison were found in the north-central and northwestern part of the state. Most of pre-settlement bison records in Iowa come from early explorers and military expeditions. Most of the early explorers followed the Missouri and Mississippi Rivers. The earliest Iowa record is of 400 animals near the Mississippi River in 1673.

The next installment of "The Lost and Almost Lost" will continue with the story of the bison in Iowa, on the Great Plains and the role three Iowans played in saving the American bison from extinction.





December

Cross-country Skiing and Snowshoeing ~ *As weather conditions allow, check the local media for cross-country skiing and snowshoe outings.*

6th ~ Brunch with the Birds ~ 9:00 A.M. ~ Wapsi River Center ~ Participants should dress for the weather



and bring binoculars as we venture out in search of the various birds inhabiting the Wapsi River Center's woodlands during the winter. Participants are asked to meet at the Eagle View Eco Center. Refreshments will be served after the hike. Pre-registration is required by calling (563) 328-3286.

6th, 7th & 8th ~ Park Closed ~ All Day ~ Scott County Park ~ Scott County Park will be closed for the controlled deer hunt.

12th ~ Snowmobile Safety Course ~ 4:00 - 8:00 P.M. ~ CCCB Headquarters, Grand Mound ~ It is required by law that anyone ages 12 through 17 must possess a Snowmobile Safety Certificate before operating a snowmobile on public lands or lands purchased with snowmobile registration funds. Participants MUST preregister for this course, preferably before December 6; contact John Hoker, Eastern Iowa Sno-riders, at (563) 374-1348 or Steve at (563) 374-3160.

13th ~ Bald Eagle Observation ~ 3:30 P.M. ~ Wapsi River Center ~ The Wapsi River Center's Eagle View Eco Center gets its name from the American bald eagles that congregate just outside the building on winter nights. There will be a slide show on the bald eagles while waiting for their arrival. People can sit inside in the warmth of the Eco Center, sipping hot chocolate (BYOM – Bring your own mug) and observing the eagles as they vie for position on the night roost.

18th ~ Bird Feeder Workshop ~ 7:00 P.M. ~ Soaring Eagle Nature Center ~ Construct various simple bird feeders and learn some of the best tips for feeding our feathered friends. Materials will be provided, offering you several design options. Kit choices will be supplied on a first-come, first-served basis. Preregister by calling (563) 242-9088

before December 15.

Winter

20th ~ Star Party ~ Dusk ~ Sherman Park ~ Join the Quad Cities Astronomical Society at Sherman Park's north end to explore the night sky.

26th - January 20th ~ Christmas Tree Recycling ~ Killdeer Recreation Area & Hagenson's Pond ~



Looking for an environmentally sound fate for your Christmas tree? Drop it off at Killdeer Recreation Area or Hagenson's Pond (located south of Folletts), and Clinton County Conservation will use it for fish habitat! Please, **no** wire, bases or flocked trees.

To be announced ~ Christmas Bird Counts ~ 6:00 A.M. - 6:00 P.M. ~ Mark your calendars, songbird enthusiasts! The Quad City Audubon Society conducts these yearly censuses to keep tabs on our feathered friends. If you are from the Lost Nation, Clinton, Quad Cities, Cordova, Andalusia or New Boston area and can help with any of these counts, either by joining a field party or watching your feeder, please call Kelly McKay at (309) 755-6731 or Tim Murphy at (309) 558-3721.

January

Cross-country Skiing and Snowshoeing ~ As weather conditions allow, check the local media for cross-country skiing and snowshoe outings.

3rd ~ Bald Eagle Watch ~ 8:00 A.M. - 4:00 P.M. ~ Clinton Community College ~ Speakers, exhibits and parking will be at the Clinton Community College. The exhibits and speakers will be there from 9:00 A.M. - 3:30 P.M. Courtesy transportation will be provided by MTA from the college to the viewing sites along the Mississippi River. Participants should dress for the weather and bring binoculars. For more information, call Jim Kelley at (815) 259-3628.

10th & 11th ~ Quad Cities Bald Eagle Days ~ The Quad Cities Conservation Alliance, Illinois Department of Natural Resources and Army Corps of Engineers are sponsoring this huge event. There will be a wildlife art show, information booths, and of course, viewing of our national bird, the American bald eagle. The event is held at the QCCA Expo Center at 2621 4th Avenue, Rock Island, from 10:00 A.M. - 7:00 P.M. on Saturday, January 10, and 10:00 A.M. - 5:00 P.M. on Sunday,

Events

January 11. Visit Us!!

15th ~ Cross-Country Ski Outing ~ 1:00 P.M. ~ Mockridge Preserve ~ Sign up to borrow the Clinton



County Conservation Board's equipment, or bring your own, for ski excursions around the wonders of Mockridge. Call (563) 847-7202 to register.

17th ~ 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) 328-3286.

22nd ~ Into Winter ~ 7:00 P.M. ~ Soaring Eagle
Nature Center ~ This public program will deal with
winter survival for plants and animals – including
humans. We will look at the methods nature uses and
learn how to apply them to ourselves to make the winter
a more comfortable and less restricting time of year.

24th ~ Ice Fishing Tournament ~ 7:00 A.M. - 2:00 P.M. ~ Rock Creek Marina and Campground ~ R&R Sports, Clinton Herald and Rock Creek Marina sponsor this great Mississippi River event. Cash prizes for biggest catches and many door prizes from local



merchants will be offered. Cost is \$22.00 per two-person team. An all-youcan-eat chili feast following fishing is included. Bait is available at the Camp

Store, as well as food, refreshments and licenses. Preregister by visiting or calling R&R Sports at (563) 243-4696.

7:00 - 8:00 A.M. ~ Registration 8:00 A.M. - 1:00 P.M. ~ Fishing 1:00 - 1:30 P.M. ~ Weigh In 1:30 - 2:00 P.M. ~ Prizes & Awards

24th ~ Cross-Country Ski Clinic ~ 9:00 A.M. - Noon ~ Eagle Point Park ~ Come out and enjoy a wintry day

with the family! An informational cross-country ski clinic will begin at 9:00 A.M. at the main lodge. Skis and snowshoes will be available for use from 10:30 A.M. - Noon. Eagle Point Park is located off Highway 67 and North 3rd Street at the north end of Clinton. Contact the Clinton County Conservation office to reserve a set of skis, (563) 847-7202.

31st ~ Snowshoe Tracking ~ 10:00 A.M. ~ Wapsi River Center ~ Join Mike Granger, Wapsi River Center Naturalist, as he takes participants on a stroll through the Wapsi woods. While making tracks of their own, via snowshoes, participants will have the opportunity to search for animal tracks and other signs of animal activity in this winter wonderland. BYOM

To be announced ~ Snowmobile Radar Run ~ Noon - 4:00 P.M. ~ Rock Creek Marina & Campground ~

The Scott County Sno-Seekers snowmobile club will once again hold this annual event on the backwater ice at Rock Creek Marina, ice permitting. Anyone is welcome to race their snowmobile against a radar gun. Minimum donation is \$1.00 per run, with all proceeds going to the Spina Bifida Foundation of Iowa. The club also holds a wheelie contest. Hot food, drinks and snacks will be available for purchase on-site. Spectators are welcome. Watch local media for details or call Cliff Voss at (563) 386-0419 for more information.

February



Cross-country Skiing and Snowshoeing ~ As weather conditions allow, check the local media for cross-country skiing and snowshoe outings.

7th & 8th ~ Winter Camp for Adults ~ 2:00 P.M. (Sat.) - 11:00 A.M. (Sun.) ~ Wapsi River Center ~ Camp is not just for kids anymore. Create your own camp memories and make some new friends that love the outdoors as much as you do! Some of the featured activities will include: night hike with owl calling, hayrack ride, music around the fireplace, live birds of prey, eagle watching, games, birding, reptile handling, snowshoeing *, crosscountry skiing * and astronomy * (* weather permitting). Cost is \$20.00

per person, which includes lodging in the Owl's Nest Dormitory and meals. Pre-registration is required; call (563) 847-7202.

10th ~ Birdhouse Workshop ~ 6:30 P.M. ~ Wapsi River Center ~ You can build your own bluebird, wren, bat, robin, kestrel or woodduck nest box from a kit to provide for wildlife in your world. You will also learn about placement and maintenance of the boxes. The kits will be available for a small donation to cover materials.



Fees are \$5.00 for a wren, robin or bluebird, \$7.00 for a bat house and \$20.00 for woodduck and kestrel boxes. You must call (563) 847-7202 before

February 6 to order your kits. BYOM

12th ~ Birdhouse Workshop ~ 6:30 P.M. ~ Soaring Eagle Nature Center ~ You can build your own bluebird wren bat robin kestrel or

bluebird, wren, bat, robin, kestrel or woodduck nest box from a kit to provide for wildlife in your world.



You will also learn about placement and maintenance of the boxes. The kits will be available for a small donation to cover materials. Fees are \$5.00 for a wren, robin or bluebird, \$7.00 for a bat house and \$20.00 for woodduck and kestrel boxes. You must call (563) 847-7202 before February 6 to order your kits. **BYOM**

19th ~ Into Winter ~ 6:30 P.M. ~ Wapsi River Center



~ This public program will deal with winter survival for plants and animals – including humans. We will look at the methods nature uses and learn how to apply them to ourselves to make the winter a more comfortable and less restricting time of year.

21st ~ Winter Fun Day ~ Wapsi River Center ~ Come to the Wapsi River Center for a fun-filled day of winter activities. This is an event the whole family can enjoy, so plan to come out and discover winter at its best. A limited number of skis and snowshoes are available, so please call to reserve equipment (563) 328-3286.

BYOM - Bring your own mug.

- * 9:00 A.M. ~ Cross-Country Ski Clinic ~ Bob Bryant, Wapsi River Center Director, will teach participants about proper skiing techniques, safety and equipment. Participants may bring their own equipment.
- * 12:30 P.M. ~ Snowshoe Nature Hike ~ Join Greg Wolf, Clinton County Naturalist, on this excursion into the Wapsi River Center's woodlands. We will be traveling the way of the Native Americans and

- early pioneers, looking for signs of life in the still, winter woods.
- * 2:00 P.M. ~ Family Dogsledding ~ Join naturalist Stephanie Byers for an introduction to family- and pet-friendly dogsledding. Bring your dogs, leashes, sleds, 10-ft. rope for each sled, kids and mugs for hot cocoa. We will supply sledding harnesses, doggy biscuits and hot drinks. Please call (563) 328-3286 to pre-register and wear warm clothes!
- * 3:30 P.M. ~ Bald Eagle Observation ~
 The Wapsi River Center's Eagle View Eco
 Center gets its name from the American
 bald eagles that congregate just outside the
 building on winter nights. There will be a slide show
 on the bald eagles while waiting for their arrival.
- * 5:30 P.M. ~ Supper ~ The Friends of the Wapsi Center, Inc. will be providing a hearty supper. Donations are accepted, so bring your own table setting and enjoy live music by Chuck Jacobsen.
- * 7:00 P.M. ~ Frostbite Star Party ~ Winter is a great time for astronomy. The sky is never clearer than on cold, sparkling winter nights. The winter constellations center around Orion, the Great Hunter. In the sword hanging from Orion's Belt, one can find the Orion Nebula, which is one of the most spectacular objects to be seen through a telescope. The St. Ambrose University's Menke Astronomical Observatory is the location; park in lot A.

26th ~ Night Hike ~ 6:30 P.M. ~ Soaring Eagle Nature Center ~ Owls should be hooting, since it is the heart of the breeding season. Join Greg Wolf, Clinton County Naturalist, to explore the sights and sounds of the winter night. Hot chocolate will be served in the Nature Barn following the hike – BYOM.

28th ~ Maple-Syruping Demonstration ~ 1:00 P.M. ~ Wapsi River Center ~ Join Tom Green as he discusses the history and procedure of tapping trees for syrup. Handouts and where to find tapping equipment will be provided to participants. Please call (563) 328 -3286, if you are interested in attending.

M arch

6th ~ Maple-Syruping

Demonstration ~ 1:00 P.M. ~ Wapsi

River Center ~ Due to the popularity of this program and nature's unpredictability, Tom Green will be conducting another maple-syruping demonstration. Please call (563) 328 -3286, if you are interested in attending.

W interSports

W apsiRiverE.E.Center

The Center's 1.5 miles of groomed crosscountry ski trails provide the perfect opportunity for wildlife viewing. Cross-country ski and snowshoe equipment is available during Center hours on Saturdays from 1-5 P.M., free of charge.

Scott County Park

The park's 4 miles of cross-country trails provide a journey rich in scenery. The trails are not groomed; however, they will be cleared of debris.

W estLakePark

Trails are open to cross-country skiing; however, they are not groomed. The park's four lakes are the perfect location for the ice-fishing enthusiast. Be sure to check ice conditions before venturing out!

Hello & Goodbye

4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4

For a little over a year, I've had the pleasure of working at the Wapsi River Environmental Education Center as a naturalist. I've enjoyed expanding my knowledge of the natural world, and trying to instill a sense of wonder and respect for nature in our young visitors. I've also appreciated the huge variety of projects, activities and strange tasks (such as being dispatched to Camp Conestoga to help fish a snake out of the latrine) I've been involved in as an employee at the Wapsi River Center. It's been neat coming in each morning wondering what surprises the day could present.

นี้ I'm moving on to a new job working with นี้ preschoolers at Madison Elementary in Davenport, นี้ but I hope to stay up-to-date on happenings at the นี้ Wapsi River Center and lend a hand when I can. นี้ Special thanks to everyone I've had the pleasure of นี้ working with or presenting a program for – I feel นี้ blessed to have met each one of you!

Danielle Schaffert

Living Green ... by Renne Lietz

Making your personal environment a little more "green" doesn't have to be a big deal this winter — doing a few little things can help.

- Timplify your gift shopping. Don't be misled by advertising and all the Christmas shopping pressures to buy more than you and your family really need. When shopping, look for the most eco-friendly packaging. Simple packaging that can be recycled is better than items that have several layers of cardboard and cellophane. Get a set of cloth or mesh bags (Wal*Mart, \$2.99) to take grocery shopping, so when they ask, "paper or plastic?", you can say, "reusable!"
- Don't hibernate during the winter! Turn off the television and bundle up the entire family for a walk. Nature provides plants and animals interesting to observe in any season. By wearing clothing in layers, we can be comfortable in most any weather. You will not only feel better, but studies show that exercise strengthens our immune systems to help us fight off

those nasty winter viruses!

- When the weather does turn cold, and you want to snuggle into your "nest", make sure the air in your "nest" is healthy! Radon is an odorless, colorless gas that is a by-product of sedimentary rock breaking down. If you live in an area with a lot of limestone, you should check your home. Radon test kits can be purchased at most hardware stores. An easy way to keep your home's air fresh is with houseplants. Easy to grow plants such as philodendron, Chinese evergreen and peace lily recycle the air in your home and add a touch of green during a long, cold winter.
- of If you want to ensure that we have a clean environment for the future, speak up! Iowa's caucus system is a very unique way for everyone to participate when it comes to choosing our country's leadership. Do your homework, read up on the candidates, listen to the debates, go to the local caucus of your choice and let your voice be heard.
- ₪ Have a safe and happy "green" holiday!

Volunteers Needed at Bald Eagle Days!!

The Quad City Bald Eagle Days at the Q.C.C.A. Expo Center is quickly approaching, and we need volunteers to help man the Wapsi River Center booth. Below is a list of times, how many individuals are needed and what day your assistance is needed. Call (563) 328-3286 to volunteer.

Saturday, January 10

9:30 - 11:00 A.M.	1 person
11 A.M 1:00 P.M.	2 people
1:00 - 3:00 P.M.	2 people
3:00 - 5:00 P.M.	2 people
5:00 - 7:00 P.M.	2 people



Sunday, January 11

9:30 - 11:00 A.M.	1 person
11 A.M 1:00 P.M.	2 people
1:00 - 3:00 P.M.	2 people
3:00 - 5:00 P.M.	2 people

Visit the WapsiRiver Center for all your Holiday Gift-Giving Needs!

The Wapsi River Center's gift shop has unique and practical gifts for the nature lovers on your list! How about a locally made sunflower seed birdfeeder in two convenient sizes? The small feeder is perfect for decks, patios, apartments or ♦ nursing home patrons. Rubbermaid birdfeeders are also ♦ available, as well as mailbox feeders. Paper maché statues. 🗣 of chickadees, bluebirds and wrens are so life-like you'll do a double-take. Birdhouses by the same artisan are also available. Stocking stuffers abound including: arrowheads, assorted squishy/stretchy/flying plastic creatures, sticker books, pencils, puzzles and bookmarks. Finder guide titles include: berry, flower, fern, track, tree, winter weed and winter tree. A beautiful variety of hand-painted paperweights, ornaments and flowerpots with local flora and fauna are also ♦ available. An assortment of candles and potpourri sachets in various scents can be found amongst the shelves. Osprey ♦ t-shirts are available in a variety of sizes. The gift shop also showcases embroidered pillowcases and flour-sack towels with butterfly, owl and bluebird motifs. That famous Scott County Park maple syrup is also on hand! For the college student, camper, backpacker or well-versed traveler we have the perfect gift - a wellstocked, compact, sturdy-cased first aid kit. Come check it out and bring your wish list! All

proceeds will benefit the Wapsi River Center.

~*****

In Appreciation of Your Support of the Wapsi River Center

Connie & Dave Huber CarlGerwulf Dottie & Jerry W ala Warren Wiese K.J.Rebarcak EmmaW iszmann Jerry Springer CarolRogers Terry & Toby Behrens Libby Platt M r.Treftz Jeanne Bryant Fullerton Lum ber Wilson Elementary Sudlow Intermediate Bettendorf Middle House 3 BettendorfM iddle House 4 North Scott Student Government MolliHermiston

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Kristy Carter
Kendra Suiter
Cortney Penel
Nick Dose
Jessi Z.
Mallory Dane
Dana Kirby

A bby Duax Brittney Fox

sm ell of cinnam on-laden pie or a steam ing bow lof stew to tantalize the nose. Now is a great tim e to experience the pungent scents of the season. With the help of an adult and the follow ing recipes, you're well on your way to som e great gift-giving projects.

The follow ing recipes include som e ingredients that can be found in your own backyard, w hile others can be found at hobby, arts & crafts, floral, grocery and health food stores. Each recipe also calls for a fixative. Fixatives are a key ingredient in potpourris because they absorb and retain the scented oils. If the fixative is om itted, the potpourriw ill quickly lose its fragrance. Orrisroot pow der, oakm oss and cellulose are commonly used fixatives that are readily available.

M aterials

Potpourri ingredients (according to recipe) Large, non-m etalm ixing bow l 🥻 N on m etalm ixing spoon Large brown paper bag Clothespins

- How to

 1. Before m ixing the dry ingredients, make sure that they have all been dried thoroughly. An oven set at a low tem perature (150 200 degrees F) and/or a food dehydrator work well for this. If the recipe calls for a fixative, set it aside and place the other dry ingredients into the large, non metalm ixing bow l.

 2. Sprinkle the fixative on top of the ingredients in the bow l. Then add the naturalor synthetic oil. Stir the ingredients thoroughly with the mixing spoon.

 3. Place the potpourri in the paper bag. Roup and seal the top of the bag with clothespins, then shake the contents well. tem perature (150 - 200 degrees F) and/or a

 - 3. Place the potpourri in the paper bag. Roll

**A Roll the excess air out of the bag and place it in a dark location. Shake the bag once a day for a week; then shake it once a week for five weeks. Remove the potpourri and display it in any attractive glass container.

**On a cold, w inter day, there is nothing like the smell of cinnam on-laden pie or a stoom in a

W inter W oods

3 cups balsam fir tips 1 cup rosebuds and petals 1/2 cup lavender blossom s 1/2 cup lem on or orange peel 1 teaspoon whole cloves 1 teaspoon whole allspice 1/2 cup oakm oss (fixative) 2 tablespoons orrisroot (fixative) Few drops balsam essential oil

Spicy Vanilla

1 cup star an ise 1 cup cinnam on stick pieces 1/2 cup nutm eq pieces 1 cup w hole cloves 1 cup sandalw ood pieces 2 vanilla beans, cut into pieces 1 cup dried white globe am aranth 1 cup dried pink globe am aranth 1 cup cellu lose fiber (fixative) 1 teaspoon natural vanilla oil



त्र प्रकार के प्रकार जिसे के प्रकार के प्

Forest Fantasy

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1 cup dried rose hips 1 cup dried pepperberries 1 cup dried rosem ary needles 1 cup dried white pinecone "petals" 1 cup dried lem on balm, cut into pieces 1 cup dried bee balm heads, broken into pieces 1 cup dried an ise hyssop heads, rem ove stem s 1 cup dried spruce needles, cut to ½ -in. lengths 1 cup dried pine needles, cut to ½-in. lengths Severalsmallsprigsdriedplumefern 1/2 cup cellu lose fiber (fixative) 20 drops of natural spruce oil

W inter W oods was taken from the book titled, Seasons of Giving. Spicy V anilla and Forest Fantasy were taken from the book titled, The Com plete Book of N ature Craft Techniques. Both can be found at your local library or

WAPSI RIVER E. E. CENTER 31555 52ND AVENUE DIXON, IA 52745

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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.

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

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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.

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