

# Iron County Land & Water Conservation Department

## 2018 Annual Report



*Students learning how to use a clinometer, a forestry tool used to measure tree height, during the marten project*

*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.*

## **2018 Year in Review**

### **Iron County Land & Water Conservation Department**

Last year, the Iron County Land & Water Conservation Department was successful in securing several grants to assist in supporting staff and programming. Iron County employs one full-time County Conservationist funded through the Department of Agriculture, Trade, and Consumer Protection (DATCP) and a full-time Conservation Specialist funded in part through DATCP, Department of Natural Resources Lake Classification Grant 2017-2018, Iron County Forestry Marten Project and County funds, and 2 limited term employees (LTE) through the summer, funded by Xcel Energy. Grant funding for staff is ever challenging as these grants are competitive and often are not used to fund ongoing projects. Over the years, state budget cuts have impacted DATCP staffing and support grants. In addition, WDNR grants have become oversubscribed with no increase in available funds. At the end of every grant project we must be even more creative to stay ahead of the trends and ensure our success in grant applications.

Zach Wilson, Conservation Specialist, continues to be an asset to the department. He continues to lead both the Loon and Marten projects with the schools, educating students on multiple conservation topics from runoff concerns to wildlife ecology to forestry tools. These projects have been ongoing for over 18 years in both the Hurley and Mercer Schools, educating hundreds of students. Zach also heads up our invasive species program educating the public on various invasives, treating populations of invasive plants across the county and managing volunteers both in invasive species monitoring and water quality. He also coordinates the conservation poster and speaking contest in both schools. Zach coordinates the popular Conservation on Tap series during the summer months which has been a very popular lecture series on different conservation topics with question & answer held at The Pines during the summer months.

The LWCD continues to provide technical and cost share assistance for a variety of non-point pollution and water quality concerns. The department implemented \$68,883 from DATCP to assist private landowners and municipalities with Cost-Share Funding. In addition, staff developed \$48,300 in technical projects which were designed, but not implemented in 2018.

In 2017-2018 the department has been working under a DNR Lake Classification grant focusing on intensive lake surveys. This work has been done through a partnership with the DNR Fisheries staff and the Iron County Zoning Dept. The LWCD has been mapping coarse woody habitat in lakes along with collecting data on every parcel on the lake, noting erosion, shoreline health and other parameters. The fisheries staff is looking at the walleye populations on these lakes to understand any impacts development is having on the walleyes. Through this partnership, each lake will receive recommendations on how better to manage their property to protect walleye populations.

The Iron County Land and Water Conservation Department appreciates the local, regional, and state support for conservation efforts within the county and across the state. We appreciate the commitment and hard work from our local County and Town Boards, lake associations, landowners, students, and concerned citizens and we will continue to be an active partner to continue implementing conservation in the county. The future of our pristine water resources depends on our strength and commitment.

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 &amp; Support</u>	
<b>Brad Matson</b>	<b>Chairman</b>	<b>Heather Palmquist</b>	<b>Conservationist</b>
<b>William Thomas</b>	<b>Vice-Chairman</b>	<b>Zach Wilson</b>	<b>Conservation Specialist</b>
<b>Larry Youngs</b>		<b>David Schultz</b>	<b>Wildlife Damage</b>
<b>Ken Saari</b>		<u>Natural Resource Conservation Service</u>	
<b>Dale Wehmas*</b>	<b>FSA Representative</b>	<b>Gary Haughn</b>	<b>District Conservationist</b>
<b>Matson also serves on the LWRB &amp; WI Land+Water BOD</b>		<b>Paul Johnson</b>	<b>Civil Engineering Tech.</b>

\* 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 **\$97,960** in DATCP staff and support funding for the department in 2018.
- Administered **\$25,000** WDNR Lake Classification grant for Shoreland Habitat Monitoring.
- Administered **\$68,883** of DATCP conservation project cost share funding.
- Administered **\$6,712** in funds for the Wildlife Damage Program.
- Coordinated the Native plant sale including **\$4,467** in sales.
- Developed & administered the department's budget.
- Filed all reimbursement requests and grant reports.
- Successfully wrote/received WDNR Lake Classification Grant & Natural Resource Grant.
- Served on Youth Education Committee.
- Served as Vice Chair of Great Lakes Committee.
- Organized NW Area Regional Poster Contest.
- Attended the WI Land+Water Conservation Association annual conference.
- Attended Wisconsin Lakes Convention.
- Attended County Conservationist meetings.
- Provide conservation technical planning for 3 townships on 3 different conservation projects, 2 project designs for 2 private landowners, and 2 technical project designs and implementation for the IC Forestry Dept & technical project design and implementation for WDNR. Projects designed totaled **\$288,089** for the year.
- Conduct monthly water quality monitoring at 4 sites on Montreal River & West Branch of Montreal River.
- Conducted shoreland habitat surveys on 4 lakes.
- Supervised staff

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

	2018	2017	2016	2015	2014
DATCP Salary Grant	\$97,960	\$93,860	\$97,778	\$93,777	\$102,889
DATCP Cost-Share	\$68,883	\$40,000	\$40,000	\$30,000	\$30,000
Wildlife Damage	\$12,836	\$11,110	\$9,803	\$11,514	\$17,892
Native Plant Sale	\$4,467	\$4,562	\$8,488	\$3,395	\$7,342
Marten Project	\$8,000	8,000	\$15,538	\$8,000	---
Natural Resource Found.	---	\$5,000	\$5,000	\$3,000	\$3,000
U.S. Fish & Wildlife	---	---	\$500	\$	---
DNR AIS Grant & Xcel	\$7,938	\$7,791	\$7,844	\$21,655	\$27,510
DNR Lake Protection/Misc.	\$25,000	\$25,000	\$30,505	\$31,604	\$8,443
FPP/Coastal Management	----	\$24,612	---	---	\$12,903
Montreal River Project	\$5,000	\$5,000	---	---	---
Other	\$6,210				
<b>TOTAL Revenue:</b>	\$236,294	\$210,538	\$215,456	\$202,945	\$182,979
<b>Dept Expenses:</b>	\$253,177	\$215,677	\$230,512	\$194,151	\$194,060
<b>County Cost:</b>	<b>\$16,883</b>	<b>\$5,139</b>	<b>\$15,056</b>	<b>+ \$8,794</b>	<b>\$11,081</b>

The County Cost line in this chart shows the total amount the county contributed to the department's budget. In 2015, the LWCD brought in \$8,794 to the county as a profit.

\*\*\*In 2018, the county's cost was 6.5% 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.

Iron County adopted its first Land & Water Resource Management Plan in 1999. The plan provides County government the flexibility and funding to address statewide goals as well as locally identified priorities. The plan was revised in 2004 and again in 2009. Goals were revised, including a new goal for invasive species management. Revisions are required to remain eligible for funding. The plan was approved by the Iron County Board on January 26, 2010 and by the Wisconsin Land & Water Board on February 2, 2010. In 2015, the 5 year workplan was updated and approved by the Wisconsin Land & Water Board and adopted by the Iron County Board.

Implementation of the plan is driven by the annual workplan, which includes goals, and activities identified by the LCC and the public. Partnerships with local producers and combined funding opportunities with NRCS have promoted farmers to address barnyard and manure management concerns. Agricultural practices, streambank stabilization, riparian habitat restoration, and technical assistance to Towns continue drive the conservation practice workload of the department. In 2018, we fielded more than 55 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 2018 through the Cost-Share Program.

<b>Completed LWRM Cost Share Projects – 2018 (pictures start on page 5)</b>						
<b>Project Type</b>	<b>Name</b>	<b>Total Cost</b>	<b>DATCP CS \$</b>	<b>Other \$</b>	<b>Source</b>	<b>Landowner</b>
Livestock Fencing - 2017 C/O	Clement	\$20,000.00	\$5,464.20	\$8,535.80	DATCP CS 2017 pd	\$6,000.00
Stream Crossing – culvert	Town of Anderson	\$10,284.00	\$5,142.00	\$2,571.00	County 25%	\$2,570.00
Stream Crossing – Culvert	Town of Kimball	\$15,287.00	\$7,643.50	\$3,822.00	County 25%	\$3,821.50
Shoreline Stabilization	Nelson	\$9,221.20	\$4,883.00	NA	NA	\$4,338.20
Shoreland stabilization	IC Forestry Shay's Dam	\$7,734.00	\$3,867.00	NA	NA	\$3,867.00
Shoreland stabilization	IC Forestry Saxon Harbor	\$220,542.60	\$41,882.23	\$1,000.00	Great Lks Grant	\$177,660.37
<b>TOTAL:</b>		\$283,068.80	\$68,881.93	\$15,928.80		\$214,185.87

## 2018 DATCP Funded Conservation Practices



### Livestock Fencing Jim Clement Farm (2017 Carryover Money)

DATCP CS:	\$5,464.20
2017 DATCP CS:	\$8,535.80
<u>Landowner:</u>	<u>\$6,000.00</u>
Total:	\$20,000.00

### Stream Crossing Town of Anderson Casey Sag Rd

DATCP CS:	\$5,142.00
County Share:	\$2,571.00
<u>Landowner:</u>	<u>\$2,570.00</u>
Total:	\$10,284.00



### Stream Crossing Town of Kimball Maki Road

DATCP CS:	\$7,643.50
County Share:	\$3,822.00
<u>Landowner:</u>	<u>\$3,821.50</u>
Total:	\$15,287.00

# 2018 DATCP Funded Conservation Practices

## Shoreland Stabilization Nelson Turtle Flambeau Flowage

DATCP CS:	\$4,883.00
<u>Landowner:</u>	<u>\$4,338.20</u>
Total:	\$9,221.20



## Shoreland Stabilization IC Forestry Shay's Dam Park

DATCP CS:	\$3,867.00
<u>Landowner:</u>	<u>\$3,867.00</u>
Total:	\$7,734.00

## Shoreland Stabilization IC Forestry Saxon Harbor- Oronto Creek (\$15,022 carryover from 2017)

DATCP CS:	\$41,882.00
Great Lks Grant:	\$1,000.00
<u>Landowner:</u>	<u>\$177,660.60</u>
Total:	\$220,542.60



# 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 vast amounts 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 2018 theme was "Life in the Soil: Dig Deeper." There were 60 participants from Mercer Art class and Hurley classes. The two age division speech winners from Mercer moved on to the regional speech competition along with the winning posters from both schools. Mercer's 5<sup>th</sup> Grade Student Ryley Saarnio received 3<sup>rd</sup> place at the NW Area (regional) Speaking Contest. For the NW Area Poster Contest Mercer student, Madison Ciriacks placed 2<sup>nd</sup> in the 10-12 grade division and Emma Galloway received 3<sup>rd</sup> place in the 2-3 grade division.

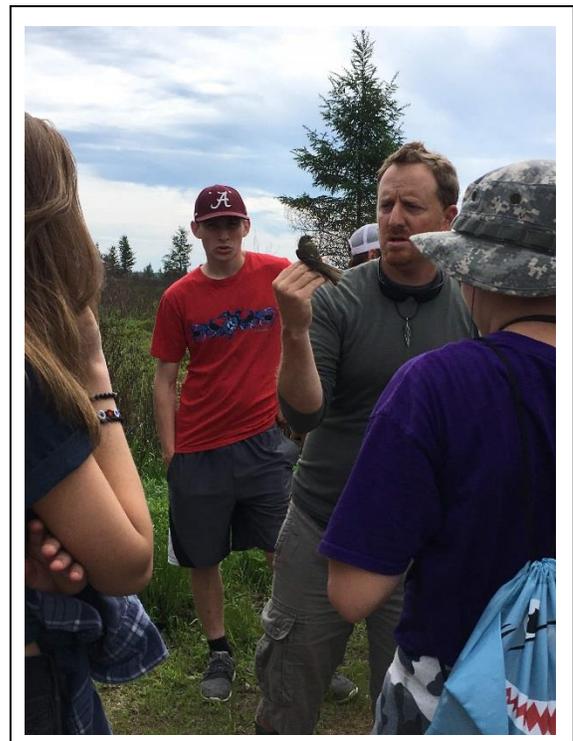


*Mercer Student Conservation Speech Contestants at NW Area Contest.*

## **Wisconsin Conservation Camp**

Since 2012, the Iron County LWCD has been primarily responsible for coordinating the Wisconsin Land+Water Conservation Camp for highschool students. This past year, the Conservation Camp had 25 attendees from across Wisconsin. The camp was held at the North Lakeland Discovery Center from June 18-22, 2018 in Manitowish Waters, Wisconsin. Camp programs focused on Fish hatchery and Natural Resource in Lac du Flambeau, Cultural History, Ottawa National Forest, Lake Superior, and more.

This year was focused on careers and cultural diversity of the area. Campers experienced the Lac du Flambeau museum learning about Native American culture, they toured the Lac du Flambeau Natural Resource Building learning about different conservation practices installed on the reservation and toured the fish hatchery which was recently expanded through a partnership with NRCS. Attendees also visited the Ottawa Visitors Center where they learned about career options with the Federal Government. Then it was off to Lake Superior, visiting Silver City, MI beaches and a visit to Lake of the Clouds in the Porcupine Mountain State Park. 2018 Conservation Camp was another great event, a great time was had by all!



# Land & Water Resource Management (LWRM) Plan (Cont.)

## Misc. Education Activities

1. Miscellaneous programs (3); 150 attendees
2. \$200 camp scholarship
3. Woods & Water (20); 55 students
4. School programs (26); 342 students
5. Conservation on Tap (3); 175+ attendees
6. Lake Association talks (2); 40
7. Camp programs (6); 125 kids
8. AIS education programs; 175 attendees
9. Garlic mustard pulls (2); 50 students
10. Conservation poster contest; 91 students
11. Conservation speaking contest; 42 students
12. Loon Days; 100 attendees.
13. Fe University Classes (3); 50 attendees
14. Pollinator Class; 21 participants
15. Log a Load – 900 kids

## Total I & E Outreach:

Field days, workshops, education booths:	29
Education programs taught:	41
# Student & adult program attendees:	2,013
Native Plant Sale brochures distributed:	400



*Hurley students learning about how development impacts the health of our watersheds.*

## Lake Classification Grant

In 2017 the LWCD was awarded a two year WDNR Lake Classification Grant for conducting Shoreland Habitat Surveys. This new DNR survey method is an in depth look at overall lake health. The project incorporated the WDNR Fisheries and the Iron County Zoning Department as partners in the project. The LWCD designed the grant to partner with Fisheries to look at lakes the DNR was currently monitoring for fish reproduction to study correlation if any on shoreland development and fish reproduction. In some instances, we have experienced walleye spawning areas that have been silted in due to erosion, sometimes caused by the way landowners develop their shorelines. Once the project has been completed if there are areas in need of restoration or work, the LWCD will work with interested landowners to implement a conservation practice on a voluntary basis.

The surveys include multiple trips to each lake to collect data. One the first trip in May – early June the entire perimeter of the lake is navigated in two feet of water with every piece of coarse woody debris over 4 inches in diameter mapped. Additional parameters are noted including sediment type at each location.

The second trip conducted in July-September, each parcel is analyzed noting the health of the shoreland buffer. Human development is measured including impervious surface, erosion concerns, bare soil, native plants, etc. The collected information is used to look at the lake to compare with fisheries data to see if there are any issues that need addressing.

### Accomplishments

- APP developed to collect data easily in the field
- 4 lake surveys completed
- Database created to compile the collected data
- Mapping system set up to show the data points/information & pictures associated

**Meet Lindsey Dashner!** Lindsey approached us in late summer as she was interested in doing the work study program through Hurley School. She is interested in a career in natural resources and wanted to gain some experience in the field to make sure she is on track for her career. She has assisted the department with a variety of tasks from water quality testing to marten research to assisting with the native plant sale. Lindsey also took on a project analyzing loon project data reviewing the pictures from one of the nesting platform cameras. She tracked the process and noted different behaviors throughout the nesting period. Lindsey will be attending UW Stevens Point in the Fall of 2019 and is planning on studying wildlife biology.



# **Invasive Species Program**

Iron County's AIS program is strong and successful and now in its ninth year. We funded two summer interns, through the Xcel FERC licensing agreement. The LTEs educated boaters about inspecting their equipment to prevent the spread of AIS.

In addition to boater education, the LTE staff monitored the Turtle Flambeau Flowage, Trude Lake and Wilson Lake for aquatic invasive species through AIS monitoring and conducting Point Intercept surveys. The LTE staff also assisted in collecting CWH data on Trude and Wilson lakes. This year the LWCD led efforts on Rice Lake with the association to hand pull invasive Curly leaf pondweed and assisted in the purple loosestrife control efforts in the county.



*Summer LTE Staff during Purple loosestrife work day.*

## **Education Accomplishments**

- Water chemistry training (5) - 2 new lakes - 5 participants
- Woods & Waters AIS monitoring (6) lakes - 24 students

## **Technical Assistance / Management/ Monitoring**

- Conducted 1,369 boat inspections, contacting 2,934 recreationists
- AIS lake monitoring conducted; over 50 species were vouchered
- Treatment of Japanese knotweed, Purple loosestrife, Wild parsnip, Giant hogweed, Garlic mustard & Curly leaf pondweed
- Conducted monthly water quality testing on Turtle Flambeau Flowage (4)
- Maintained partnerships with WDNR, GLIFWC, USFS and National Park Service

## 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 pine martin in the fall/winter.

In 2015 the Marten project was forced to change scope and was no longer issued trapping permits which eliminated the ability to collar the animals and follow them using the radio telemetry. In response to the change in the program in the 2017/2018 school year students started to trap mice and other small mammals to identify the species and study the available food source within the Marten territories. More tracking surveys were conducted and the game cameras were put over baits to “capture” martens to monitor their population.

There was more emphasis put on the forestry component of this program in 2018. Eric Peterson was present on field outings showing students logging operations and discussing forestry practices. He introduced multiple career opportunities in the logging industry from the logger to the forester to the log buyer.



*Peterson educating students at a timber sale.*



*Loon pair circling the platform right when it was placed in the spring.*

The Waters component of this unique program includes placing loon platforms on five lakes throughout the county. The platforms are monitored by students through the summer to record success of nesting. The program has increased successful reproduction by more than 50%. In addition, the students learn about the impacts of water quality and shoreland development on loon reproduction. They also learn how to measure water chemistry and how that correlates to lake health. Students also learn about aquatic plants, how to identify them and about aquatic invasive species. The research opportunity has been highly beneficial for these students to be part of. They are also learning life skills including canoeing and strapping boats on a

trailer securely. Many of the students experience canoeing for the first time.



## Native Plant Sale



The 2018 Native Plant Sale was successful once again. This year we offered something new, a pollinator pack. A pollinator pack consisted of 32 plant plugs (2 ½ inch plug) 4 plugs of 8 different species, all of which are important to a variety of pollinators. The pollinator pack was an easy way for landowners to create a garden to attract pollinators to their property with a variety of wildflowers and grasses. It proved to be a huge success and will be incorporated in future sales. 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.

### 2018 Native Plant Sale:

- ❖ 1,175 trees & shrubs
- ❖ 36 ferns
- ❖ 1,115 grasses/wildflowers

- 
- ❖ **2,326** Total Plants Distributed
  - ❖ Awarded **\$200.00** in scholarships for a Springstead resident to attend the middle school Land+Water Conservation Camp

### 2017 Native Plant Sale:

- ❖ 1,275 trees
- ❖ 575 shrubs
- ❖ 1,764 grasses/wildflowers

- 
- ❖ **3,614** Total Plants Distributed
  - ❖ Awarded **\$200** in scholarships to Springstead resident to attend Land+Water Conservation Camp

# 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 manages the claims program for Iron County. 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 2018, in which 30 bear were trapped and relocated. The 628 acres appraised had a determined loss of 496 bushels of corn.

## List of Acronymns

BMP	Best Management Practice
CREP	Conservation Reserve Enhancement Program
CSA	Cost Share Agreement
DATCP	Wisconsin Department of Agriculture, Trade, and Consumer Protection
EQIP	Environmental Quality Incentives Program
FPP	Farmland Preservation Plan
FSA	Farm Service Agency
GIS	Geographical Information System
GLIFWC	Great Lakes Indian Fish & Wildlife Service
I&E	Information & Education
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
NWLC	Northwest Wisconsin Lakes Conference
NWLWCA	Northwest Wisconsin Land & Water Conservation 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 acronymns 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
- Paul Johnson, Civil Engineering Technician

## **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
- Brett Bockhop, TFF Property Manager
- Jennifer Murphy, Water Management Specialist

## **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