Species Highlight: Red Fox (Vulpes vulpes)

The red fox is one of the most common mammals that is present in Pine county. 1 of 2 fox species in Minnesota, the red fox unsurprisingly gets its name for its rusty-red color. That being said, they can have several color variations, sometimes being spotted as solid black, silver-black, and red with dark bands across the back and shoulders. Other identifying characteristics include a bushy tail and black ears. In maturity, they end up being around 3 feet long and 15-16 inches tall.

Range and Habitat

Red foxes live all throughout the state of Minnesota and are very adaptable to their environment. Whether it be in the forests of the northwoods or the open fields of the tallgrass prairie, these animals can find a way to survive. In Pine County, most of the red fox habitat is found in the forests, specifically forest edges. They will burrow in dens or find brush piles to hunker down in when rearing their young. From their dens, they can travel up to 2 miles to hunt for food.

Food

The red fox is an opportunist hunter that is not picky. They will prey on mice, rabbits, squirrels, birds, snakes, insects, or even nuts and berries. A unique characteristic about the red fox is that they will cache their food in nearby locations and come back to it once they are ready to eat it. They directly compete for food with coyotes and wolves, and can at times become prey to these larger carnivores. Red foxes will always hunt alone, doing most of their searching around dusk.

Management

In Minnesota and in Pine county, the red fox is a common species that is hunted and trapped. Despite this, their population numbers remain strong. At times, they can become a nuisance to poultry and pheasant farmers through predation or disease transmission. They also assist in keeping small mammal populations in check. The red fox is an important species from both a recreational aspect and from an ecological aspect.

Check Us Out Online

Pineswcd.com

And Follow Us on Facebook!

RIM Easemets are Coming to Pine County - Paul Swanson

Pine SWCD is happy to be bringing a new initiative to Pine County. Working with BWSR, Pheasants Forever, and other partners, we were able to secure funding for conservation easements in the Kettle and Snake River watershed!

RIM (Reinvest in Minnesota) easements are part of a program facilitated by the Minnesota Board of Soil and Water Resources (BWSR). Through them, on behalf of the state, they acquire easements to permanently protect land in the state. The land is still owned by the landowner, and they still are responsible for maintaining the property, as well as paying any taxes on the property. Landowners who invest in these easements will receive a one time payment for 60% of the county assessed tax value of the property.

These easements will be focused on properties larger than 20 acres and are adjacent or in close proximity to the main stems of the Kettle and Snake Rivers. Other aspects may also be evaluated when prioritizing properties such as current wildlife habitat, and adjacency to public lands.

If you are in one of the focus areas for this new initiative, you can expect to hear more about this opportunity in the near future as this process continues. In the meantime, if you are interested in learning more, you can contact Paul at (320)216-4241.

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The Pine SWCD Newsletter

Pine County Soil & Water Conservation District

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New Lower St. Croix Partnership Offers Funding for Projects

Over the past two years, the Pine SWCD has been involved in an effort to put together a Lower St. Croix (LSC) River Comprehensive Watershed Management Plan. Joining 15 other local government partners across Washington, Chisago, Isanti, Anoka, and Pine counties, this initiative originated with the statewide One Watershed, One Plan program that looks to guide watershed conservation work in the region for the next 10 years.

With adoption of the plan in October 2020 by the Board of Water and Soil Resources (BWSR), the Lower St. Croix Watershed Partnership was officially founded and is moving into its implementation phase. BWSR has provided $2.1 million in funding for the Partnership's first two years. In addition to hiring new staff, partners are also establishing processes through which potential clean water projects will be reviewed and prioritized. Potential projects supported by the grant include a wide range of conservation measures that look to improve water quality and prevent degradation of water resources in rural and urban landscapes, including but not limited to structural and non-structural best management practices, wetland restoration, groundwater protection, forest management, raingardens, shoreline plantings, and more.

Recently our staff met a landowner on his property to discuss an impending livestock exclusion project that will be funded through the Partnership. The farm includes hundreds of feet of shoreline along a lake impaired by excess nutrients. Removing livestock access to the lake will reduce shoreline erosion and sediment disturbance as well as phosphorus and bacteria inputs. Furthermore, the landowner intends to seed a 50-ft buffer from the shoreline with native plants to help stabilize the shoreline and provide wildlife and pollinator habitat.

Paul Swanson, District Manager of the Pine SWCD, puts it simply: "This is a good project, and a great fit for the LSC Watershed Partnership. We're excited to be one of the first projects on the ground and hope this is the first of many that benefit the St. Croix River watershed."

Learn more about the Lower St. Croix Watershed Partnership at www.lsc1w1p.org.

Inside this issue:

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Become a Master Gardener - Pine County Extension

Applications are now being accepted to become a Pine County Master Gardener. This is an opportunity to take a basic horticulture course from horticulture experts from the University of Minnesota and to share one's gardening knowledge and experience with Pine County residents. The deadline to apply is October 1st.

Master Gardener Jennifer Eaves, Hinckley said that this program is a unique way to meet people with an interest in gardening and to share research-based information with the citizens of Pine County and Minnesota. Kim Metz, Rock Creek added, "This program has made a huge difference in my life to have a local gardening and information community."

Individuals accepted for the program will start an internship that begins with a 48-hour Master Gardener Core Course the second week of January 2022. There are two ways to take the course. One is to take it online between January and May. The other option is to take it in-person at eight sessions on Fridays and Saturdays in January and early February at the University of Minnesota Landscape Arboretum near Chanhassen. Or, it can be taken by a combination of these two options.

Following the core course, interns complete 50 hours of volunteer time in their first year and 25 hours in succeeding years by working with other local master gardeners and/or on their own on a variety of projects that inform the public about gardening and horticulture.

In Pine County, some of those projects include the Pine County Horticulture Day, community education classes, Pine City Community Garden, Hinckley School Garden, Junior Master Gardeners, Ask a Master Gardener booths at the Farmers' Market, Grand Casino and County Fair; newspaper columns, Facebook posts and more. During the COVID pandemic this year, Pine County Master Gardeners have been growing giving vegetable gardens at home and in Pine City and Hinckley, growing plants to share and walk-by pollinator gardens.

After completing the first-year internship, an intern becomes certified as a University of Minnesota Extension Master Gardener.

There is a fee for the core course. A partial scholarship is available.

To apply now and until October 1st call or email Terry Salmela, Pine County Master Gardener Coordinator at the Pine County Extension office at the Courthouse in Pine City at 800-657-38 13 Ext. #3 or 612-390-3149. His email is salme002@umn.edu

Equipment Rental

Our no-till drill and wildlife plot equipment is available to rent for your spring planting needs!

The no-till drill

Working Width 12 feet
Travel Width 16 feet
Rental Rate is $14 per acre

A 50% deposit of estimated acres is needed to hold your place.

Wildlife plot equipment

Can be used behind an ATV or small utility tractor.

Includes:
small field disc
broadcast seeder
drag harrow

Rental Rate is
$80 per weekday
$225 for the weekend

Contact
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The Kettle River/Upper St. Croix 1W1P

As the state continues to move towards watershed wide water planning instead of county water planning, your local county and SWCD staff have been busy planning and implementing conservation efforts in the county's four major watersheds. The Kettle/Upper St. Croix watersheds are the last of the four 1W1P planning areas to begin this process.
The collaborative efforts of county and district staff within the Kettle River and Upper St. Croix watersheds applied for the One Watershed One Plan (1W1P) planning grant earlier this year. This grant provides funding for local partners to work on efforts to plan and develop a watershed wide water plan that will help prioritize and direct conservation efforts within watersheds of Minnesota.

We are happy to announce that in late August we received word from the Board of Water and Soil Resources (BWSR) that our grant had been approved for funding. This will allow local partners to work with BWSR to execute a grant agreement so we can begin the planning phase of the 1W1P process. Our hope is to have things in place by the end of this year so we can begin the 2 year planning process at the beginning of 2022.
This planning process is long and intricate, but it allows local partners to dive into the local issues these watersheds are facing, address how to help resolve them, develop measurable goals, and receive plenty of feedback from the public as well as local and state agencies.

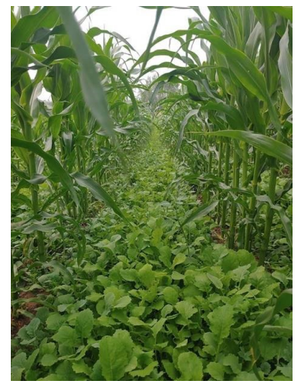
After this 2 year process, the plan will be submitted to BWSR, who will then review and approve it.
Once approved, the plan is designed to instruct local agencies on conservation implementation in the watersheds for a 10 year period. State funds are also made available to be used within the watersheds. This means more conservation dollars that are available to be used and more conservation being done on the ground.
The 1W1P initiative has provided local agencies capacity to increase their efforts and provide more services to local landowners across the state. We are excited to continue moving Pine County towards this new and exciting water plan effort, and to be able to expand our service to the people of Pine County.

The Benefits of Cover Crops - Zach Van Orsdel

Cover crops have the potential to provide multiple benefits in a cropping system. The harvest of low residue row crops, such as corn silage or soybeans, usually means the soil surface of a field will be left bare until the next crop is planted and a new plant canopy is established. This next planting may be as long as 5-7 months away. That's a long time for the bare soil to be subjected to erosion caused by rainfall, snowmelt, or wind. For that reason, cover crops are usually established and grown in the fall months, and remain during the winter. In the spring they are then harvested or killed and left on the surface as residue for conservation tillage or are incorporated into the soil.

Beyond protection from wind and water erosion, cover crops have other benefits. They improve soil health by increasing organic matter concentrations and improving soil structure, both of which increase the moisture and nutrient holding capacity of soils. Cover crops can also help suppress weeds and break pest cycles while potentially providing extra forage in the spring.

Cost share may be available for cover crops starting Spring 2022, if you would like more information, give Zach a call.



An Example of interseeding cover crops. Photo Credit: NE MAWQP

Conservation in Action: Big Pine Lake - Paul Swanson

A shoreline planting

With the profits made from our 2021 Tree Sale, we were able to help fund three shoreline planting projects on Big Pine Lake this year!

The Big Pine Lake Association has been working on installing lakeshore buffer plantings for many years on the Aitkin County side of their lake. Last year they partnered with us to start working on the Pine County side, and we were happy to work with them again this year.

These projects are designed by Hayland Woods, and with some guidance, are installed by the landowners and other members of the lake association.

Generally these types of projects involve installing willow wattles (bundles) along the lakeshore and planting native perennials along the lakeshore after some site preparation. They tend to be cost-effective and provide great results! Projects that have been installed for several years help stabilize and increase shoreline, and provide a beautiful native planting that can include a variety of native flowers that bloom throughout the growing season!

Having a shoreline buffer helps absorb and disperse wave action that can cause erosion. They also can catch surface runoff from your property and allow it to infiltrate into soil, preventing debris and pollutants from entering our county lakes.

Our district is excited about these projects, and the prospect of working with other lake associations to install similar projects throughout the county.

Without your support of our tree sale, these projects would not have been possible! Thank you for helping us put conservation in action!

Meet Our New Technician

"I WANTED TO CONTINUE WORKING AT A CONSERVATION DISTRICT,"

Hi! Zach Van Orsdel here, Pine SWCD's new technician. I'm excited to be back in my home state and working in Pine County. I grew up in the western side of the state in Alexandria and spent most of my time on a lake or wandering around the few acre wooded lot across the street.

I went to Gustavus Adolphus College where I got a degree in Geology and English. Post-graduation I did a variety of things that led me to working at a conservation district. I've worked for the MN Geological Survey, a construction consulting company, surveyed trout habitat in Idaho, earned a Masters in Geology, spent a semester in a soil science graduate program, and finally ended up at the Asotin County Conservation District in south eastern Washington. After spending some time there I decided it was time to move back to Minnesota. I wanted to continue working at a conservation district and was fortunate enough to be offered the opportunity to work here at Pine County's.

I have several responsibilities here, but my main role will be working with landowners to address resource concerns on their property. These concerns can range from stabilizing shorelines to implementing agricultural practices that improve soil health. I really enjoy meeting new people, seeing their properties, and working with them to implement conservation on their land. I look forward to work with the people of Pine County

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Prescribed Grazing - Zach Van Orsdel

Prescribed grazing is the application of domestic livestock grazing at a specified season, frequency, duration, and intensity to accomplish specific vegetation management goals. Prescribed grazing can be used to accomplish several goals, including improving water infiltration, maintaining or improving pasture vegetation productivity, protecting stream banks from erosion, managing manure concentrations, and improving soil health. If you are interested in learning more or having a prescribed grazing plan, give Zach a call.

Zach Van Orsdel, Technician
(320)216-4242

"PRESCRIBED GRAZING CAN BE USED TO ACCOMPLISH SEVERAL GOALS,"

Recycling Services in Pine County - Caleb Anderson

Pine County, like numerous communities throughout the country, has experienced diminishing accessibility to recycling services over the past couple years. Through the 1990's and early 2000's exports of recycled products surged, particularly to China, which offered local recycling companies respectable revenue for participating in this environmental initiative. Locally during that time, Pine County hosted as many as 20 unstaffed recycling drop-off sites.

As global markets have steered away from buying the US's old pop bottles, the cost of collecting and transporting materials for recycling has largely depended on state and local subsidies to continue. In Pine County this has been compounded by increased contamination of its recycling centers. An unlit public recycling shed has been a choice location for some residents to drop off any type of non-recyclable material, which has burdened the program causing the County to get more creative and strategic about keeping the cost of the service under control. Today the County only has one unstaffed recycling center, three transfer stations that accept recycling, and one staffed recycling center.

While many people have shared concerns that Pine County is devaluing the concept of recycling, this could not be farther from the truth. The County has instead shifted to a more holistic approach to solid waste and recycling. The County opened a new household hazardous waste collection facility in Pine City in 2016. In 2019 it opened two residential transfer stations in Willow River and Pine City, which collect more than just bottles and cans, also garbage, appliances, electronics, fluorescent bulbs, scrap metal, etc. In 2021 the County opened a new staffed recycling center in Sandstone. In 2021 the County was a recipient of a grant to build a household hazardous waste collection facility at its North Pine Transfer Station in Willow River. There are fewer locations to recycle in Pine County now, but there are more locations to get rid of other materials, and the County has shifted to staffed recycling sites.

Recycling has never been effortless. Yes, it needs to be convenient, but it also needs to cost effective. Some strategies, which are extremely cost-effective, often also get overlooked, such as home composting, reducing the amount of packaging we purchase, and reusing materials when possible. How much slower would a household's recycling bin fill up if they used more reuseable water bottles rather than countless plastic water bottles?

Building new landfills and filling them up with garbage remains a publicly unfavorable concept for numerous reasons. Recycling continues to be a valued strategy to conserve natural resources and energy for our communities for generations to come. Find your local recycling center and participate in this public programming, or check with your garbage hauler about curbside recycling service.

For more information contact the Solid Waste Department at 320-216-4220

The Benefits of Natural, Native Shoreline - Zach Van Orsdel

Many lakeshore property owners purchase their lots because they enjoy nature and want to see it thrive. An important part to a thriving natural community is having a healthy shoreline. A healthy shoreline supports a diverse community of fish and wildlife by providing native vegetation that fulfills their habitat needs where land and water meet. Native vegetation also provides important water quality functions by slowing and filtering water runoff as it moves to the lake or stream. Shorelines with a diverse mixture of native plants extending inland as well as offshore of the bank are more resilient to wave and ice erosion. Our lakes, streams and wetlands need healthy shorelines to reduce runoff, filter pollutants, and provide important habitat functions that benefit fish and wildlife.

Let's look at some of the problems lakeshore owners may have before looking at how native vegetation can be the solutions to them.

Green Water: A mowed lawn sends rain runoff carrying fertilizers, pet waste, lawn clippings, and sediment quickly and directly into the lake, where they fuel algae blooms that make swimming less enjoyable.

Surface Runoff: Lawns act as slides for rainfall, allowing it to flow quickly over land and into a lake. This can cause gullying and rapid erosion in areas with exposed soil or sand.

Wave Erosion: Plants in a lake such as bulrushes, cattails, and coontail reduce the energy of waves before they hit shorelines. Removing them will allow higher energy waves to hit shorelines, resulting in increased erosion. Bare soil on a shoreline is especially susceptible to erosion and undercutting, a problem which turf grass's short (2-3 inches) root system can't solve.

Nuisance Wildlife: Lawns mowed directly to the lakeshore attract geese. Geese are grazers and mowed lawns create ideal conditions for them to hunt for the insects they eat.

Lack of Wildlife: While a mowed lawn is good for geese, it does not provide habitat for other native wildlife, and neither do artificial beaches.

How can native vegetation be the solution to the above problems?

Green Water: Slows runoff and absorbs nutrients which otherwise enter a lake and cause algae blooms

Surface Runoff: Slows surface flow, reducing erosive power. Native plants hold soils together with their roots and limits soil erosion from surface runoff.

Wave Erosion: Binds and strengthens the soil column with a deep (3-10+ feet) and dense root system, preventing soil loss and undercutting.

Nuisance Wildlife: Discourages geese presence by making it more difficult for them to graze

Lack of Wildlife: Provides diverse habitat for a variety of wildlife.

If you would like to learn more about how native shoreline can help protect your property and attract more wildlife, feel free to contact us and we can help you get started!

Oak Wilt in Pine County– Jake Dale

When I write stewardship plans for landowners around the county, a common phrase I hear is "I love my oaks, how can I protect the ones I have and encourage new growth?" There are four species of oak within Pine County: bur oak, white oak, northern pin oak and northern red oak. They are all very popular trees landowners enjoy on their landscapes. Oaks provide a great food source to so many different types of wildlife and the trees themselves are a major component of the typical northern hardwoods forests that we all love.

Unfortunately, oaks are susceptible to a deadly disease called oak wilt. Oak wilt is a fungal disease that can spread through insects and through the root systems of nearby oaks. It can spread rapidly, and eventually kills any oak trees that encounter it. Pine County is near the northern boundary of oak wilt in Minnesota. With that being said, it is still here and can spread quick.

There have been confirmed cases in the county in 2021, so it is important to know what to look for on your property. In July and August, the leaves of oaks will begin to fall off the tree, with the leaves at the top of the canopy falling off the tree first. Wilting of red and pin oaks can occur in as little as 4 weeks, while symptoms in white and bur oaks typically take longer to present themselves. The leaves of the oaks that fall will turn bronzish-red beginning at the tips and progressing towards the middle.

If you believe your oaks have contracted oak wilt, there is little you can do to save already-infected trees. You can apply fungicide to infected trees if they are of high value, though usually disease-ridden trees are left alone to die. However, if you begin to manage quickly, there are things you can do to protect nearby healthy oaks. The first thing you can do is call a local forester to come out and inspect your trees. My number is 320-216-4245. The DNR and local private foresters can also perform oak wilt checks. A vibratory plow is a tool and can cut below-ground root connections. This can help reduce spread of oak wilt to nearby trees. Don't prune oaks April-July. The open wounds increase risk of infection. Be sure to not move infected wood out of the area. The fungus can still spread through firewood movement and you could potentially spread the disease to a previously untouched area.

If you have any questions related to oak wilt, please feel free to give me a call. This is a very important disease to manage for, and I am happy to help out in any way.

The typical appearance of a red oak leaf infected with oak wilt
Photo Credit: Jake Dale

"THERE ARE THINGS YOU CAN DO TO PROTECT NEARBY HEATLHY OAKS."

The 2022 Annual Tree Sale

Our 2022 Annual Tree Sale will be here before you know it! Our order will go out to the nurseries by early November.

Once our orders are confirmed, our staff will work hard to get things ready and get our order forms out.

Our 2022 order form will appear on our website starting in late December.

Those of you who have ordered from us the last two years will get an order form sent to you in the mail around the beginning of the year.

And back by popular demand, our mixed bundles!

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