Wildlife Species Highlight:

Sharp-tailed Grouse (*Tympanuchus phasianellus*)

Photo Credit: National Audubon Society

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The sharp-tailed grouse is the only prairie grouse indigenous to Minnesota. The name "sharptail" comes from their two long and pointed central tail feathers. Sharptails are also often referred to as the "firebird" because of their reliance on burned areas. They are most widely known for their unique breeding display where they dance on breeding grounds known as "leks".

Sharptail Range & Distribution

These birds occupy a very large range from the northern brushlands of Alaska to as far south as Colorado. In Minnesota, sharptails were once an abundant and popular game species. Now, due to the loss of habitat, their populations have steadily been in decline.

Habitat

Sharp-tailed grouse rely specifically on large, open landscapes dominated by brush and grass. This brushland habitat comes in forms of natural meadows, pastures, open bogs, abandoned farm fields and even small grain croplands. Space is a main component of their habitat . One bird requires at least 640 acres of continuous habitat to provide food and cover requirements. Much more space is needed to sustain an entire population of breeding birds. Sharpies require these expanses of open area to utilize as lek sites that are an essential of their breeding behavior. Because sharptails are a year-round, permanent resident, a diverse mix of different types of brushland habitat is essential. Contiguous areas of roughly two square miles in size are crucial for their survival. Brushy areas are utilized for cover and winter browse, and expansive open grasslands are utilized for spring mating and nesting. These open areas are usually free of trees allowing a visual of any potential predators approaching. Some trees are tolerated such as aspen and birch, but conifers are not, especially on their breeding grounds!

Typically brushlands occur as a result of fire, logging, and/or abandoned farms. However, this habitat is extremely vulnerable to destruction by natural succession into forests and habitat fragmentation and conversion to cropland and conifer plantations.

Food

Similar to other upland birds, insects are an important food source for young. Buds, berries, leafy greens, grasses, grains, flowers, acorns, and seeds make up about 90% of adult diets. Most foraging is done on the ground, but they can be found perching in trees and shrubs to reach buds and fruits on occasion.

The Lek

Each spring morning, male sharpies will gather on a small area known as a lek. Here, males will dance and freeze in synchronization. Each defend small territories and competing for the attention of females. Males stand with their wings held out and cupped downward, neck extended, their superciliary combs (colored skin above the eyes) expanded, air sacs in the neck inflated, stamping their feet rapidly, with their tail cocked upwards while making a "cooing" call. Although all birds in the lek participate, only a few males, mostly older males, are accepted by the females for mating.

Management

In order for sharp-tailed grouse populations to improve, brushland habitat management is huge. There are several ways to implement this. Mowing, sheering, prescribed fire, and rotational grazing are all great ways to halt and set back plant succession and create that young habitat that sharp-tails need. As more than 75% of MN land is privately owned, it's important to recognize that private landowners are critical stewards of the land and can make a big impact.

Pine SWCD
1610 Hwy 23 N
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The Pine SWCD Newsletter

Pine County Soil & Water Conservation District

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Some Big Changes at Pine SWCD

Leatherwood (*Dirca palustris*)

2020 was a wild year for many reasons. Many people had ups and downs as we faced uncertain and unprecedented times. Many things changed, and Pine SWCD had some big changes too.

2020 marked big changes and new beginnings for this district. Paul Swanson, the district forester, has now become the district manager. Paul is excited to continue working for the district in his new capacity, and is looking forward to continuing working with the people of Pine County to provide on-the-ground conservation.

Moving into the manager position opened up the district forester role. Jake Dale, who was hired as seasonal forester in September 2020, has now taken over as district forester. Jake is ambitious, energetic, and is excited to continue his work with the district in a more permanent role.

This April, we also have a new technician starting at the district. Zach Van Orsdel is excited to start working with landowners and address the conservation issues that Pine County faces.

Along with new staff changes, the district also has two new elected supervisors. Kelly Henry and Dan Benzie started their terms in January of this year after being elected in the November elections. Both are excited to help guide Pine SWCD into the future, and have fresh perspective that will help the district move forward.

With all this "new" at the district, it is a little nerve wracking at times. But it also gives us a new page to start on. New enthusiasm, new ideas, new perspective. We are excited for the potential of our "new", and hope that our future brings us to bigger and better things in the conservation efforts of Pine County.

Inside this issue:

POSTAL PATRON

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Meet Jake, the New District Forester

My name is Jake Dale and I joined Pine SWCD back in September as a seasonal forester. When my employment began, I only expected to work here for a seasonal term of 6 months. Recently I was offered an opportunity to stay on full time as the district forester and I could not be more excited! I have grown to really enjoy the area and I am grateful for the opportunity to continue working with Pine county landowners in the future.

I grew up in the river town of Hastings, MN, just over an hour and a half south of our office in Sandstone. For college, I attended Upper Iowa University where I majored in conservation management. I graduated in May of 2020 and joined the Conservation Corps right after graduation and before joining the district. Throughout my education, I have also worked at a nature center and at an apple orchard.

My main responsibility here will be writing woodland stewardship plans for landowners to qualify for the SFIA and 2c land management programs. I can also assist with forestry related conservation projects, the tree sale, and fielding any forestry-related landowner inquiries. I am very excited to continue to work with the district and can't wait to work with you

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 for no-till drill
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Contact for wildlife equip.
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Pine SWCD Forestry and Wildlife Directory-Jake Dale

Looking to improve your woodland but don't know where to start? Our forestry and wildlife management directory can be a great place to look. Find your local contacts for logging, tree removal, invasive species control, tree planting, wildlife habitat management, water quality, tree and plant nurseries, land surveying, and more!

You can find the directory on our website, pineswcd.com, under the programs and services tab in the forestry section.

It can be a great asset for landowners who might have a project in mind but don't know who can provide the specific resources that are necessary.

Septic Systems in Pine County: Social Distance from Your Sewage

Sewage waste, including gray water, can pose several risks to human and environmental health. According to the Center for Disease Control, sewage can spread Ecoli, Giardi rotovirus, Salmonella, Shigella, Cryptospridium, Hepatitius A, among others. Additionally, sewage can cause elevated phosphorus and nitrogen contamination in ground and surface water, which can impact the water quality of our lakes and rivers. The Pine County Auditor's office estimates there to be 7,100 dwellings and businesses in Pine County without access to public sewer systems, which are then dependent on some type of onsite sewage treatment system. Inspection reports conducted throughout Pine County suggest that approximately 17% of the septic systems in the County either are an imminent health threat or are failing to protect groundwater.

There are a few things that homeowners can do to assist this effort. If your property has a modern septic system, a management plan was likely created by your septic system designer prior to construction. This management plan described maintenance activities for the homeowner to oversee. The most common management activity is to have your septic tank pumped, as prescribed by the designer. Pumping every three years is the most common interval. This helps extend the life of the mound or drainfield.

If your septic system was installed before the mid-90s, not entirely functional, or poses a pollution risk in some other way, you might consider upgrading your septic system to bring it up to code. The state septic code requires 36" of vertical separation between the drainfield pipes and periodically saturated soil. In other words, the goal is for wastewater to be treated in non-saturated soil, prior to contacting the groundwater. For this reason older septic systems may be "working," by making wastewater go away from the house but may not actually be providing sewage treatment while contaminating groundwater. The County has a low interest loan for septic system replacement for dwellings with full time occupancy. Also, Lakes & Pines administers a grant program for low income households to replace failing septic systems.

Contact the Pine County Zoning office with questions or for more information at: 320-216-4220.

> "ADDITIONALLY, SEWAGE CAN CAUSE ELEVATED PHOSPHORUS AND NITROGEN CONTAMINATION IN GROUND AND SURFACE WATER…"

Plant for the Pollinators!- Paul Swanson

Do you want to help out the bees? Do you want to see more butterflies flittering around your yard? If you do, planting native flowers is the best way to attract more pollinators.

There are native flowers that can fit any condition on your property. If it's a small flower garden or an old field, every planting helps build and sustain important habitat. Small gardens in a yard can act as a resting stop for bees and butterflies as they travel from one habitat to another. Larger wildflower areas can provide shelter and breeding grounds to help sustain pollinator populations.

To find out what type of native plants would do well in the conditions of your property, go online and do some research. Better yet, give us a call or send us an email. Our staff would be happy to help guide you as you consider converting an old hay field to a native planting, or building a small native flower garden.

Help our bees and butterflies by creating a sustainable and colorful native habitat!

Yellow bumblebee
(*Bombus fervidus*)

How Trees Can Help Reduce Standing Water and Surface Runoff— Paul Swanson

Tamarack (*Larix laricina*)

High water has been a major concern for many landowners in recent years. Much above average rainfall in many of the recently past years has led to increased areas of standing water and surface runoff. These issues can contribute to increased erosion and pollution input to our lakes and streams. To help solve this issue we can look to trees as an ally.

Trees can help mitigate some of the issues associated with standing water and surface runoff. Large root systems can help increase soil infiltration and storage of stormwater. Trees also can retain large amounts of water in their roots, stems and branches. The larger the tree, the more water it can retain.

By doing these things, trees can reduce surface runoff and increase groundwater. So not only can trees help reduce water flow by increasing water storage, they also help recharge groundwater aquifers.

By planting trees in areas that may be prone to runoff or standing water, you can help mitigate these issues. Choose species that are associated with wetlands and wet forests. Some examples include tamarack, Northern white cedar, black spruce, and black ash. Black ash is threatened by emerald ash borer, so other options may be a better choice.

These are just a few suggestions for trees and how they can help mitigate water. For more information, contact Pine SWCD.

Woodland Stewardship Plans

"RECEVING A WOODLAND STEWARDSHIP PLAN ALSO QUALIFIES YOU TO ENROLL IN ONE OF TWO DIFFERENT TAX INCENTIVE PROGRAMS…"

Woodland Stewardship Plans are roadmaps that help guide landowners (with 20 acres or more of forested cover) through their land management. A Pine SWCD forester will visit your property and prescribe different land management practices that help meet your management goals while also promoting sustainability. Receiving a woodland stewardship plan also qualifies you to enroll in one of two different tax incentive programs that can benefit you monetarily. Visit our website at www.pineswcd.com/forestry and scroll to the bottom of the page for more information about the process.

You can also call the Pine SWCD Forester, Jake Dale, with any questions (320)216-4245.

The 2021 Tree Sale

Our annual tree sale is in full swing! We are having another record breaking year! Orders are coming in quickly and our stock is shrinking fast.

If your would like to place an order you can go to our website, pineswcd.com, to see our most up-to-date order form with our currently available stock items. Print off the form and mail it in to our office.

You can also come into our office to fill out a form, or you can call in and we can send an order form to you!

All orders sent in must have full payment to fill your order. If we have run out of stock of an item you ordered, a staff member will call you and let you know.

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What is EQIP? The Environmental Quality Incentives Program—Megan Lindberg

Program Basics

The Environmental Quality Incentives program otherwise known as "EQIP", is a voluntary conservation program that provides financial assistance to help landowners and farmers with their conservation and land management goals. The program is designed to address natural resource concerns such water quality, soil erosion and compaction, nutrient management, forest health, wildlife habitat, and many others. Eligible program participants receive financial and technical assistance through the implementation of conservation plans that address these natural resource concerns on their land. This program is possible through the USDA's federal Farm Bill and administered by NRCS.

Eligibility

EQIP is open to agricultural producers, owners of non-industrial forestland, and Tribes. To be eligible to apply for EQIP funding, you must be the owner or operator of the eligible land. Eligible land includes cropland, rangeland, pastureland, non-industrial private forestland, and other farm or ranch lands. The program is competitive, with applications ranked based on overall cost-effectiveness, fulfillment of EQIP conservation goals, how effectively resource concerns are addressed, and the improvement of conservation practices or systems currently in place. All approved applicants are responsible for working with the Natural Resources Conservation Service

The Program in Action

In Pine County alone, countless landowners and farmers have received financial and technical assistance through EQIP. Although this list is not comprehensive, it exhibits the diversity and applicability of the program for landowners and producers of Pine County.

- Prescribed grazing plans to improve cattle forage, reduce soil compaction, and improve access to clean water.
- Pollinator plantings to create habitat for pollinators and wildlife
- Nutrient and waste management plans to reduce the impact of animal waste on water quality.
- Forest stewardship plans to guide future management on forestland
- Water and sediment control basins within crop fields to reduce soil erosion and nutrients transported to surface- and ground-water.
- Forest management to reduce the presence of invasive Buckthorn and to improve native plant communities on the landscape.
- No-till planting and the use of cover crops to improve production and reduce soil erosion.

How to Apply

EQIP applications are accepted on a continuous basis with application submission deadlines designated for each sign-up. NRCS conservationists and partners including Pine County's Pheasants Forever Farm Bill Biologist, Megan Lindberg, are available to determine conservation needs, develop conservation plans, and help guide plan implementation on your property. Please call the Natural Resources Conservation Service Field Office at (320) 384-7432 or Megan Lindberg at (320) 372-0757 if you would like to learn more about if the EQIP program is right for you!

Wildlife Habitat in Management Considerations in Northern Minnesota

All wildlife require food, water, cover, and space in order to thrive year-round. So when thinking about managing for quality habitat for these critters in your backyard, you first need to understand what habitat types already exist, what wildlife you already see, and what components are missing or should be improved. Taking inventory of what already exists on your property will make the biggest impact on wildlife overall.

Here is a list of common management techniques that you can implement for wildlife on your property!

- Increase the diversity of habitats on your land wherever possible—a mix of brushlands, grasslands, wetlands, croplands, and forests can provide a whole suite of wildlife with their required habitat needs.
- Have a Forest Stewardship Plan written to guide best management practices for your property.
- Plant fruit- and nut-bearing trees and shrubs such as dogwood, elderberry, choke cherry, and oak.
- Delay haying/mowing practices until August 1st. Birds will have completed their nesting activities and are able to flush with their broods much easier!
- Wetlands should be maintained or restored wherever possible. Wetlands provide great cover, food, and breeding resources along with improving both ground and surface water quality on the landscape.
- Planting a pollinator plot can provide quality nesting and brood-rearing habitat for grassland dependent birds as it often contains a variety of grasses, legumes, and forbs that attract insects for the young chicks.
- Plant slopes and waterways with permanent native cover such as grasses, wildflowers, trees and/or shrubs. These areas will keep erosion in check, protect water quality, and provide food, cover, and winter habitat for wildlife.
- Create openings within forests. Openings provide deer, turkey, ruffed grouse, and other wildlife with browse, food, and cover in mature forests that have little understory vegetation.
- Food Plots! The location and size of food plots is important; blocks of 2+ acres adjacent to winter cover are preferable to linear strips. Establishing snow traps on the windward side of food plots (generally the northwest) creates the perfect winter cover for wildlife. Leave 4-6 rows of corn windwards and harvest 12-20 adjacent rows as a snow catch.
- If you're concerned about predation in grasslands or crop fields, remove trees taller than 15 ft along fencerows to eliminate perches for avian predators.
- Plant conifers such as white spruce, red pine, white pine, and balsam fir which provide essential winter cover for many wildlife species.
- Practice conservation tillage to reduce cultivation and compaction of soil while simultaneously making grain residue available as a food source.
- Plant warm-season grasses such as big bluestem, little bluestem, indiangrass, and switchgrass in idle fields. These grasses provide high-quality summer forage, nesting, brood-rearing, and winter cover year-round.
- Cover crops provide adequate food and cover resources for wildlife to utilize in the winter months when food is scarce.
- Irregularly shaped native plantings provide added "edge habitat" that wildlife like turkey and deer utilize for cover while foraging.
- Connecting nonadjacent habitats with vegetated corridors increases the ability for wildlife to access and utilize different habitat types.

Fruit Tree Care- Jake Dale

Spring is coming and will be here before we know it. Warmer weather, longer days and greener lawns are some signs that spring has sprung. Personally one of my favorites, is the return of the many spring blooming plants that flood the forests. A wide variety of trees, shrubs, and other plants will bloom in the spring bringing our forests and yards back to life after a long cold winter. It would take days to cover all of these plants in depth. Instead, I would like to highlight a specific group of trees that could be of interest to anyone from the large landowner to the homeowner on the end of the cul-de-sac. That group is fruit trees!

If you have ever tried to actively grow and maintain fruit trees, you'll know that there is plenty to consider to make them as healthy as possible. Pruning is one of the most important. Most of the pruning should be done in the winter, while the tree is dormant. Suckers sprout up from the tree base. These will steal resources from the tree and should be pruned to maximize the fruit quality on remaining branches. Water spouts are branches that grow perpendicularly to a horizontal branch. These won't bear fruit and should be cut. Others that could be cut are smaller branches or branches that are growing at odd angles. One thing to remember is not to prune more than 30% of the tree in a year. If too much of the tree is pruned, the tree will suffer down the road.

Another aspect of tree maintenance is thinning. Most fruit trees will produce more fruit than the tree can support. This is in an effort to create as many different opportunities to spread their seed. However, for us as fruit tree growers, we want to maximize the quality of the fruit come harvest time. Thinning can occur throughout the summer season. As the season goes on the more productive fruits will start to grow larger than some of the less productive ones. Remove the smaller fruits from the tree. This does two beneficial things. It increases the energy that the tree can put into the remaining fruits, and the remaining fruits will have more space to grow. Both of these factors increase the quality of the fruits that you will harvest later on.

There are also some minor things to consider that may boost your success. They include incorporating rodent guards, ensuring there is enough water, and incorporating mulch and fertilizers.

There is a lot that goes into fruit tree growing and maintenance. Taking certain steps to care for your fruit trees will help ensure a successful season.

"MOST PRUNING SHOULD BE DONE IN THE WINTER, WHILE THE TREE IS DORMANT."

What's that flower???- Paul Swanson

As Spring approaches, many of us eagerly await the diverse and colorful show of flowers that we can enjoy the whole growing season. But you may at times be asking yourself "What is the name of that flower?"

Sometimes finding what plant is producing those beautiful blooms can be easy. Other times, it can be a downright maddening task. Thankfully there are a few good resources you can turn to.

The first is a wonderful website called Minnesota Wildflowers. There you can search through the many native and non-native flowering plants found in the state. You can look by color, type of plant, or time of year. It is a great resource, and will hopefully provide you an answer.

And of course there is Pine SWCD. Feel free to email or bring in a picture or sample of the flower. We will be more than happy to help you!

Kidney-leaved violet (*Viola renifolia*)