

Iron County Land & Water Conservation Department

2021 Annual Report



This project at the Mercer Library was funded by proceeds from the Native Plant Sale. The rain garden will serve as a demonstration site so visitors can learn about slowing runoff while promoting pollinators. The plants within the rain garden are species that will attract pollinating birds and butterflies. Rain gardens capture runoff and the plants will absorb the water rather than causing erosion or ponding in unwanted areas.



The mission of the Iron County Land Conservation Department is to provide leadership and promote sound land and water stewardship through education, technical support and consistent program delivery.

2021 Year in Review

Iron County Land & Water Conservation Department

Another successful and action-packed year was implemented by the Land & Water Conservation Department (LWCD) staff. This small department is lucky to be staffed with a passionate, dedicated crew who accomplish an amazing amount of work. This year was no exception!

Zach Wilson, Conservation Specialist, led a summer staff of four this year. Each year, the LWCD hires 2 LTE staff for the summer with funds from Xcel Energy to conduct work on the Turtle Flambeau Flowage on invasive species. In addition to that funding, the LWCD received an additional DNR grant to hire 2 more LTE staff for the summer. Together they worked on a variety of both terrestrial and aquatic invasive species, provided outreach at boat landings across the county and conducted shoreland habitat surveys on two lakes.

The Woods and Waters program with Hurley and Mercer Schools was carried out with some alterations under the guidance of our Health Department. The Health Department was a great asset in helping us make sure that we could still offer our programming for students in a safe manner for our students and staff. It was great to get our local kids out on the water and in the woods. We see this is an opportunity that our kids are not getting, and Zach strives to make sure they have a positive experience in the outdoors while learning important skills in the natural resource field.

Our popular cost-share program worked with 4 townships on stream crossing projects and assisted 2 private landowners with shoreland stabilization projects. In addition, I have been working with a township to address a stream restoration project that will include addressing 9 stream crossings and restore the stream channel to its historic location. In order to accomplish this ambitious project, I gathered partners from other agencies to brainstorm and assist in finding funds to cover the cost of this endeavor.

In addition to the technical assistance provided by our cost-share program, the Zoning Department has continued to require our assistance with shoreland mitigation. With the increase in development in Iron County comes violations or instances where mitigation is needed to gain permits. This year we assisted the Zoning Department on 7 different shoreland sites.

Lastly, I was a part of a group that worked to develop a booklet on shoreland stabilization practices over the past two years. I applied and received a DNR grant to publish the booklet and distribute it across the state for homeowners and professionals to better understand how to select practices for eroding shorelines to protect water quality. This will be a great tool for many agencies and LWCD staff across Wisconsin.

As I said, it was a busy, productive year. We had a great staff, got a lot accomplished and had fun doing it! Thank you to all our volunteers who worked with us to accomplish great things for natural resources, we can't do it without volunteer help. We are lucky to work with folks who take monthly water quality readings, assist in controlling invasive species and much more!

Sincerely dedicated to conservation,
Heather Palmquist
County Conservationist/ Department Head

Iron County Land & Water Conservation

The mission of the Iron County Land & Water Conservation Department is to provide leadership and promote sound land and water stewardship through education, technical support and consistent program delivery.

<u>LCC Committee</u>		<u>LCC Staff & Support</u>	
Ken Saari Jr.	Chairman	Heather Palmquist	Conservationist
William Thomas	Vice-Chairman	Zach Wilson	Conservation Specialist
Karl Krall		David Schultz	Wildlife Damage
Anne McComas		<u>Natural Resource Conservation Service</u>	
Dale Wehmas*	FSA Representative	Gary Haughn	District Conservationist
		Vacant	Civil Engineering Tech.

* Denotes Non-County Board Member

Land Conservation Committees were created under Chapter 92.06(1)(a), Wis. Stats. and have local responsibility for natural resource issues related to erosion control, sedimentation and nonpoint source pollution, and other duties as directed by the county board.

Administrative Activities

- Administered **\$111,729** in DATCP staff and support funding for the department in 2021.
- Administered **\$76,305** of DATCP conservation project cost share funding.
- Administered **\$20,688** in funds for the Wildlife Damage Program.
- Coordinated the Native plant sale including **\$3,472** in sales.
- Administered a **\$16,268** DNR Surface Water LMPN Grant.
- Administered **\$9,000** Shoreland Stabilization Booklet project, grant and matching funds.
- Administered **\$18,624** DNR Surface Water Lake Projection Grant.
- Developed & administered the department's budget.
- Filed all reimbursement requests and grant reports.
- Served on Youth Education Committee.
- Served on Great Lakes Committee.
- Served as the NW Land & Water Conservation Association Coordinator.
- Attended the WI Land+Water Conservation Association annual conference.
- Attended County Conservationist meetings.
- Provide conservation technical planning for 5 townships on 15 different conservation projects, 9 project designs private landowners, and 1 technical project design for the Mercer Public Library. Projects designed totaled **\$154,065.00** for the year.
- Administered 3 separate DNR Surface Water Grants.
- Attended Wisconsin Lakes Convention.
- Served on a committee that developed a booklet on Shoreland Stabilization for Homeowners.
- Completed 5 past project checks.
- Supervised staff

Budget Summary *(includes actual expenses & approximate revenues)*

	2021	2020	2019	2018	2017
DATCP Salary Grant	\$111,729	\$108,529	\$102,925	\$97,960	\$93,860
DATCP Cost-Share	\$76,305	\$55,215	\$49,509	\$68,883	\$40,000
Wildlife Damage	\$20,688	\$18,528	\$13,530	\$12,836	\$11,110
Native Plant Sale	\$3,472	\$4,886	\$6,172	\$4,467	\$4,562
Marten Project	\$8,000	\$8,000	\$8,000	\$8,000	8,000
Natural Resource Found.	----	\$5,000	\$4,875	----	\$5,000
U.S. Fish & Wildlife	----	\$30,500	----	----	----
DNR AIS Grant & Xcel	\$24,597	\$8,232	\$8,071	\$7,938	\$7,791
DNR Lake Grants/Misc.	\$27,557	----	----	\$25,000	\$25,000
FPP/Coastal Management	----	----	\$12,995	----	\$24,612
Montreal River Project	----	----	\$5,000	\$5,000	\$5,000
Other	\$2,641	\$3,140	\$4,516	\$6,210	
TOTAL Revenue:	\$274,987	\$242,030	\$215,593	\$236,294	\$210,538
Dept Expenses:	\$325,796	\$269,543	\$260,098	\$253,177	\$215,677
County Cost:	\$50,809	\$27,513	\$44,505	\$16,883	\$5,139

The County Cost line in this chart shows the total amount the county contributed to the department's budget.

*****In 2021, the county's cost was approximately 15% of the total LWCD's operating budget.**

Water Resource Management (LWRM) Plan

Chapter 92 of the Wisconsin Statutes grants authority to Land Conservation Committees (LCC) to set policy for local soil & water resource management. Their policies are administered through the LWCD.

The purpose of the Land & Water Resource Management Plans is for the counties to assess their individual resources, concerns and plans for address concerns. These plans are approved for a 10-year period, with a review 5-years into the plan. These mandatory plans are reviewed by the WI Land & Water Board in order for counties to receive their funding from DATCP.

Implementation of the plan is driven by the annual workplan, which includes goals, and activities identified by the LCC and the public.

Agricultural practices, streambank stabilization, riparian habitat restoration, and technical assistance to Towns continue drive the conservation practice workload of the department. In 2021, we fielded more than 57 site visits and numerous responses to technical requests.

The LWCD works cooperatively with agencies and county departments as opportunities arise including the Forestry, Highway, and Zoning Departments. The department is committed to a strong partnership with youth and adults through the County Lakes Alliance & lake groups, Hurley & Mercer Schools, Fe University, and more.

The table below summarizes the projects funded in 2021 through the Cost-Share Program.

Completed LWRM Cost Share Projects – 2021 (pictures start on page 5)						
Project Type	Name	Total Cost	DATCP CS \$	Other \$	Source	Landowner
Stream Crossing - 2020 C/O	Town of Gurney	\$29,693.00	\$14,846.50	\$7,423.25	County 25%	\$7,432.25
Stream Crossing - 2020 C/O	Town of Oma	\$19,568.00	\$9,784.00	\$4,892.00	County 25%	\$4,892.00
Stream Crossing – 2020 C/O	Town of Carey	\$15,309.00	\$7,654.50	\$3,827.25	County 25%	\$3,827.25
Stream Crossing – 2020 C/O	Town of Anderson	\$11,152.00	\$5,576.00	\$2,788.00	County 25%	\$2,788.00
Shoreline Stabilization	Burns – Trude Lake	\$21,577.00	\$10,788.50	\$5,372.00	DNR Grant	\$5,416.50
Shoreline Stabilization	Florence – Trude Lake	\$53,766.00	\$26,883.00	13,252.25	DNR Grant	\$12,130.75
TOTAL:		\$151,065.00	\$75,532.50	\$37,554.75		\$36,477.75

2021 DATCP Funded Conservation Practices



Stream Crossing Town of Gurney – Sullivan Fire Ln. (2020 Carryover Money)

DATCP CS:	\$14,846.50
County Share:	\$7,423.25
<u>Landowner:</u>	<u>\$7,432.25</u>
Total:	\$29,693.00

Stream Crossing Town of Oma – Riverside Drive (2020 Carryover Money)

DATCP CS:	\$9,784.00
County Share:	\$4,892.00
<u>Landowner:</u>	<u>\$4,892.00</u>
Total:	\$19,568.00



Stream Crossing Town of Carey – S. Island Lk Rd (2020 Carryover Money)

DATCP CS:	\$7,654.00
County Share:	\$3,827.25
<u>Landowner:</u>	<u>\$3,827.25</u>
Total:	\$15,309.00

2021 DATCP Funded Conservation Practices (cont.)

Stream Crossing Town of Anderson-Shirley Lk Rd (2020 Carryover Money)

DATCP CS:	\$5,576.00
County Share:	\$2,788.00
<u>Landowner:</u>	<u>\$2,788.00</u>
Total:	\$11,152.00



Shoreland Stabilization Burns – Trude Lake (2020 Carryover Money)

DATCP CS:	\$10,788.50
DNR Grant:	\$5,372.00
<u>Landowner:</u>	<u>\$5,416.50</u>
Total:	\$21,577.00

Shoreland Stabilization Florence – Trude Lake

DATCP CS:	\$26,883.00
DNR Grant:	\$13,252.25
<u>Landowner:</u>	<u>\$12,130.75</u>
Total:	\$53,766.00



Land & Water Resource Management (LWRM) Plan

Promoting land and water conservation outreach is the number one priority of Iron County's LWCD. The department dedicates a vast amount of time, energy, and funding to promote stewardship and resource protection to students, farmers, municipalities, elected officials, landowners, and the general public. This is the only department in the county that fills the niche.

Iron County participates in the state and regional Conservation Poster & Speaking Contest sponsored through the WI Land & Water Conservation Association. The 2021 theme was "Healthy Soils Healthy Life". There were 36 participants from Mercer's Art, Science and English classes. The elementary division speech winner from Mercer moved on to the regional speech competition along with the winning posters. Mercer's 5th Grade student Hunter Saarnio received 1st place at the NW Area (regional) speaking contest and will be moving on to state on March 2nd.



*Mercer Students -Conservation
Speech and Poster Competition*

Wisconsin Conservation Camp

The planning committee for the Wisconsin Conservation Camp met to discuss holding camp in 2022 after canceling in 2020 and 2021 due to COVID-19. In preparation there were two camp schedules developed, one with the typical off campus field trips and one with all programming to be held onsite to eliminate travel. Currently, the planning committee is moving ahead for a full camp schedule for 2022.

Shoreland Habitat Assessment Surveys

LWCD staff continued to conduct shoreland habitat assessment surveys this year. Coarse Woody Habitat (CWH) was surveyed on Fisher Lake. The parcel assessment was delayed until next field season as water levels were dropped to conduct repair work on Shay's Dam. Pike Lake was completed, the CWH survey was done in 2020, in 2021 the parcel assessment was completed. LTE staff assisted the County Conservationist on these surveys, learning about shoreland health.

Shoreline Stabilization Outreach Project

After two years in the making the *Shoreline Stabilization A Guide For Homeowners and Conservationists on Inland Lakes and Flowages* has been printed and distributed across the state. Printing was made possible through a DNR Surface Water Grant received by Iron County LWCD and by donations from 6 of the 8 Area Land & Water Conservation Associations. Wisconsin Valley Improvement Company (WVIC) donated the cost of shipping a box containing 165 booklets to each County LWCD in the state. This collaboration was a huge success and the booklet has been received with great enthusiasm and will be a valuable tool for LWCD staff, zoning staff and homeowners.

Land & Water Resource Management (LWRM) Plan (cont.)

Total Outreach & Education:

Field days, workshops, education programs: 75 programs

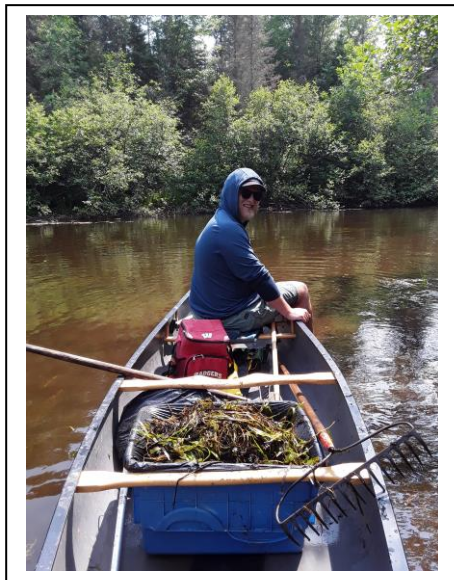
Student & adult program attendees: 389 youth and 523 adults

Native Plant Sale brochures distributed: 400

Total Participants: 912

Misc. Education Activities - (number of events); # participants

- Woods & Water (35); 46 students
- School programs (35); 389 students
- Lake Association talks (8); 184 participants
- AIS education programs (25); 383 attendees
- Terrestrial Invasive (8); 72 participants
- Conservation poster contest; 21 students
- Conservation speaking contest; 13 students



*Curly leaf pondweed hand
pulling event-Turtle River, Rice
and Pike Lakes*



*New population of European marsh thistle
Hwy 51 & Moose Lake Road*

Invasive Species Program

Iron County's Aquatic Invasive Species (AIS) program is strong and successful and now in its 14th year. The program has proven to be essential, educating the public, providing resources, and helping fight invasives throughout Iron County. This year we hired 4 summer intern/LTE, through the Xcel FERC licensing agreement, and the DNR - Lake Monitoring and Protection Network grant. The position was designed as a conservation field technician, to work alongside the Conservation Specialist. Together, the crew conducted surveys, created education fliers and YouTube videos, controlled and managed both aquatic and terrestrial invasive species, and conducted the Clean Boats Clean Waters watercraft inspections program.

In addition, the LTE's had independent study projects that helped the department improve education and outreach. Through this they created a newsletter, developed an online interactive mapping platform. Additional AIS monitoring surveys were done on the following lakes: Fisher, Mercer, Turtle Flambeau Flowage, Upper and Lower Springstead, and Pike. The Turtle River was surveyed for AIS from Rice Lake to Lake of the Falls.

Purple loosestrife continues to be a focus on the Turtle Flambeau Flowage. Each year a large workday is organized with volunteers from the lake association, partners from the DNR and LWCD staff assist in the effort to manage populations on the flowage. Based off data collected through the last 8 years, populations of this invasive plant seem to be somewhat under control, but not eradicated. Continued monitoring and management are advised.



Turtle Flambeau Flowage Purple Loosestrife Workday-WDNR, TFFTL-Assoc. & Iron County Land and Water Conservation Dept.

Education Accomplishments

- Assisted Pike & Rice Lake to help fulfill activities highlighted in the Early Detection and Response grant
- Trained & organized volunteers to hand pull Curly leaf pondweed on the Turtle River, Pike Lake and Rice Lake
- Conducted educational trainings, lessons, workshops, field trips and increased online presence

Technical Assistance / Management/ Monitoring

- AIS lake monitoring conducted; Spiny Water Flea surveys on Pike Lake, Gile and Turtle Flambeau Flowage, collected and vouchered new populations of AIS throughout the county
- Treatment of Japanese knotweed, Purple loosestrife, Wild parsnip, Giant hogweed, Garlic mustard, European marsh thistle, Yellow iris & Curly leaf pondweed
- Maintained partnerships with WDNR, NCWMA, GLIFWC, USFS and National Park Service
- Created an interactive online county GIS map to provide information on lake statistics, water quality, AIS, fish species present, and conservation work done by LWCD
- Coordinate water quality monitoring volunteers on 35 lakes in Iron County

Woods & Waters Project

Since 1999, Hurley and Mercer students have gained first-hand experience in conducting field research through studying the link between Iron County Forest types, soils, wildlife, and water quality through the Woods & Waters Project. This unique program draws students into the field to study water quality and loons during summer and to track American marten in the fall/winter.

In April and May Hurley and Mercer students participated in the Loon Project. In total, 28 students assisted in placing nesting platforms on Gile Flowage, Deer Lake and Fox Lake. These students learned how to test for water quality, learned about loon ecology, and how shoreline development can impact water quality and loon reproduction. Attendees of a Fe University program also participated in the program in July during the final visit to the lakes.

The 2021/2022 the woods and waters project also suffered due to the pandemic. With some restrictions for gathering. We did have a field season for the waters portion of the project but had to scale down on the woods part of the project. Zoom lessons did occur as well as classroom visits teaching students about our lakes and loons. During the fall of 2021, we started the project off with an introduction to the county forest. Students met Eric Peterson (County Forest Supervisor) at Corrigan's Lookout, where they learned about the George A. Corrigan and the county forest. Students also ventured into the forest and out to Saxon Harbor where they learned about Lake Superior and the many opportunities for recreation the county forest offers. In February, students learned how to identify trees, and cruised timber for forest management assessments. Lessons occurred each week from October through March via Zoom, classroom, or outdoor field outings. Students learned about the three ecological landscapes in Iron County, how to cruise timber, conducted tracking surveys, aged deer, and surveyed with game cameras to monitor American marten populations.



Students learning about macro-invertebrates while studying lake health



Marten Project students learning how to cruise timber



Learning about ecosystems while bird banding



Native Plant Sale



The 2021 Native Plant Sale was successful once again. This sale provides an opportunity for landowners to purchase small quantities of native seedlings, grasses, and wildflowers at a low cost. All the plants in the sale are native to northern Wisconsin!

There are many environmental and social values in promoting native species. This supports local nurseries and ensures greater survival because the plants are adapted to northern Wisconsin's climate. Once established, they require less maintenance because they do not need water, fertilizer, or pesticides.

Multiple layers of native plants (groundcovers, shrubs, and trees) provide the essential food, shelter, and space for a diversity of wildlife. These plants have broad and often deep roots, thus reducing soil erosion and promoting water percolation into the soil. As water percolates into the ground, nutrients are absorbed that would otherwise runoff into nearby lakes or streams.

Benefits and uses of these seedlings include: wildlife value, timber, windbreaks, shoreland habitat restoration, and more.

Proceeds from the Native Plant Sale funded scholarships for high school students.

2021 Native Plant Sale:

- ❖ 1,090 trees & shrubs
 - ❖ 11 ferns
 - ❖ 671 grasses/wildflowers
-
- ❖ **1,772** Total Plants Distributed
 - ❖ Camps cancelled in 2021.

2020 Native Plant Sale:

- ❖ 1,850 trees & shrubs
 - ❖ 18 ferns
 - ❖ 1,235 grasses/wildflowers
-
- ❖ **3,103** Total Plants Distributed
 - ❖ Camps cancelled in 2020.

Wildlife Damage Abatement Program

The Wildlife Damage Abatement & Claims Program (WDACP) was created by the Wisconsin Legislature in 1983 and has been implemented in Ashland, Bayfield, Douglas, and Iron Counties since 1987. Iron County's program is administered out of the Ashland County LWCD office.

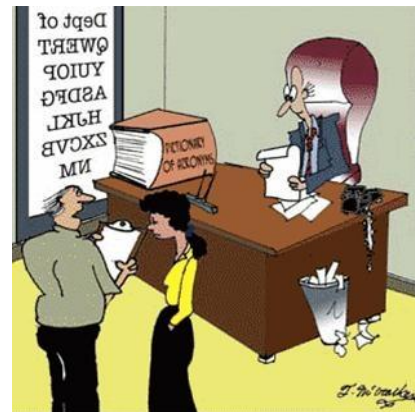
The emphasis of the WDACP is on abatement (alleviation) of damage from deer, bear, turkey and geese through techniques such as: modification of agricultural practices, fencing, live trapping and relocation of bear, repellents, scare devices and wildlife population control through managed hunting. In the 4-county area, there are a variety of commercial crops being damaged by wildlife including corn, sunflowers, soybeans, buckwheat, forage, apples, cherries, plums, strawberries, blueberries; carrots, beets, beans and other garden vegetables, cut flowers, honey and livestock.

ABATEMENT: The wildlife damage program responds to dozens of program inquiries and damage complaints annually. For those people that meet program eligibility requirements, some choose to enroll and implement abatement measures when damage is first reported.

CLAIMS: Dave Schultz, the WDACP Specialist managed the claims program for Iron County for over 20 years. Dave retired in August of 2021, for the remainder of the season the LWCD contracted Wildlife Services through APHIS. Program participants must call for damage appraisals at least 10 days prior to harvest to remain eligible for damage reimbursements. They must comply with program requirements and have properly implemented the recommended abatement measures to have their claims approved by the Land Conservation Committees and the WDNR. Iron County had one bear trapping and relocation program participant in 2021. In which 35 bear were trapped and relocated, in addition, there were 12 additional bears listed as harvested. The 715 acres appraised had a determined loss of 244 bushels of corn.

List of Acronyms

APHIS	Animal & Plant Health Inspection Service (part of USDA)
BMP	Best Management Practice
CSA	Cost Share Agreement
DATCP	Wisconsin Department of Agriculture, Trade, and Consumer Protection
FPP	Farmland Preservation Plan
FSA	Farm Service Agency
GIS	Geographical Information System
GLIFWC	Great Lakes Indian Fish & Wildlife Service
LCC	Land Conservation Committee
LWCB	Land & Water Conservation Board
LWCD	Land & Water Conservation Department
LWRM	Land & Water Resource Management
NCWMA	Northwoods Cooperative Weed Management Area
NRCS	Natural Resource Conservation Service (part of USDA)
NWLWCA	Northwest Wisconsin Land & Water Conservation Association
SRWA	Superior Rivers Watershed Association
USFWS	United States Fish & Wildlife Service
USDA	United States Department of Agriculture
UWEX	University of Wisconsin Extension
WDACP	Wildlife Damage Abatement and Claims Program
WDNR	Wisconsin Department of Natural Resources
WI Land+Water	Wisconsin Land and Water Conservation Association



"It's time for McWit to leave.
He's learned all the acronyms we use."

Cooperating Agencies

This Department extends an appreciative Thank You for your contributions in our outstanding accomplishments and success in soil & water conservation.

Federal

United States Fish & Wildlife Service (USFWS)

- Ted Koehler, Wildlife Biologist

USDA Natural Resource Conservation Service (NRCS)

- Gary Haughn, District Conservationist

State

Department of Agriculture, Trade and Consumer Protection (DATCP)

- Kim Carlson, County Liaison
- Stacy Dehne, Engineer

Wisconsin Department of Natural Resources (DNR)

- Zach Lawson, Fisheries Biologist
- Jenna Malinowski, Wildlife Biologist
- Beth Feind, TFF Property Manager
- Nichole Hays, Water Management Specialist
- Jon Simonsen, DOT Liaison

Superior Rivers Watershed Association

- Kevin Brewster, Program Manager

County

Iron County Board & Board Chairman

Iron County Forestry Department

- Eric Peterson, County Forestry Administrator

Iron County Zoning Department

- Erika Roeder, Zoning Administrator

Iron County Highway Department

- Mike Swartz, Highway Administrator