






Wildlife and Habitats

Most species of shokable non-migratory game have at least a fighting chance of being saved ... The same cannot be said ... of other wilderness game, or of migratory birds ... or predators ... or rare plants ... or in general all wild native forms which have only esthetic and scientific value to (people) ... Their continued existence is based on protection and a favorable (habitat) ...

~ Aldo Leopold

Why Care?

-  It is important to preserve a diversity of species because we don't know the benefits that each species contributes to the functioning of the environment.
-  Birding is the second most rapidly increasing recreational activity, adding significant dollars to local economies.
-  Hunting plays an important part in maintaining healthy wildlife populations.
-  Deer damage to cars and crops are increasing in cost each year.
-  Some exotic species outcompete native species and do not provide the same function that the native species performed in the environment.

The Basin is home to many native and non-native species of mammals, birds, fish, reptiles, insects, and amphibians. The Basin's habitats adequately support many native species. However, habitat loss or fragmentation from land use changes is having a serious impact on certain species. Some native plants and animals are also affected by exotic species - plants, animals, and insects that aren't native to the Basin or the state. Many exotics are out-competing native wildlife for food and habitat. Changes in habitat or species composition vibrate throughout the web-of-life because the web includes and touches everything and everyone.

Native Species ~ Birds

The Basin is part of an important migratory route for many birds coming up from Central and South America to nest in Wisconsin or passing through to the north. Some species migrate down to Wisconsin from the north, spending their winters here in Wisconsin.

Many birds, including Neo-tropical migrant birds, like the ruby-throated hummingbird and the Baltimore oriole migrate northward along the Rock River and its tributaries. The migration makes the Basin a bird watchers paradise, especially in spring and fall.

☆ For more information on birding see:
www.americanbirding.org/
www.horiconmarshbirdclub.com

At the Horicon Marsh, the largest fresh water cattail marsh in the United States, over 265 species of birds, including many rare and endangered species, have been identified. Horicon Marsh has been designated as a “Wetland of International Importance” and a “Globally Important Bird Area” because of its ecological significance. The large number of bird species in the Horicon area has prompted numerous birding-related recreational events to promote nature-based tourism. There are many other areas in our Basin with wonderful birding opportunities for local recreation use and economic promotion.

Many important wildlife areas in the Basin have been created and are managed by local governments or organizations. The Rose Lake Conservancy (Jefferson County) and the Madison Metropolitan Sewage District Wildlife Observation Area are just two of these important wildlife areas in the Basin. The Madison Metro Sewage District Wildlife Observation Area is also part of network of hundreds of acres managed by other groups, including the UW-Madison Arboretum. This allows wildlife and people to connect to other areas. In our Basin there are other areas that are valuable and a great experience to visit.

Since 1966, the USFWS has coordinated a breeding bird survey in the state. The Federal Breeding Bird Survey (BBS) is conducted by volunteers who survey specific routes in Wisconsin. There are seven routes in or crossing our Basin. Of the 140 species observed on these routes, one species is state endangered, four are state threatened, and 32 are species of ‘Special Concern’. Special Concern species are those species that some problem of abundance or distribution is suspected but not yet proved. The main purpose of this category is to focus attention on a species before they become threatened or endangered.

☆ For information on participating in bird surveys:
<http://cf.uwex.edu/ces/ag/birdwatch/>

Bird species such as eastern wild turkeys and trumpeter swans, absent here for many years, have been reintroduced into the Rock River Basin. While the eastern wild turkeys are flourishing in the basin, it’s too early to tell about trumpeter swans. In the case of turkeys, the reintroduction is providing wonderful hunting and wildlife viewing opportunities throughout the Basin.

A large number of areas in the Basin have the basic ecological ingredients to potentially provide habitat for many species of game birds such as ring-necked pheasant, eastern wild turkey, and songbirds. Studies conducted by State and Federal agencies of potential game bird restoration areas, found that almost all of the rural areas in the Basin have the potential to support many upland game birds. Many Basin townships have been designated as #1 priority areas for waterfowl habitat in North America under the North American Waterfowl Management Plan. Map 11 in the Land section shows the wetland areas drained in Dane County. The figure also indicates the environmentally suitable, potential wetland restoration sites in Dane County. Similar opportunities exist in the other Basin counties where wetlands have been drained. Many programs are available to landowners to help restore upland and wetland wildlife habitat on their land.

Many bird species, including some grassland birds, must have large expanses of their particular habitat to live and raise young. In fact, the general rule of thumb for management of grassland and forest birds is the larger the area the better. This shows the importance of private landowners cooperating together across their common property boundaries to create larger blocks of habitat.

Land protection efforts for these birds are most productive if concentrated in the largest, most contiguous areas of quality habitat. Quality habitat for grassland birds most often consists of undisturbed (idle) or lightly grazed grasslands. Many of the largest tracts of undisturbed grass occur on public lands in the Basin, such as in the Southern Kettle Moraine and several State Wildlife Areas. Map 14 shows areas in the Basin with the highest restoration potential for grassland/prairie bird habitat.

Other species of birds need deep woods - unbroken by roads or buildings. This type of habitat is vulnerable primarily because many people have a strong desire to live in the woods. Building in the middle of a wood lot is particularly detrimental. Building outside on the edge of the woods has much less impact on woodland inhabitants because this results in less edge. Edge is the border between two different habitat types, such as the shrub border between a woodlot and grassland; or the border between the lawn, crop field, or roadside and the beginning of the woods. Edge is where many bird predators and nest parasites lurk, like the brown-headed cowbird, which lays its eggs in the nests of other species. In addition, people’s coming and going

Map 14: Recommended Grassland Preservation Areas in the Rock River Basin

Please refer to the State of the Rock River Basin Report web page to view this map

State Lands in the Rock River Basin

State Land	County	Acres
Hampden Wetland Hunting Grounds	Columbia	227
Paradise Marsh Wildlife Area	Columbia	1,496
Columbus Wetland Public Hunting Grounds	Columbia	242
Glacial Habitat Restoration Area	Columbia/Dodge/Fond du Lac	3,568
Waunakee Marsh Wildlife Area	Dane	447
Cherokee Marsh Fishery Area	Dane	948
Deansville Wildlife Area	Dane	1,927
Lower Waubesa Wetland State Natural Area	Dane	299
Mud Lake Wildlife Area	Dane	4,533
Goose Lake Wildlife Area	Dane	2,277
Badfish Creek Wildlife Area	Dane	1,929
Anthony Branch Streambank Protection Area	Dane	480
Lower Mud Lake Fishery Area	Dane	292
Dorn Creek Fishery Area	Dane	114
Fox Lake Fishery Area	Dodge	464
Horicon Marsh Wildlife Area	Dodge	11,009
Westford Public Hunting Grounds	Dodge	682
Shaw Marsh	Dodge	903
Sinissippi Public Hunting Grounds	Dodge	344
Brandon Marsh Public Hunting Grounds	Fond du Lac	259
Waterloo Wildlife Area	Jefferson/Dodge	6,179
Arkin Marsh Public Hunting Grounds	Jefferson/Dodge	190
Jefferson Marsh Public Hunting Grounds	Jefferson	1,365
Rome Pond Wildlife Area	Jefferson	2,245
Koshkonong Marsh Wildlife Area	Jefferson	884
Prince's Point Wildlife Area	Jefferson	1,527
Lake Mills Wildlife Area	Jefferson	1,199
Storr's Lake Wildlife Area	Rock	935
Lima Marsh Wildlife Area	Rock	3,338
Theresa Marsh Wildlife Area	Washington/Dodge	5,499
Allenton Marsh Wildlife Area	Washington	1,299
Loew Lake Unit (Kettle Moraine State Forest)	Washington	1,086
Pike Lake State Park	Washington	678
Scuppernong Wildlife Area	Waukesha	1,725
Clover Valley Wildlife Area	Walworth	1,432
Turtle Creek Wildlife Area	Walworth/Rock	1,035
TOTAL:		57,453

to their houses in the woods also creates significant nesting and feeding disturbances.

One bird species in the Basin and Wisconsin has been very adaptable, as many private landowners and visitors of public parks and golf courses will attest. Giant Canada geese, a sub-species of the Canada goose, are increasingly making public parks, private lakeshores and river banks their preferred home - even year round. Goose droppings can seriously affect use of parklands, shorelands and golf courses. Communities and public agencies are working together to find acceptable, sound solutions to the increase of this species. One helpful action is to not mow your lawn to the shoreline. Leaving a buffer of long grasses and plants at the water's edge will often discourage geese from entering the yard or park.




For many bird species habitat protection or restoration and connection, is their most critical need. Migratory and non-migratory birds are only as safe as their feeding, resting, and nesting places. Food, cover, and clean water is essential not only where birds nest and raise young, but also for migratory birds dependent on resting and feeding areas during spring and fall migration. Because most land in our Basin is privately owned, the key to protecting or restoring habitat is with the private landowners. Governments can help protect the most sensitive, critical sites. DNR staff and education materials are available to show ways to create valuable bird habitat, even on small parcels of privately owned land.

Native Species ~ Mammals

Mammal species in the Basin include deer, raccoon, opossum, muskrat, coyote, rabbits, fox and less commonly, beaver and otter. Some species like bison and elk are gone from the Basin, and are unlikely to be seen here again - outside of wildlife farms. Most native mammals have adapted to their human neighbors. The whitetail deer have not only adapted, but since the 1950s the population has exploded.

Deer can cause serious depredation on crops and natural vegetation, posing problems for farmers, suburban residents and many public natural areas and parks. Another serious problem with large deer populations is deer/car collisions. These collisions can cause death, serious injuries and property loss resulting in considerable financial costs. In 2000, the statewide car-killed deer numbers reached 45,000 deer killed on Wisconsin highways.

The deer herd is increasing primarily due to a number of factors:

-  More available cover and food.
-  Less hunting pressure due to urbanization; more properties out of agriculture and residential parcel sizes are too small for safe hunting.
-  Growing reluctance by farmers and landowners to permit hunting on their property.

The primary land use in southern Wisconsin and throughout the Basin is agriculture. The conversion of original forests and prairies to farmland has created a nearly limitless food supply to support a greater number of deer than we can afford to live with. Therefore, deer management is focused on maintaining a deer herd well below the number of animals that the land could support.

The deer herd has increased significantly. To help determine how to control expanding herds of deer, the Conservation Congress instituted the Deer 2000 Program. The Conservation Congress, which is statutorily mandated, advises the DNR on all issues related to wildlife and natural resources through its elected county delegates and annual state-wide public hearings. The DNR Deer 2000 project is working to identify what means the public will support to reduce deer populations in areas exceeding acceptable levels of deer numbers.

Our primary control for deer is hunting. Currently in the Basin, about 58,300 acres of public land is open to hunting. Refer back to Map 10 in the Land Section for location of public wildlife recreation areas. But this acreage by itself is not adequate to control the burgeoning deer and geese populations. Hunting on private land is critical to manage over-abundant deer.

Other mammals are also important to the Basin. While many people have an aversion to bats, the old Neda Mine, located in the north-eastern part of the Basin, provides the largest hibernaculum (bat wintering site) in the upper Midwest. It is estimated that as many as 500,000 bats hibernate during the winter months in the old mine shafts.

Bats provide a tremendous service to humans by devouring thousands of insects each night during the summer. While many birds, such as purple martins and swallows, also eat insects, many of the problem insects come out at dusk when birds are roosting. At this time the bats take over the air and maintain a control on abundant insect populations that may be pests to humans (mosquitoes) or agricultural and forest crops.

Over the past 10 to 20 years, river otters and beavers have again made their home in many of the rivers within the Basin. These mammals had been displaced due to the loss of shoreline habitat and degradation of water quality, which impacted their food sources. With the regrowth of shoreline vegetation along our streams and improvements in some of our waterways these mammals have again established themselves in these water corridors.

In addition to the many commonly recognized mammals, the Basin is also home to numerous rodents and other small mammals. While these animals are of little economic benefit to the area, they provide the food base for predators. If not for the hawks, owls, foxes, coyotes and other predatory birds and mammals to keep these populations in check we would soon be over-run by the rodents resulting in a tremendous loss of crops and the potential spread of diseases. The healthy functioning of our ecosystems is dependent on the inter-relationship of vegetation, predator and prey, which maintain a balance, and ecosystem services, which we often take for granted.

Native Species ~ Frogs and Toads

Frogs and toads need a large variety of habitats ranging from forests to wetlands to complete their life cycles. Many of these species live, breed or develop in water and their porous skins make them very susceptible to changes in water quality. Consequently they are very important early indicators of environmental problems. These creatures are also an important link in the food chain.

The Wisconsin Frog and Toad Survey was begun by DNR in 1981 to assess populations and trends of Wisconsin's 12 species of frogs and toads. Trained volunteers travel designated roadsides stopping to listen for frog and toad calls. By estimating their calls we determine the relative abundance and estimate the number of different species over time.

☆ For information on helping in frog surveys see: www.mbr-pwrc.usgs.gov/wifrog/frog.htm

The annual frog and toad surveys can be very valuable for showing impacts of land use changes. Fourteen frog/toad calling routes cross the Basin. Eleven of the 12 species of frogs and toads found in the state are in the Basin. Only two frog species, the leopard frog and pickerel frog are showing statistically significant population declines.

Native Fish Species

A wide variety of fish live in the Basin's rivers and lakes. These include small and large-mouthed bass, northern pike, walleye, catfish, a variety of panfish, carp and other fish.

☆ For more information on Fishes of Wisconsin see: www.seagrant.wisc.edu/greatlakesfish/

Unfortunately, fish populations in many Basin rivers and lakes are impacted by poor water quality and habitat conditions. Today, sediment and algae due to polluted runoff seriously choke many Basin streams. Many smaller streams have been channelized and ditched, destroying vital habitat for fish. Dams, while sometimes providing limited areas of good fishing, are very detrimental to stream fisheries. Some fish species migrate considerable distances during the course of a year. For example, each year in the spring northern pike migrate upriver to adjacent spawning marshes. Dams prevent fish from being able to migrate to suitable spawning or winter habitats. In some areas, fish passages are being constructed around dams to provide some ability for fish movement. Another factor previously mentioned is water level management. Changes in water levels, particularly at vulnerable times in a fish's life cycle, can significantly impact the fishery.

Considering all the water quality problems in many Basin rivers, a surprising secret is out! There's very good fishing in many lakes and river stretches in the Basin. The DNR's comprehensive approach to rough fish control projects has been quite successful.

In spring 2000, some Rock River Basin streams and lakes were featured in "Wisconsin Sportsman" as places to go for good fishing in Wisconsin. In fact, the Basin made the list of hot Wisconsin fishing areas in three categories. Runs of walleye were highlighted in the Rock River around Lake Koshkonong and pools at several dams. Many walleyes are also found in the Upper Rock River and Crawfish River. The Basin made the Wisconsin northern pike areas list with Lake Mendota and Delavan Lake. Finally, crappie fishing was touted in the Madison Lake chain with Lakes Waubesa and Kegonsa having possibly the most abundant crappie fishery. Lake Mendota has a huge perch fishery well known to many successful anglers! Other good fishing news was that two state record white crappies were taken in 2000 in Beaver Dam Lake and Lake Emily.

Endangered Species

Over 65 species are known to have declined and are listed as threatened or endangered species in the Basin. A list of the endangered, threatened, species of special concern (species about which some problem of abundance or distribution is suspected but not yet proven) is available from the DNR. The list also includes vulnerable sensitive ecosystems in the Basin. This list is derived from the statewide Natural Heritage Inventory listing. Keep in mind that this is not a full listing of the endangered, threatened or vulnerable species in the Basin. These type of species occur in other Basin areas, but not every area or habitat has been field assessed. The DNR welcomes observations of endangered, threatened or special concern plant and animal species. Most of the endangered/threatened species in the Basin have declined through loss or fragmentation of habitat.

Wisconsin: Leading the Nation in Bird Conservation

Wisconsin is the first state in the nation to develop a comprehensive bird conservation strategy to manage for all birds in all habitats. This program will pull together different organizations and conservation efforts dealing with neotropical migrant birds, forest interior birds, grassland birds, shorebirds and colonial nesting birds. To launch this program, the DNR hosted a historic signing ceremony at Horicon Marsh on May 12, 2001. This project will provide the basis for an integrated approach to keeping common birds common and recovering imperiled species in Wisconsin.

The Wisconsin Bird Conservation Initiative is a voluntary partnership of state, federal, and conservation and environmental organizations dedicated to providing a full spectrum of conservation to Wisconsin's bird species. By focusing on common goals to protect a wide variety of bird species and developing regional priorities, it is hoped that this project will do more than previous endangered species programs.











Many existing programs work to recover species after populations have seriously declined. This program's goal is working in a preventive role and through diverse partnerships, working more holistically. In addition to bird conservation programs, this project will also work towards education and enjoyment of our birdlife through the development of a state bird trail and other similar efforts. Together these projects can accomplish not only the protection of our birdlife but also promoting tourism and sustainable community development.

Friends of Pheasant Branch, Inc.

A model to follow

Never underestimate the power of a small group of determined citizens. The Friends organized six years ago when they learned of plans to construct two sewers through the Pheasant Branch Conservancy, a 660-acre preserve containing a regionally significant marsh, springs, oak savannas and prairies. After losing one battle and winning the other, the Friends became a not-for-profit, tax-exempt organization and turned their attention to protecting the marsh and its springs.

Since then, the Friends have:

-  Donated more than 5,000 hours to restoring an oak savanna and prairie with much help from Middleton High School and other students
-  Constructed an observation deck overlooking the marsh, with another one planned
-  Convened public officials, scientists, developers, contractors, and stakeholders from the city and nearby towns to develop a common vision for the Pheasant Branch Watershed
-  Developed a prize-winning, nationally recognized report with recommendations for protecting the watershed
-  Leveraged more than \$1.5 million for scientific studies in the conservancy and watershed
-  Leveraged about \$4 million in land acquisitions to protect sensitive areas adjacent to the conservancy or other parts of the watershed
-  Sponsored dozens of public lectures and field trips
-  Published quarterly newsletters distributed to nearly 1300 households
-  Provided students of all ages with hands-on conservation and ecology experiences
-  Opened an office in Middleton and hired a director to help the Friends do even more!

For more informations:

Mailing address: Friends of Pheasant Branch, Inc.
P.O. Office Box 628242
Middleton, WI 53562

 Website: www.pheasantbranch.org
 E-mail: office@pheasantbranch.org
 Phone/Fax: (608) 831-4641

☆ For more information on threatened and endangered species see: www.dnr.state.wi.us/org/land/er/nhi/NHI_ims/onlinedb.htm

Very little is known about the health and status of mussels and clams in the Basin. Some Basin rivers, including the Scuppernong, the Bark and Turtle rivers, are known to have areas containing threatened mussel and clam species. Much additional survey work is necessary to evaluate mussel populations in other Basin rivers. Habitat changes that most impact mussels and clams include excessive in-stream sediment and invasion of a stream by zebra mussels.

Wisconsin Law requires the protection of our state's endangered and threatened species. It's unlawful to take, or destroy state-listed animals on any lands without a permit from the DNR. For listed plants, the law prohibits taking where it occurs on lands, except in the course of forestry, agriculture or utility actions. A new provision in the law directs all state agencies to determine whether any actions or projects they conduct, fund, or approve may affect endangered and threatened species.

Exotic Species

Non-native species are invading lakes, rivers and land in the Basin. In many cases, these exotics are harming native plant and animal populations as they spread unchecked by natural controls. Some of the aquatic species arrived in ballast water from foreign ships in the Great Lakes. They were often transported to inland lakes and rivers by unsuspecting boaters and other recreational users. Other exotics were brought here intentionally while some species hitchhiked in due to our mobile society. Commonly they lack natural predators and parasites; most of their predators were left behind in their native country. Typically, few if any, native species find exotic species an interesting or available food source. Alien invasive species are regarded as a serious threat to biodiversity, second only to habitat destruction.

One well known exotic species is carp (*Cyprinus carpio*). Carp were introduced into the Basin in the 1890's. The State once had a carp hatchery to raise and release carp! Over time, carp have successfully colonized almost all Basin waterways. Carp not only destroy aquatic vegetation stands, but they also resuspend sediments, which increases water temperatures, lowers dissolved oxygen levels, and reduces light

penetration. These abrupt changes in the aquatic ecosystem reduce new plant growth and deteriorate suitable habitat for other fish and aquatic organisms. Carp are known to survive under a wide range of environmental conditions and outcompete native fish species for food and spawning areas. Carp have become an entrenched part of the Basin's waterways and dominate many streams and lakes.

In the past, the DNR attempted to completely eradicate carp from stream or lake systems. This approach proved expensive and not entirely successful. Currently, the Department uses a multi-pronged approach: eradicate as many rough fish as possible and restock with predator fish, such as northern pike, walleye, bluegill, and crappies which help keep the carp under control. Where possible, the DNR and local organizations employ carp harvesting contractors to help maintain a balanced fishery. Usually fishery or water quality related projects are undertaken along with a rough fish control project.

A good example of an integrated fisheries and water quality project was conducted at Delavan Lake. Delavan Lake conducted a number of other integrated lake improvement projects, along with a chemical treatment for rough fish control. They included rerouting of a major feeder stream and an alum treatment to tie up phosphorus in lake sediments. Recently, Delavan Lake is showing signs that it may need an additional alum treatment to tie up new phosphorus input. More efforts need to be undertaken on all lake protection projects to keep the sediment and phosphorus in the watershed from entering the lakes.

The latest exotic, aquatic invader to the Basin is the zebra mussel (*Dreissenia polymorpha*). Zebra mussels were first found in Wisconsin waters of Lake Michigan in 1989. The inland lake invasion of zebra mussels into Basin waters is recent and as yet their populations are small. Zebra mussels have been found to play a major role in a sharp decline in native mussel populations along many rivers in the state. Zebra mussels clog water intake pipes at utility and industrial sites and can encrust boat hulls and damage boat engines. Adult zebra mussels, or the immature microscopic form called veligers, have been found in the following Basin lakes: Nagawicka, Upper Nemahbin, Lac La Belle and Oconomowoc. What their eventual long-term impact will be is not known. Studies are being conducted to

quantify the long-term ecological and financial impacts. However, native aquatic inhabitants in the Basin and their environment may be significantly impacted.

Another pest brought into the country many years ago has recently become a wide spread invasive. The gypsy moth has been found in most areas of the Basin. Their caterpillars can swiftly defoliate trees and shrubs and are difficult to control. The year 2000 had a particularly bad outbreak in many parts of the Basin. The DNR and DATCP have instituted an aggressive campaign to try and control gypsy moths using Bt, natural bacteria, which kills gypsy moths.

Invasive plants (weeds - plants out of place!) are the most abundant and troublesome of the exotic species. Some of the more widespread invasive plants on land include: honeysuckle (*Lonicera bella*, *L. morrowii*, and *L. tatarica*), Canada thistle (*Cirsium arvense*), common buckthorn (*Rhamnus cathartica* and *R. frangula*), wild parsnip (*Pastinaca sativa*), multiflora rose (*Rosa multiflora*), and garlic mustard (*Alliaria petiolata*). Many of these plants are causing serious problems in parks and wildlife area because they displace native plants used by wildlife.

Aquatic or water-loving exotics that cause significant ecological and other problems in lakes includes the Eurasian watermilfoil (*Myriophyllum spicatum*) and purple loosestrife (*Lythrum salicaria*). Eurasian water milfoil first arrived in Wisconsin in the 1960s. It reproduces by vegetative fragmentation. These fragments can be carried downstream by water currents or boats, motors, trailers, bilges, live wells, or bait buckets, and can stay alive for weeks if kept moist. The DNR has a program to help lake managers control or reduce Eurasian water milfoil.

Purple loosestrife was first detected in Wisconsin in the early 1930s. Over the last five years, purple loosestrife has been spreading into many wetlands in the Basin. Purple loosestrife spreads mainly by seed, but can also spread vegetatively from root or stem segments. It can survive in a wide-range of environmental condition. This plant outcompetes many native plant species because it has few native predators. Currently, about 24 states have laws prohibiting the importation or distribution of purple loosestrife because of its aggressively invasive characteristics. The DNR, in cooperation with the U.S. Fish and Wildlife Service, have been working on control methods to curtail and eradicate purple loosestrife from wetlands.

☆ For more information about exotic species see:
www.dnr.state.wi.us/org/land/er/invasive/

The Good News!

Many wildlife species are maintaining or even increasing their numbers, as erodible farmland is stabilized and converted from agriculture back into grassland and woods. Another positive factor is the increasing acres of wetland habitat restorations in the Basin. Protecting or restoring wildlife habitat is the goal of numerous public and private partnership efforts. These partnerships have found greater success in protecting wildlife by working together.

In Spring 2001, a particularly exciting wildlife event took place at the Horicon Marsh. For the first time in over 50 years, a pair of bald eagles mated and raised young in the marsh. Another pair of bald eagles nested and raised young at nearby Lake Sinissippi. It's thrilling to see our national bird majestically soaring over the rivers and lakes in the Basin.

Creative solutions are being looked at to deal with species with abundance problems, such as whitetail deer. Deer hunters and processors joined together in the fall hunt of 2000 and 2001 to accomplish two goals - one for the natural resource and one for the people. During this deer-hunting season, hunters donated deer to local people in need. Private deer processors are paid through the state Wildlife Damage Fund to butcher the deer, and take the meat to area food pantries. At the same time the deer numbers are reduced by providing bonus harvest tags to hunters. This is a win - win solution that works because hunters, deer processors and the DNR are going an extra mile to protect the resource while providing valuable food to local people in need.

To help people learn more about wildlife and nature, a number of natural resource and wildlife education centers provide information and workshops in the Basin. These include the Aldo Leopold Nature Center and the University of Wisconsin Arboretum in Madison, the Marsh Haven Nature Center, the Horicon USFWS National Wildlife Refuge Center, and the Wisconsin DNR International Education Center at the Horicon Marsh.

Another important component to protecting wildlife and sensitive habitat is publicly sponsored land trusts. Across the Basin several land trusts are helping purchase sensitive lands. Most of the protected lands are either farmed or associated with agriculture use. The

goal is preserving valuable natural areas for people today and for future generations.

Many local groups are forming to support local parks and natural areas to help control exotic species like buckthorn, honeysuckle, and garlic mustard . A good example is ‘The Friends of Glacial Drumlin Trail.’ This group spends considerable time to protect their trail park. All parks and sensitive areas could use FRIENDS who help protect and care for park land and water resources.

Another example of local partnerships for exotic plant control involves growing insects that feast on purple loosestrife. For a number of years, Waupun High School, and other schools in the Basin, have been rearing beetles in the classroom that when released feed upon and kill purple loosestrife plants. After raising multitudes of beetles, the insects are released into wetland areas thick with purple loosestrife. The children are educated about ecology and biology while helping protect local wetlands. Growing these beetles is an educationally powerful, useful and fun program - adaptable to many school science programs!



For information raising beetles call DNR research staff, 608-221-6349

The Basin still has a diverse fishery ranging from quite good in some rivers and lakes to very poor in other waterbodies. Most waterbodies in the Basin are warm water streams or lakes containing a number of game fish, such as northern pike, walleye, and pan fish. There are a few small cold water streams either containing trout or are potentially able to support trout. One of the most publicized is Token Creek. This stream located near the City of Madison, is undergoing significant public and private protection efforts to help restore this beautiful, cold water stream to its full capacity for trout fishing and fun. Not many large cities will have a beautiful trout stream of such high quality so close to their doorstep when the restoration is completed.

WHAT YOU CAN DO . . .



Promote good land use planning in your community.



Work in your county or township to preserve and connect sensitive habitats.



Support responsible hunting on appropriate public and private lands.



Volunteer for bird, frog or wildlife surveys in your area.



When landscaping, choose native plants that will provide food and shelter to other species.



Get your local school and youth groups involved in habitat restoration projects.



Join a “Friends of the Parks” group and exercise weed control.

TO LEARN MORE ...



Biodiversity Project:
www.biodiversityproject.org/activities.htm



State and County Conservation Congress
www.dnr.state.wi.us/org/nrboard/congress



Federal Conservation Grant Program:
www.wi.nrcs.usds.gov/general/progs.html



Glacial Habitat Restoration Project:
www.dnr.state.wi.us/org/land/wildlife/HUNT/hra.htm



Zebra mussels:
www.nas.er.usgs.gov/zebramusel/



Environmental education electronic newsletter:
www.dnr.state.wi.us/org/caer/ce/ekk/index.htm



Information on fish and habitat management:
WI DNR: (608) 267-7498

Recreation

... we can learn far more about the conditions, and values, of a society by contemplating how it chooses to play, to use its free time, to take its leisure, than by examining how it goes about its work.

~ A. Bartlett Gianatti

Why Care?



Public lands ensure that everyone has the opportunity to enjoy the great outdoors.



Recreational trails link people, communities, and nature together in friendly, healthy recreation.



Healthy lakes and rivers are precious and irreplaceable resources that provide many recreational opportunities.



Rivers and lakes play a vital role in the ecology of birds, mammals, plants and people.

Outdoor recreational opportunities are essential for the physical and emotional well-being of Rock River Basin residents, and for the economic well-being of the Basin. There are many recreational opportunities provided by public lands, trails and waters, but private lands also play an important role.

According to the Public Conservation Recreation Land Report, as of December 1999 approximately 95% of the Basin land is in private ownership. This private land provides much of the Basin's recreational and hunting opportunities, thanks to the many landowners that allow access to their lands. Public lands cannot meet all the growing demand for outdoor recreation.

Increasingly, many areas on the fringe of developments are being removed from outdoor recreational use due to changing land practices such as conversion of agricultural lands to rural and suburban residential development. In addition, use of private lands for various recreational activities is no longer compatible in many areas. A good example is safety concerns with hunting in developed areas.

Map 15: Public Lands and Recreation Trails in the Rock River Basin

Please refer to the State of the Rock River
Basin Report web page to view this map

Land-based Recreation

Many opportunities exist for people to see wildlife and recreate on public lands and trails in the Rock River Basin. State parks and forests in the Basin include Aztalan, Lake Kegonsa, Governor Nelson, and Capital Springs State Parks and the Loew Lake, Pike Lake, and Lapham Peak Units of the Kettle Moraine State Forest. The state parks and forests, along with county and local parks, provide the public places to hike, bike, horse-back ride, camp, swim, in-line skate, ski, snowmobile, and enjoy the wonders of nature.

☆ For information on state parks, forests, recreation areas, and nature centers see:
www.wisconline.com/attractions/parks.html

In the Basin, there are more than 200 miles of state or federally owned recreation trails for different recreational experiences. Three major trails in the Basin are the Glacial Drumlin, Wild Goose and Ice Age state trail. The Glacial Drumlin Trail is a 51-mile long and traverses the Basin through Waukesha, Jefferson and Dane Counties. The Wild Goose Trail is a 32-mile county-owned trail that crosses the upper part of the Basin from Clyman north to the city of Fond du Lac.

The Ice Age Trail, a National Scenic Trail, zigzags for 1,000 miles through Wisconsin. The Rock River Basin has portions of the trail in Washington, Walworth, Jefferson, Rock, and Dane counties which follows the terminal moraine created when the glaciers retreated. Upon completion the basin will have approximately 140 miles of the trail. Currently about 91 miles of the trail are completed and open to the public. Many counties and municipalities also have developed miles of excellent recreational trails. There are even a few areas in the Basin that have designated auto touring trails.

State funded snowmobile trails exist in every county in the Basin. There are approximately 150-250 miles of trail per county available for snowmobiling. In addition, there are about 30% additional trails that are maintained by local snowmobile club trails. Local snowmobile clubs contact the landowners, post the trail signs, and groom the trails.

However, for all the many miles of trails in the Basin, there are large areas that have few trailways developed. Many trails are unconnected to each other. Connecting trails would provide an enjoyable network of outdoor trails for Basin residents and visitors. This is an opportunity for recreational groups and local and state

agencies to work together to connect these trails. Map 15 shows the general location of many different types of trails in the Basin.

Sight-seeing is a major recreation for many people. Canoe rentals, camping fees, motor coach tours, guided tours, birding field trips, use of private hunting preserves, dog trails and training areas, and photography are all major recreational opportunities. Many of these activities are promoted and supported by private businesses. These companies depend upon the condition of our natural resources to bring people to their area to recreate. There continues to be many private opportunities to provide these and other recreational activities throughout our Basin.

The Basin's state fish and wildlife areas offer a wide variety of outdoor recreation activities like hunting, fishing, wildlife viewing, hiking, biking, boating, and other opportunities. There are 33 DNR Public Wildlife Recreation Lands in the Basin. See the State Lands sidebar on page 84. They range in size from a couple hundred acres (Arkin Marsh Public Hunting Grounds, 190 acres in Jefferson County) to several thousand acres (Horicon Marsh Wildlife Area, 11,009 acres in Dodge County). The Horicon Marsh also has an adjoining 21,000 acres managed by the U.S. Fish and Wildlife Service, the Horicon National Wildlife Refuge.

Each wildlife area, state and federal, varies in the amount of land open for public access based on wildlife protection needs. However, many of these public wildlife areas often have roadways that serve as ad hoc walking trails.

In the Basin, hunting for waterfowl, pheasants, and deer are favorite past times for sportsmen and women. Special youth hunts are also growing in popularity. The majority of hunting for deer, waterfowl, and upland species occurs on private lands. Another outdoor activity is trapping. An unique opportunity for trapping muskrats is available at the Horicon Marsh. The marsh is the only state and federal fur farm which permits trapping.

Increasingly, people are asking for non-consumptive recreation such as bird watching. Bird watching is fast becoming a major outdoor activity for many people. Studies done in Waukesha County found that people want more resource-based recreation opportunities for silent sports and nature appreciation. Many areas in the Basin are available where people desiring silent sports and nature appreciation recreation can go.

The Horicon Marsh: Recreational Treasure and Economic Asset

For most of the Horicon Marsh recreational history, people visited the area in the fall to hunt or watch the spectacular migrations of geese. However, times change. Due to the dramatic increase of geese in urban and suburban areas viewing the large geese flocks up at Horicon isn't the attraction it once was.

Environmental, recreational, and economic interests teamed up to promote "Visit the Horicon Marsh" - in all the seasons for many reasons. The Friends of the Horicon Marsh International Education Center, the Horicon Marsh Bird Club, the Rock River Archeology Club joined with the cities of Waupun, Horicon, Mayville and Fond du Lac and local businesses to increase tourism to the Horicon Marsh area. Their goal: get more people to visit the area and more often! Their latest collaborative event started in spring 2001.

The area-wide teamwork brought into being: a number of annual events that attract many visitors to the area:

- 1989 The Annual Horicon Marsh Indian Mound Tour
- 1997 The Nikon School of Bird and Bird Photography
- 1998 The Horicon Marsh Bird Festival
- 1999 The Horicon Marsh Archeology Fair
- 2001 Marsh Melodies

In 2001, Marsh Melodies began its 6-week series of recreational, educational and fun events focused on the rich cultural, natural history and wildlife resources at the Horicon Marsh. A broad area partnership of nearby communities, nature organizations, state and federal agencies received a \$40,000 state tourism "Destination Marketing Grant" to promote the event - regionally and nationally. The series of events brought about 3,000 more people into the Horicon Marsh area for bird watching, canoeing and hiking and other fun activities. More people are expected to participate in 2002.

Increased tourism and economic success is told in more visits to the Horicon Marsh - throughout the year. In 1996, approximately 381,000 people visited the Horicon National Refuge and area; in 1999, the public visits were up to about 680,000. The economic impact from tourism to the surrounding cities is estimated to be about \$5 million/year. Numerous, new partners appreciate all the many reasons - environmental, recreational and economic - to protect the natural resources in the Horicon Marsh and the area.

☆ **For more information on the Horicon Marsh see:**







WI Department of Natural Resources: www.dnr.state.wi.us/org/land/wildlife/reclands/horicon/
U. S. Fish and Wildlife Service: www.midwest.fws.gov/horicon
www.horiconmarshbirdclub.com (Marsh Melodies; View Events)

Water-based Recreation

Water is a big attraction to most people. According to the Outdoor Recreation Resources Review Commission's 1962 report, "Water is the focal point of much of the outdoor recreation. Most people seeking outdoor recreation want water- to sit by, to swim and fish in, to ski across, to dive under, and to run their boats over." This is as true today as it was in 1962 with more people participating in recreational boating, canoeing, and fishing than ever. Public boating accesses provide the way to the lakes and rivers throughout the Basin.

Canoeing and kayaking link appreciating nature with more physical activity. Volunteer citizens are working to open more canoe trails within the Basin. It is news to many residents that there are wonderful canoeing opportunities close to home. Canoe trips on the Rock River or its tributaries easily fit Saturday family excursions and offer exciting wildlife viewing opportunities.

Motor boating is a favorite recreation activity for many people. Public boat access sites are available on most Basin waters. Unfortunately, user conflicts are increasing, particularly on lakes but also on many stretches of the Rock River. Heavy boating use is having an impact and on some lakes and river stretches, exceeding the capacity of these waters to handle these large numbers. This creates a safety issue. Larger boats with bigger motors and personal watercraft are causing:

-  Considerable wave action
-  Destruction of aquatic plants by propellers and wave-action
-  Disturbance of wildlife
-  Shoreline erosion
-  Resuspension of sediments and decreased water clarity
-  Higher noise level

Beside fishing opportunities on state and federal properties, there are many excellent county and municipal fishing and boating access sites on the Basin's rivers and lakes. Due to the close proximity of the




Basin's lakes to major metropolitan areas, such as Milwaukee and Madison, our lakes receive extremely high fishing pressure and recreational use. This trend can be projected to increase as the population of southern Wisconsin continues to grow at a rapid rate. Creel surveys evaluate the harvest of fish on lakes. They indicate that lakes in our Basin have a very high use per acre and harvest compared to lakes in the less populated northern portion of Wisconsin. Results also show that a large proportion of anglers utilizing our Basin's lakes and rivers reside outside of the local area.

The Good News!






This past year the DNR along with the RRC, UWEX and other private groups began assessing potential Basin canoe trails. Beautiful stretches of river are found along the Turtle Creek, and the Bark, Crawfish, Yahara, and Rock Rivers. The RRC Recreational Issue Team plans to publish a Rock River Canoe Trails brochure in 2002.

More groups are working together to protect the Basin's environment and recreational opportunities. However, additional efforts will be needed as populations grow and place additional pressure on existing recreation and wilderness areas. Balancing use of lakes, rivers, and natural areas to protect the natural resources is a major challenge to Basin citizens who use and enjoy outdoor recreation and to public agencies entrusted with resource protection responsibility.

WHAT YOU CAN DO . . .

-  Join the Basin's Recreation Issue Team to help increase recreational opportunities in the Rock River Basin. Contact the UWEX Rock River Basin Educator at (920) 674-7295
-  Start a local Friends of the Park or a citizen River Protection group.
-  Get involved in trail and park organizations. Many state and local trail organizations work to develop and connect biking, hiking, snowmobiling, and horse riding trails in the Basin.

TO LEARN MORE . . .

-  Nature, wildlife, and recreational events by county:
www.wisconline.com (select Nature)
-  Madison City Paddlers:
www.geocities.com/yosemite/falls/1922/
-  Boating safety information:
www.dnr.state.wi.us/org/caer/cs/registrations/boats.htm (select from options)
-  State parks and forests bike trails:
www.danenet.wiclip.org/bcp/wspft.html
-  Local recreation and hunting opportunities, boat access, and regulations:
Call your local WI DNR Service Center

Canoeing the Rock River

Capitol Water Trails, a non-profit organization formed in 1998, has 90 enthusiastic volunteers helping educate people about water stewardship and creating enjoyable canoeing opportunities on the Rock River. Three Basin river trails are ready for canoeing: the Maunsha River Trail near Marshall and Wingra Creek Passage. Nine other waterways are being evaluated for future river trails.

In Fall of 2001, a major canoe trail opened in the Basin: the Token Creek-Upper Yahara River, through the Madison Chain of Lakes. This trail connects 21 Madison and Middleton city parks, four county and two state parks. Several parks have camping. It's a great opportunity for canoeing down a beautiful trout stream and through the Madison Lake chain, with camping enroute!

For more information or to help open canoeing trails in the Rock River Basin.

Contact : Capitol Water Trails LTD.
3806 Atwood Ave
Madison, WI 53714-2805;

 Email: capwtrtrls@aol.com
Website: www.mailbag.com/users/cwt