

Turtle & Mouse

SOILMATES

“Caring for the Land, One Step at a Time”



FABRIC SITE PREPARATION:

Fabric Site Preparation:

- Site preparation, if tilled in strips, shall be at least 10 feet wide to allow enough loose soil to properly anchor the fabric.
- Fabric strip splices shall be anchored with staples, pins, or rocks (we use staples). Staples and pins shall be of a length recommended by the manufacturer for particular soil texture. Rocks must weigh at least 5 pounds. Do not anchor fabric splices with soil alone. When the splices are made with field-cut fabric ends, consider tucking a few inches of the cut under itself to reduce the risk of snagging the fabric with maintenance equipment.
- In lighter soils, or in high wind areas, pins, staples, or rocks may be needed to anchor the fabric at each opening. On extremely vulnerable sites, an additional pin, staple, or rock may be needed every 10 feet or between each tree, whichever is greater.
- After installation, it is often necessary to run a tractor or truck wheel over the edge of the fabric to get a firm seal. Check dams across the furrow or slight grading of the site may be necessary on sloping land to prevent water from running along the edge of and uncovering the fabric. Continue to check your fabric for any loose areas that may get caught by the wind.
- We recommend to seed grass in between the fabric splices (tree rows) after the fabric installation is complete. We usually suggest seeding a grass mix that is relatively shorter and doesn't require as much moisture like your typical lawn grasses do. Species like blue grama and side-oats grama, are great choices for in between the row seedings, because they stay relatively short, which will require less mowing, and they will help prevent moisture competition between your newly planted trees/shrubs with the grass seedings.
- After fabric is installed, tilling in between the fabric splices (tree rows) is an absolute NO. To seed grass in between the rows, please use a broadcast seeder with a light harrow, or depending on the space between your rows, you can use a drill, but be careful to avoid the edges of the fabric. I would recommend at least a 2-foot buffer on each side of the fabric splices to keep equipment away from.
- As with any grass seedings, you will have weeds that come up first. To control weeds in your newly planted tree rows, you can use a granular herbicide that is safe around trees/shrubs, or we recommend clipping/mowing the weeds, making sure your mower deck is set higher for the first initial mowings to prevent catching the edges of the fabric.



TREE PLANTING SITE PREPARATION:

Tree Planting Site Preparation:



- Ground preparation is the most important step in machine tree planting. If the sod is not properly disked and tilled, the chances of air-pockets forming around the tree's roots increase, resulting in the death of the tree. Perform sufficient tillage to kill the sod and maintain the entire site in a reasonably weed free condition for one growing season prior to tree and shrub planting.
- Non-selective herbicides may be used to kill sod grasses and other herbaceous species prior to tillage.
- Avoid tilling soils that are wet, to minimize compaction. Compacted soils can reduce rooting success and plant vigor.
- Be alert to potential wind and water erosion risks during the fallow period. Seed an annual cover crop of oats or spring grains to control erosion while minimizing water usage. Oats and spring grains will die over winter but must be seeded early enough to attain 4-6 inches of height prior to freeze up to provide soil protection.
- For very erosive sites without rhizomatous grasses (smooth brome grass, canary grass, Kentucky bluegrass, quack grass, or alfalfa), and no plans for cover crops, till only 6-10-foot-wide strips where the trees/shrubs will be planted while leaving and maintaining existing vegetation between the rows. This will reduce wind and water erosion, sandblasting, provide easier site access, and provide wildlife benefits. The wider tilled area is appropriate for locations where weed control fabric is to be installed after tree/shrub plantings.
- Avoid deep tillage (greater than 2 inches deep) immediately prior to planting to prevent drying the seed bed.
- Firm the seedbed prior to planting, if needed, to reduce soil moisture loss and aid in proper plant placement. A firm seedbed for tree planting should be similar to a firm seedbed for grass seeding where human footprints are barely visible and planting equipment leaves a minimal trench.



Tree Planting Site Prep 101

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ND One Call



The site must be clearly marked of all buried utility lines in the tree planting area.

- Call 811 ND One Call before digging within 48 hours of planting schedule.
- Share ONE CALL ticket # with SCD office.

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Timeline

- Prep Site by: May 1st
- Down payment by: May 1st
- April- SCD will reach out about scheduling planting dates
- Modifications to tree plans should be done by: March 1st

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Tree Site Prep:

- Till the planting site to a depth of 6-10 inches, using a cultivator, disk, or tiller.
- Remove ALL rocks, tree branches, tree roots, garbage, etc.
- AFTER trees are planted please keep the site lightly tilled and free of vegetation until we are able to return to lay the fabric.
- When tilling strips, each strip must be a minimum of 10 ft wide.

First Fall Pass:



Second Fall Pass:



First Spring Pass:



Day of Planting:





Keeping North Dakota's streams, rivers and lakes clean demands more than dockside diligence. Even if you don't live along the shores or banks, you may be contributing to the pollution of lakes and streams because they are larger than their shorelines. They're part of a system called a watershed.

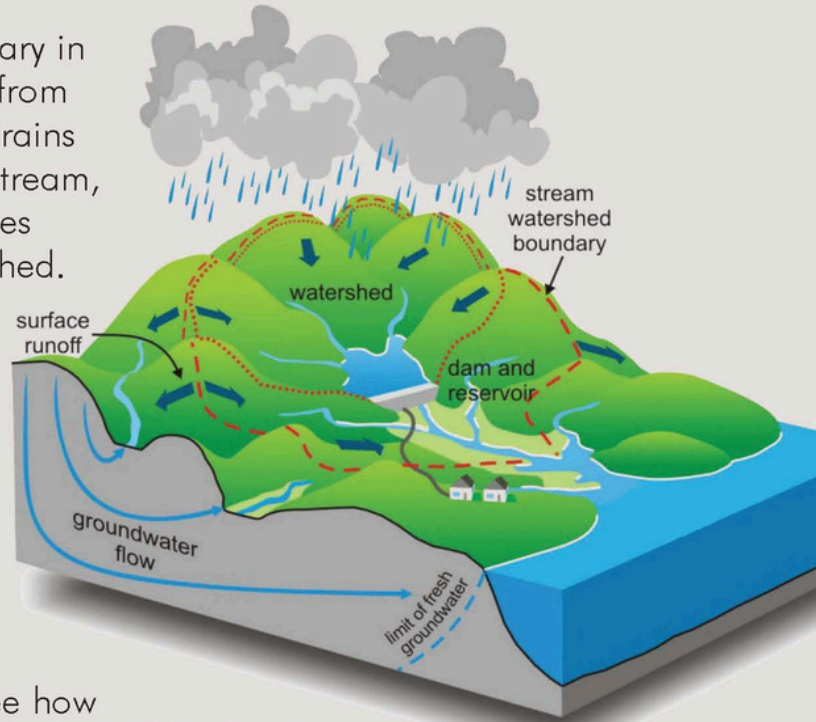
WHAT IS A WATERSHED?

Water from rainfall or snowmelt that doesn't evaporate or soak into the soil runs into ditches, streams, wetlands or lakes. The area of land from which the water drains is called a watershed.

Watersheds vary in size. If water from a few acres drains into a small stream, those few acres are its watershed.

This stream and others like it run into larger streams or lakes. Small watersheds make up larger ones.

It's easy to see how the watersheds of North Dakota's lakes can have land areas many times larger than their lake surfaces.



HOW DO YOU FIT INTO YOUR WATERSHED?

Wherever you live in North Dakota you are in a watershed. Your watershed may be covered with towns, industrial areas or farmland. Any excess nutrients, sediments and pollutants in your watershed are carried by runoff to surface waters.

You and the other people

WATERSHED MANAGEMENT TIPS

Minimize erosion by adopting practices that slow the flow of water over your property.

Reduce excess nutrients that could wash off your land.

Collect waste oil and other automotive wastes to be recycled, rather than letting them run on to the ground.



No-till practices improve soil health and water quality. Photo credit No-Till Farmer



Rain gardens are shallow depressions that capture and treat stormwater naturally. Photo credit U.S. Environmental Protection Agency

Feel free to use this information, but please credit the North Dakota Department of Environmental Quality.

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who live in the watershed potentially influence the water quality in nearby streams and lakes, depending on how careful you are in your day-to-day activities.

Understanding that actions on land impact water quality should lead you to cast a more critical eye on many common activities such as gardening, lawn care, automobile maintenance, farming and ranching. These and other activities can contribute excess nutrients, sediment and pollutants to the streams, rivers or lakes in your watershed.

WHAT CAN YOU DO FOR YOUR WATERSHED?

In rural areas you can:

- Practice building soil health.
- Use conservation tillage.
- Practice crop rotation.
- Install grassed waterways.
- Plant filter strips around feedlots.
- Retire highly erodible land.
- Practice sound pesticide and fertilizer use.
- Recycle agricultural chemical containers.
- Construct diversion dikes or channels around feedlots.
- Recycle fluids from vehicles and machinery.

In urban areas you can:

- Maintain plant cover to reduce runoff.
- Mulch gardens and exposed soil.
- Terrace land to slow runoff.
- Direct runoff to areas where it will soak into the soil.
- Minimize pavement and impermeable surfaces.
- Minimize soil disturbance at construction sites.
- Maintain septic systems.
- Use low- or no-phosphate soaps.
- Recycle automotive fluids.

OUTDOOR HERITAGE FUND TREE PLANTING INITIATIVE

North Dakota
Spring 2027



Cost-Share for Tree Plantings



Free Technical Assistance

We offer free technical assistance on tree planning/design; on location, or an in-person office visit.



Application Deadline: July 15th, 2026

Grant funds are to be 75% of the total estimated project cost, not to exceed \$15,000.00
(Minimum grant fund requested: \$3,000.00)

WHAT WE CAN ASSIST YOU WITH:

- ✓ Tree Planning/Design
- ✓ Machine Tree Planting
- ✓ Weed Barrier Installation
- ✓ Site preparation/Tilling

Applicable cost-share costs are tree planting, weed barrier, cultural walks required



CONTACT US NOW!



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2026 Turtle Mountain and Mouse River SCDs Joint Meeting



On March 4, 2026, a joint meeting was held at the Westhope Gateway, bringing together the Mouse River SCD, Turtle Mountain SCD, NRCS, Ducks Unlimited, NDASCD, and North Dakota Forest Service. The group reviewed minutes from the previous meeting and discussed collaboration efforts, including a joint newsletter and logo coloring contest. Key topics included coordinated tree and weed barrier installation projects, and a recap of the 2025 workshop held in Antler, ND. Attendees also shared ideas for the 2026 workshop, with potential topics such as high tunnels, windbreaks, renovations, tree planting (including grant opportunities), pollinator plots, and medicinal plants.



Seeking Windbreak Renovation Contractors!

Does your company offer windbreak removal services, like row removal, site prep, or burn and bury?

SUBMIT YOUR COMPANY TO OUR CONTRACTOR LIST!*



*inclusion on this list is voluntary and not a preferred vendor list



ND Conservation Trees and shrubs chart

	Mature Height	Growth Form	Cold Hardiness	Drought Resistance	Alkaline Tolerance	Wildlife Value	Growth Rate*
Deciduous Shrubs							
Russian Almond	3-5	Medium	G	F	F	G	M
Buffaloberry	6-14	Open	G	G	G	E	M
Caragana	6-14	Dense	G	G	G	G	M
Nanking Cherry	6-10	Open	G	G	F	F	M
Chokecherry	12-25	Medium	G	F	F	G	M
European Cotoneaster	8-12	Open	G	F	F	G	M
Golden Currant	3-6	Open	G	F	G	G	M
Redosier Dogwood	7-10	Medium	G	F	F	G	F
Tatarian Honeysuckle	10-12	Medium	G	F	G	G	M
Juneberry	6-15	Medium	G	F	F	E	S
Common Lilac	8-12	Dense	G	G	G	G	M
American Plum	8-10	Open	G	F	F	E	M
Hansen Hedge Rose	4-6	Medium	G	F	G	E	M
Sandcherry	3-6	Open	G	F	F	F	M
Silverberry	5-9	Medium	G	G	G	G	F
Lemonade Sumac	3-8	Open	G	F	F	F	M
Deciduous Trees							
Siberian Crabapple	15-25	Medium	G	F	F	G	M
Arnold Hawthorn	15-20	Dense	G	G	F	G	M
Amur Maple	15-20	Medium	G	F	P	F	M
Russian-olive	15-25	Medium	G	G	E	G	F
Green Ash	35-45	Open	G	G	G	F	M
Boxelder	30-40	Medium	G	F	F	F	F
Cottonwood	50-100	Open	G	P	G	F	F
Siberian Elm	25-40	Medium	G	F	G	F	F
Hackberry	40-50	Open	G	F	F	G	M
Silver Maple	40-50	Medium	F	P	P	F	F
Bur Oak	40-60	Medium	G	G	F	G	S
Poplar	40-60	Open	F	P	F	G	F
Black Walnut	35-45	Open	P	P	F	G	M
Golden Willow	40-55	Medium	F	P	F	G	F
Conifers							
Eastern Redcedar	30-35	Dense	G	G	G	E	S
Rocky Mt. Juniper	20-30	Dense	G	G	G	E	S
Ponderosa Pine	50-70	Medium	G	G	G	F	M
Scotch Pine	25-50	Medium	F	F	G	F	M
Black Hills Spruce	30-60	Dense	G	F	F	G	M
Colorado Blue Spruce	30-65	Dense	G	F	F	G	M

E-Excellent • G-Good • F-Fair • P-Poor

* F-Fast • M-Medium • S-Slow

All programs and services are offered on a nondiscriminatory basis in regards to race, color, national origin, sex, religion, age, disability, political beliefs, and marital or family status.

Banana Bars with Cream Cheese Frosting

Ingredients

- 1/2 cup butter, softened
- 2 cups sugar
- 3 eggs
- 1-1/2 cups mashed ripe bananas (about 3 medium)
- 1 teaspoon vanilla extract
- 2 cups all-purpose flour
- 1 teaspoon baking soda
- Dash salt

FROSTING:

- 1 package (8 ounces) cream cheese, softened
- 1/2 cup butter, softened
- 4 cups confectioners' sugar
- 2 teaspoons vanilla extract

Directions

1. In a large bowl, cream butter and sugar until light and fluffy. Beat in the eggs, bananas and vanilla. Combine the flour, baking soda and salt; stir into creamed mixture just until blended.
2. Transfer to a greased 15-in.x10-in.x1-in. baking pan. Bake at 350° for 20-25 minutes or until a toothpick inserted near the center comes out clean. Cool in pan on a wire rack.
3. For frosting, in a small bowl, beat cream cheese and butter until fluffy. Add confectioners' sugar and vanilla; beat until smooth. Frost bars. Yield: 3 dozen.