

Chippewa WFRP Update—2004

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Special points of interest:

- The Chippewa has 54 wild-life impoundments totaling more than 3,400 acres at full pool.
- Eurasian water milfoil has now been discovered in 146 lakes and seven rivers or streams in Minnesota. It is only known from one lake (Leech) on the Chippewa.



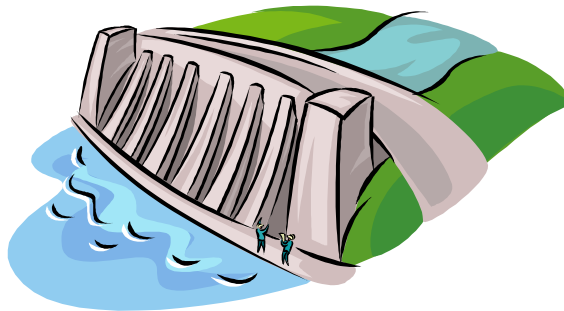
Brush Lake Impoundment Partnership

Mary Nordeen, contributor

Tucked away in the Forest between Sucker Lake and Sucker Bay is a small 27-acre impoundment with a big history. The Brush Lake impoundment was built in 1971 for waterfowl habitat. The structure had a twenty-year life expectancy.

In the late 1990's, a partnership developed between the Chippewa National Forest and the Leech Lake Band of Ojibwe to maintain the 18 impoundments located across the Forest and within the Reservation, including Brush Lake. Through help with "Circle of Flight" dollars, work was completed to mow dikes, install beaver bafflers, and clean outlet pipes at those 18 Forest impoundments.

In 2000, Leech Lake Band of Ojibwe field crews found that the outlet pipe at Brush Lake had rotted and collapsed. The dike was washing out and something had to be done. Working together with John Casson (Walker Ranger District) and the Minnesota Chapter of Ducks Unlimited, the Leech



Lake crew breached the Brush Lake dike to avoid catastrophic failure. The impoundment stood empty until 2004 when Forest engineers designed a new structure for the impoundment. The new structure was installed by the partners in August 2004, and partially filled for the winter. In the spring of 2005, as the waterfowl come back to the northwoods, biologists will once again find the Brush Lake impoundment filled with water.. and waterfowl.

Why so much interest in this small 27-acre site? Brush Lake has become a very productive impoundment over the years, providing nesting, brood rearing and resting habitat for varieties of waterfowl and other wildlife. The lake, so small that one has a hard time finding it on the map, is a piece of vital deep marsh habitat that warrants our notice and care. In the end, it's a great success story for both winged and four-legged friends.

Woodtick Trail Wetland Restoration Project Nominated for Regional Award

A cooperative project to restore a series of wetlands along a section of the Woodtick Trail was recently nominated for a Regional Forester's Honor Award. Built on an 1890's railroad grade that crossed several wetland basins, the original Woodtick Trail presented continuous maintenance problems, including washouts and the need to re-surface every year. High maintenance costs, combined with increasing wetland impacts spurred a project to relocate 3,500 feet of the road

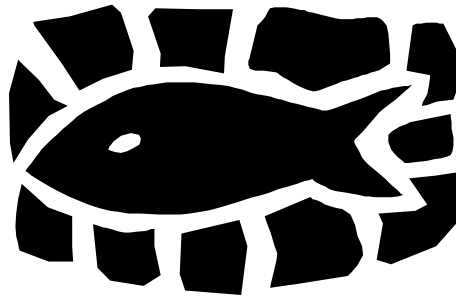
and restore wetland habitat. Through a partnership with Cass County, 18.9 acres of bisected wetlands were restored and reconnected, and habitat for turtles, including the sensitive Blanding's Turtle, was created. The project was a success because transportation, wildlife, and watershed specialists worked together to restore the wetland habitat. Ongoing monitoring will help fine-tune wetland restoration.

Dunbar River Spawning Riffle Construction

In 2004, Jeff Allison and the Blackduck District teamed up with the Minnesota Department of Natural Resources (DNR) to design and construct two artificial walleye spawning riffles in the Dunbar River. The objective of the riffle construction is to improve natural walleye reproduction in the river, and it is one of the goals of a long-term partnership aimed at increasing reproductive success in the Round Lake watershed.

In the fall of 2003, the river channel was surveyed, and the riffle was designed according to Minnesota DNR protocol. In the winter, an ASV (All Season Vehicle) placed the rocks on the frozen river. When the ice melted in spring, the rocks settled to the river bottom.

The riffles span the 25 foot



width of the river and are each about 40 feet long. The structures form a convex mound upstream, and slope gradually downstream.

The spawning riffles were constructed to improve habitat for walleye that migrated out of Round Lake to spawn. The turbulence, created by water flow over the newly-placed rocks, oxygenates the water and keeps the rock surface clear of fine

sediments, giving fish eggs that are deposited on the new riffle an increased chance of survival. Four other spawning riffles were placed in the Popple River (another tributary) from 1999-2003.

Willow River Restoration—an update

In 2002, the Walker District Ranger signed a decision to restore portions of the Willow River near Remer. The river and its tributaries were channelized and ditched in the early 1900's to improve the land for agriculture. Today the land is largely owned by the Forest Service, Cass County, and Minnesota Department of Natural Resources, who manages Big Rice Lake for waterfowl. In 2004, over 3 miles of the Willow River (both the ditch & original channel) were

surveyed using Rosgen Level II survey techniques. Data will be analyzed and used to determine possible restoration techniques. Data will also be shared with potential partners and local landowners who could potentially be impacted by the ditch plugging (channel restoration). Survey of the tributaries and modeling hydrologic and elevation changes will be done in FY05 through a partnership.

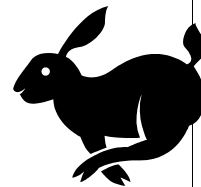
Profile of a Hare

In 2004, John Casson completed a Species Profile for the snowshoe hare, a keystone prey species that a number of Regional Forester Sensitive Species (RFSS) and Federally listed Threatened & Endangered species utilize for food. Did you know that snowshoe hare are the primary prey of the boreal forest ecosystem, or that Canada lynx, northern goshawk, and great horned owl are snowshoe hare obligates, or that coyotes and red-tailed hawks rely heavily on snowshoe hares to maintain their population levels?

The Snowshoe Hare Profile establishes a com-

prehensive base of information for the species and provides management recommendations for habitat enhancements.

The idea behind a Species Profile is to develop a consistent approach to discussing, analyzing, and conserving RFSS species, in order to reduce the amount of time spent in analysis of projects while maintaining consistency in management approaches across the Units. Look for additional Species Profiles in the future.



Did you know that In 1933-34, during a cyclic peak, snowshoe hare densities reached 478 hares per square mile in Morrison County, MN?

Burning for Rails

Mary Nordeen, contributor

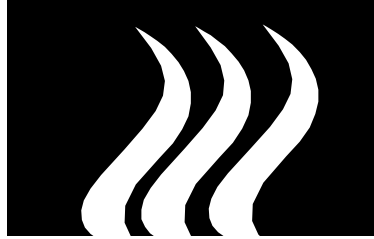
Since 1981, Chippewa National Forest fire crews have worked in the Boy River area each spring to burn a patch of wet meadow. The work was done mainly to reduce fuels and lessen the threat of wildfire due to arson. The prescribed burning was completed in partnership with the Minnesota Department of Natural Resources (DNR) Forestry and Fish and Wildlife Divisions and Cass County Land Department.

In 1997, DNR's County Biological Survey staff found yellow rails in the Boy River floodplain wetlands. That population is now one of the largest known concentrations of yellow rails in the state!

Yellow rail habitat is fire dependent wet meadow, an uncommon habitat type on the Forest. Approximately 17,000 acres of the Forest fall into this category, and 8,000 of those acres are found at the Boy River site.

In 2002, a new partnership was created to restore the near natural fire regime to this unique

land type. Core samples taken in the lake and meadow show a historic fire regime, with the site burning every 3-5 years on average. The new prescribed burn plan separates the 8,000 acre area into 18 units. Each year, a number of units will be selected (approx. 2000 acres per year) and burned. In 2004, 1800 acres were burned, and 3000 acres are planned for the spring of 2005. Some of the units in the expanded burn plan have not seen fire for over 70 years!



Overall goals are bringing the natural fire regime back on the landscape and providing habitat for Yellow Rail, LeConte's Sparrow, Sharp-tailed Sparrow and a variety of other species.

The work will also reduce thatch to benefit nesting birds and continue to provide fuel reduction and protection for many neighbors and local communities.

Kids Fishing on the Chippewa

Saturday, June 5th 2004, the 15th Annual Take a Kid Fishing Day was held at Clubhouse Campground on the Marcell / Deer River District of the Chippewa National Forest. This event is part of the Wal-Mart All American Fishing Derby, a national program produced at the local level through community partnerships. Over the years, "Take a Kid Fishing Day" has grown to be something that kids in the community really look forward to. Many families combine the event with a weekend of camping.

Although a severe storm hovered over the

area, more than 20 hearty kids showed up prepared with raincoats and boots. Ready to weather the storm, everyone waited for the skies to lighten; however, the extremely heavy rains forced a cancellation of the fishing trip. Everyone had a good visit under the tarps while the rain poured down, and all of the kids were pleased to receive prizes for their participation in the event.

Forest staff also participated in Take A Kid Fishing events at Cass Lake, Bemidji, and Norway Beach campground this spring, in addition to programs at local schools.

"This is the third exotic aquatic species found in Leech Lake this summer. "
Minnesota DNR

Eurasian Water Milfoil Found in Leech Lake

In July 2004, Eurasian water milfoil was discovered in Leech Lake, by a citizen swimming at a beach near the Whipholt Public Water Access on State Highway 200. Further surveys conducted by the Minnesota Department of Natural Resources then discovered the non-native, invasive aquatic plant growing in several harbors from Stony Point to Rogers Point on the southern shore.

Eurasian water milfoil can form dense mats of vegetation and crowd out native aquatic plants, clog boat propellers, and make water recreation difficult. The DNR quickly responded to the



finding and hired a contractor to aggressively treat the five harbors where milfoil was found. This is the third exotic aquatic species found in Leech Lake. During the plant surveys, biologists also found curly leaf pondweed and Chinese mystery snails. DNR will

continue to monitor Leech Lake for this and other exotics that could impair habitats or upset native diversity in the lake. Increased public awareness is critical to preventing the spread of exotic species, which could accidentally be carried to other lakes on trailered boats.

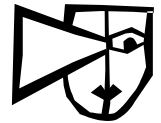
Other 2004 WFRP Projects	District	Accomplishment
Fish Barrier Removal	Blackduck Ranger District	Partial removal of the beaver dams, along with some trapping, allowed pre-spawn walleyes unobstructed access to at least 9 miles of spawning habitat in the Third, North Turtle, Popple, and Dunbar rivers.
Recon of the Bowstring and Big Fork River Systems.	Blackduck Ranger District	The Bowstring and Big Fork River systems (including major tributaries) were evaluated by floating sections of the river to assess riparian stand conditions, sample substrates, and identify key aquatic habitats.
Monitoring walleye spawning on Spring Lake Creek, Third River, Dunbar River, and Popple River spawning riffles.	Blackduck Ranger District Deer River/Marcell Ranger District	Volunteers & staff monitored 11 constructed rock riffles at night to record walleye spawning activity during the spring spawning season. Egg baskets were set at some of the riffles to determine egg deposition.
North Turtle River Stream Channel Survey	Blackduck Ranger District	Approximately 2 miles of the North Turtle River were surveyed from 2003-2004 using Rosgen Level II inventory methods, along with a suitable reference reach on the Popple River. The data were analyzed to help design potential restoration activities within the stream channel and in the riparian zone.
Stream Crossing Inventory	Forestwide	189 road/stream crossings were surveyed in 2004; this approximates 4 actual miles of inventory, although the area influenced by each culvert is much greater.
Wagner Lake, Dunbar Lake, and Third River Riparian Planting	Blackduck Ranger District	15 acres of riparian plantings were released and sprayed through a combination of NFWF and CWKV funds.
Restoration of South Twin Lake fish structures	Blackduck Ranger District	Eleven log structures, providing woody cover habitat were improved in a 30 ac bay of South Twin Lake.
Mitigation Measure Monitoring	Forestwide	Projects were monitored on each of the three Ranger Districts. Teams of Biologists and other technical staff visited each project and reviewed implementation & effectiveness of the mitigation measures for wildlife.
Forestwide Impoundment Management	Forestwide	Maintenance of impoundments resulted in restored or enhanced wetland wildlife habitat, including 499 acres on Blackduck District, 325 acres on Walker District, and 122 acres at Marcell.
Monitor & Maintain Eagle Gates	Forestwide	32 gates were monitored or replaced across the Forest.
RFSS Proactive Surveys	Forestwide	Proactive surveys were completed for RFSS species on 883 acres. Contract preparation for Black-throated blue warbler survey was completed.
TES Survey Protocol—Spruce Grouse	Forestwide	A draft survey protocol for spruce grouse (RFSS) was completed & helped to refine habitat suitability criteria on Forest. Sites for proactive surveys were identified.
RFSS Site Validation	Forestwide	79 RFSS sites were validated through a programmatic screening process (office), and 13 RFSS sites were field-checked. 17 RFSS species were monitored in the process.
Goblin Fern Administrative Study	Cass Lake/ Walker Ranger District	Data collection on soil moisture & plant populations was completed. A timber harvest contract was prepared in order to begin the disturbance phase of the study.
Eagle & Osprey Aerial Surveys	Forestwide	Flights were completed to monitor eagle nest activity / productivity and osprey nest activity
Planting & Seeding for Wildlife	Blackduck Ranger District	38 acres of grasses, forbs, trees, and shrubs beneficial to wildlife were planted in permanent openings and obliterated roads using NFWF and NFKV funds.
Structural Wildlife Habitat Improvements	Blackduck Ranger District	Habitat conditions for cavity nesters and waterfowl were improved through the construction and maintenance of 3 goose nesting platforms, 8 bluebird houses, and 85 duck boxes. The project was a partnership with MN Department of Natural Resources.
Permanent Opening Maintenance	Blackduck Ranger District	204 acres of permanent openings were restored or enhanced by mowing down brush and saplings in partnership with MN Department of Natural Resources.



WFRP Staff Receive Awards

In 2004, several WFRP staff received awards in honor of their significant accomplishments. **John Casson** was recognized for writing a thorough Species Profile for snowshoe hare, which will be used in effects analysis for TES species, such as Canada lynx. In addition, John fostered a partnership for reconstruction of Brush Lake impoundment that saved the government approximately \$20,000. **Kelly Barrett** was recognized for leading a team to evaluate the application & effectiveness of WFRP mitigation measures in Environmental Assessments, as well as for

her analysis of wildlife issues in the revised Forest Plan. **Jeremy Cable** was recognized for his work in refining protocols and specifications for survey of sensitive species. His efforts have led to increased efficiency and consistency (& cost savings!). **Stan Kot** was awarded for completing the WFRP annual report and developing protocols for District staff to back-track cat tracks in the snow. **Jim Gallagher** received a Regional award for his role on the Plan Revision Team, and **Al Williamson** was recognized by WFRP staff for his program leadership & advocacy for forest resources.



Working Together—WFRP Partnerships

Did you know that the Forest's WFRP program restored 3 miles of stream, 1,049 acres of aquatic and terrestrial habitat, and constructed 165 habitat improvement structures in 2004? Did you know that much of this work was accomplished through partnerships? In fact, just 10 partners contributed over \$20,000 in cash and \$56,000 of in-kind services for these inventory and improvement projects on the Chipewewa. In addition to the partnerships with external agencies & individuals/groups, the

Forest also partnered internally, accomplishing much needed WFRP inventory and improvements with other funds, such as inventory & monitoring (NFIM) and Knutson-Vandenberg funds (KV).

In future editions of the WFRP newsletter, we will share some of our other partnership projects. This edition profiles 4 — restoration of Brush Lake Impoundment, Woodtick Trail, Boy River Burn, and the Dunbar River spawning riffles. Thanks to all our partners!

WFRP partners contributed over \$20,000 cash and \$56,000 worth of in-kind services during 2004.

Rare Plants Found on the North Side of Lake Winnie

In 2004, Tom Suddendorf and Heidi Hartman located a unique northern hardwood stand on the north side of Lake Winnie. The stand contains an exciting assemblage of under-story species, including *Dicentra canadensis* (Squirrel Corn), *Claytonia virginica* (Spring Beauty), and *Dryopteris goldiana* (Goldie's Fern). Squirrel Corn was previously known in Minnesota only from four counties in extreme Southeastern Minnesota. Spring Beauty was previously reported from the Forest, but its general range is confined to eastern Minnesota, as far north as southern Saint Louis county. It is an indicator of high quality northern hardwoods and is considered to be a "spring ephemeral".

Goldie's Fern was found in a large colony (over one 1,000 individuals). It is a Regional Forester Sensitive Species, and is only known from 6 locations on the Forest, all within a couple of miles of either Lake

Winnie or Leech Lake. Goldie's Fern are found in hardwood stands adjacent to the big lakes, as northern disjuncts of their more southerly range. Apparently, the large water bodies ameliorate the climate enough that the plants can survive the winters here. The colony is probably the largest found in northern Minnesota. Tom and Heidi will revisit the stand in spring 2005. They believe they will also find White Trout Lily (*Erythronium albidum*) in the same hardwood community. This plant is also one of the spring ephemerals, and visible for only that short time when it flowers in the spring.

For more information on these rare and unique species, visit: [j:/fsfiles/GIS/Forest/Wildlife/Botany/Rare Plants](j:/fsfiles/GIS/Forest/Wildlife/Botany/Rare%20Plants), and look under the Genus/species names or in the folder called "Unique Species".



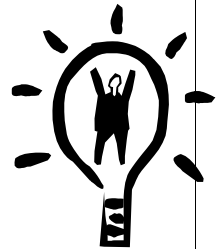
NEWSLETTER OF THE WILDLIFE,
FISH, & RARE PLANTS STAFF

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Tim Welker joins our staff as a zone fisheries biologist for the Blackduck & Deer River/Marcell Ranger Districts. Tim came to the Chippewa from Logan, UT, where he worked on numerous endangered-fish projects for a private consulting firm. Tim has BS and MS degrees in Biology from Fort Hays State University and a PhD in Fisheries from the University of Idaho. Tim and his family (wife Kristy, 2 ½ year-old son Mason, and 1 mo. old daughter Nora) reside in Grand Rapids. Please welcome Tim to the Region and forest.



Notes from the Editors.....

At a recent meeting of the Chippewa's biologists, we focused on ideas that would advance the wildlife, fish and rare plant (WFRP) programs on the Forest. One of our primary goals derived from that meeting was to "get the word out" to our fellow Forest employees, our Regional Office counterparts and our partners about what is currently happening in WFRP on the Chippewa. To that end, we have decided to use this newsletter as a vehicle to describe recent WFRP program accomplishments, raise and discuss important issues affecting WFRP resources, and keep you up to date with the programs and personnel. The biological staff in the Chippewa's WFRP program areas have over 100 years of combined field experience in exploring, understanding and managing the aquatic and terrestrial resources of the Forest. This collective experience and perspective will be invaluable as we implement the revised Forest Plan.

This is the first of what we hope to be many WFRP newsletters. This particular one is more focused on the program accomplishments of 2004. Future editions may include more forums for raising and discussing particular issues, editorials, letters to the editors, personnel profiles, photographs, etc. We expect the newsletter to evolve and change over time, so if any of you have ideas, articles, issues, or other information that would make this newsletter more effective, please contact Chantel or Al at cmcook@fs.fed.us or awilliamson@fs.fed.us. We look forward to hearing from you! Have a happy, healthy and harmonious new year!

Have You Noticed....

The largest irruption of northern owls ever documented is occurring in Minnesota this winter. Many of you no doubt have noticed the unusual numbers and visibility of great gray and Northern hawk-owls, and increasingly, boreal owls. All these species become nomadic and/or shift as their food base of small mammals collapses, as has apparently happened across an unusually large swath of Canada and northern Minnesota. This phenomenon has brought large numbers of bird enthusiasts from all over the United States, and even other countries, to northern Minnesota, and attracted regional and national media attention. If you are interested in tracking observations of owls this winter or if you come across dead owls, please contact Jim Gallagher at 335-8656.

Calendar of Upcoming Meetings & Events

February 2005

- 8-9: Forest Leadership Team meeting
- 8-9: MN Chapter of The Wildlife Society annual mtg in Fergus Falls
- 23: Native aquatic plant studies in MN—annual update organized by DNR Metro Area
- 24: Exotic Aquatic Plant Mtg—organized by DNR Metro Area
- 28: Mar 11: ESRU, Jacksonville, FL

March 2005

- Feb 28—Mar 11: ESRU, Jacksonville, FL
- 8-9: Forest Leadership Team meeting
- 14-16: MN American Fisheries Society annual mtg w/MN Chapter of Society for Conservation Biology—Grand Rapids, MN
- 29: Supervisor's Office Natural Resources Team meets with Forest Supervisor