Stutsman County SCD

Stutsman County Soil Conservation District May 2022 www.stutsmanscd.net

Ground Preparation for the

Upcoming Tree Planting Season

When preparing soils for tree planting, the ground should be tilled black; looking like a garden is the best way to put it. It's easier on the trees and better for installing weed barrier fabric.

- In the bad photo to the right, the clumpy soil creates air pockets which will cause the roots to dry out and kill the trees.
- Till the ground in the spring before we come out to plant the trees. The ground should be worked to a 6" to 8" depth.
- Weeds need to be dealt with *before* we come out to plant and also *before* we lay the fabric down.
- Fabric does not lay well with vegetation holding it up. You need to work the ground around the trees to keep the soil loose and weed free for fabric installation.
- The better that the site is worked up, the better the chance of the trees surviving.
- Avoid putting any fertilizer down, as this will burn up your trees.

When the soil is prepared properly like the planting on the left, then your tree planting could potentially look like the one on the right.

We are looking forward to getting out and starting our tree planting season. With the recent weather the ground is going to take awhile to dry out. If you have a tree planting for this spring remember to stay in touch with us and let us know when your ground is ready to plant. Our office number is 701-252-2521 ext. 3.

We are dreaming of nice summer days!

TREE PLANTING

9 Reasons to Plant a Tree

By Arbor Day Foundation | May 17, 2018

Did you know planting a tree is one of the easiest and most powerful things you can do to have a positive impact on the environment? It's true. Trees clean the air, prevent rainwater runoff, help you save energy and even combat global warming. And they're a snap to plant! No horticultural degree required.

From the single homeowner in Nebraska planting a maple in her backyard to the 250 Comcast employees volunteering in communities devastated by hurricanes, fires and Emerald Ash Borer infestation by planting hundreds of trees on Comcast Cares Day (the nation's largest single-day corporate volunteer event), people nationwide are getting their tree on. Here are 9 reasons why you should join them.

Trees fight climate change

Wish you could do more than recycling and reducing your carbon footprint to combat climate change? Trees have you covered. Through photosynthesis, trees absorb harmful carbon dioxide, removing and storing the carbon and releasing oxygen back into the air.

Trees clean the air and help you breathe

Trees don't just absorb CO2. They also absorb odors and pollutants like nitrogen oxides, ammonia, sulfur dioxide and ozone. It's estimated that one tree can absorb nearly 10 pounds of polluted air each year and release 260 pounds of oxygen.

Trees prevent soil erosion and rainwater runoff

During heavy rains, water runoff finds its way to streams, lakes and wetlands, creating the potential for flooding. It also picks up and carries pollutants along the way. The EPA and the Center for Watershed Protection are recognizing the importance of trees in managing runoff. Leaf canopies help buffer the falling rain and their roots hold the soil in place, encouraging the water to seep into the ground rather than run off.

Planting trees is easy

Gardening can be intimidating for newbies because there are so many variables. Which plants and flowers should you put next to each other, and which should you separate? Which bloom in the summer and which bloom in the fall? When you're dealing with trees, there's none of that. Just choose a spot in your yard and you're good to go.

You'll save money

Trees conserve energy in summer and winter, providing shade from the hot summer sun and shelter from cold winter winds. With trees standing between you and the elements, you'll spend less on your energy bill to heat and cool your home.

Trees increase your home's value

Studies of comparable homes with and without trees show that, if you have trees in your yard, your home's value increases by up to 15 percent. It's all about curb appeal, and trees make your home and yard more beautiful.

You'll attract birds (and critters)

Trees provide nesting sites, food, and shelter for your bird friends. Hang a feeder in one of the branches and enjoy the birdsong all year long. Squirrels love to make their homes in trees, too, and watching their antics is a great way to spend a lazy summer afternoon.

Trees are good for your mental and physical health

A view of trees in urban areas has been proven to reduce stress, anxiety and even the crime rate. Tree-filled gardens on hospital grounds speed healing in hospital patients.

You'll be giving your descendants a gift

Trees can live hundreds of years, so when you plant one, you're giving a gift to your children and grandchildren. It's a symbol of your commitment to the environment and the beauty of the world around you that will live on far beyond your own lifetime.

Soil Movement

Minimizing Soil Disturbance

The Soil Health foundation consists of five principles which are: soil armor, minimizing soil disturbance, plant diversity, continual living plant/root, and livestock integration. This article will discuss the second principle; minimizing soil disturbance.

In this second of five articles on soil health, Jay explains the concept of "soil disturbance" and why minimizing soil disturbance is important for building soil health.

Soil disturbance can generally occur in different forms:

- Biological disturbance, such as overgrazing, which limits the plants ability to harvest CO2 and sunlight.
- Chemical disturbance, such as over application of nutrients and pesticide, can disrupt the soil food web functions.
- Physical disturbance, such as tillage, which we will focus on in this article.

A typical soil is approximately 45% mineral (sand, silt, and clay), 5% soil organic matter, 25% water and 25% air. The water and air portions exist in the pore spaces between the soil aggregates. Over time, tillage implements reduce and remove the pore spaces from our soils; restricting infiltration and destroying the biological glues which hold our soils together.

Ultimately tillage results in one or more of the following :

- Water erosion; transporting soil, nutrients, and water to offsite locations, which negatively impacts water quality and quantity .
- Wind erosion, transporting soil, and nutrients to offsite locations, which negatively impacts air quality, human health, and animal health.
- Ponding water; which stays saturated on the surface for long periods of time, a result of reduced infiltration and increased runoff.
- Crusting easily, which restricts plant emergence.
- Soil organic matter depletion.

Can we reverse the impacts from tillage and improve soil function? Yes, we can. Minimizing soil disturbance is a good start to re-building soil aggregates, pore spaces, soil glue, and soil organic matter. This is an essential step for long term soil productivity.

NRCS Photo Caption: The results of 20+ years of no tillage and crop diversity is a healthy, well aggregated soil.

Information is from the NRCS/USDA website and article written by Jay Fuhrer, NRCS Soil Health Specialist.

Soil Movement

How we can limit soil movement with Better Management Practices.

By Dustin Krueger 319 Watershed Coordinator

What a change a year can make. We are talking about the 5 principles of soil health and this issue focuses on minimizing soil disturbance. How can minimizing soil disturbance increase your field integrity. As you till up soil it breaks apart soil aggregates, the aggregates are held together by a glue left behind from the microorganisms and other bugs in the soil, then the soil loses its integrity. This glue holds the soil together and in place. The tilling also creates a hard layer under the ground. Now this hard layer impedes water from infiltrating through the soil column and allows it to run off fields creating washouts or ponding water. Like the photos to the right and above taken May 2nd.

Now when working on minimizing soil disturbance no-till is the greatest tool in the box. But you can also go to minimal till only do one pass of tillage instead of two. Plant cover crops after harvesting crops to control weeds reducing tillage, and keep something growing to absorb water. Over wintering cover crops can play a great role in helping with excess moisture in the spring. As soon as these crops break dormancy, they start working by utilizing the water and holding the soil in place.

In critical areas look at putting in grass waterways or water and control sediment basins to stabilize soil and not allow water to erode the soil. Areas won't need to be worked after rains or snowmelt, and the downstream water bodies won't receive the nutrients and sediment from the fields.

There are many avenues to approach on limiting soil disturbance and improving soil. Try something to see if it fits into your system on a small scale. Work at it for more than few years, these practices are not magic, they are not going to show huge improvements in one year. Also incorporate as many practices as you can the more the marrier, this is not a one practice cure all. Soil health is a system approach!!

Stop in and visit with us and what you want to do. The NRCS and Stutsman County Soil Conservation are here for technical and even some financial support. There many cost-share route out there to help promote soil health.

Give us a call at 701-252-2521 ext 3 and ask for Darin or Dustin.

Photo taken May 2nd cover crops

2022 Stutsman County SCD Price List

Handplant Tree Prices

Conservation Grade Trees:
$2 each
Bundle of 25 Conservation Grade:
$45 bundle
2-4 ft Tree (When Available):
$5 each
1 Gallon Potted (Conifers only):
$12 each

SCD Tree Planting:
$40 per 100 feet
$400 minimum applies by SCD (1000ft)
Weed Barrier Fabric:
$60 per 100 feet
$600 minimum applied by SCD (1000ft.)
500' Fabric rolls:
$150 each
Fabric Staples:
$0.20 each
Box 500 Staples:
$90
Tree Mats:
$4 each
Tree Tube with Stake:
$9 each, Installed by SCD $12.50 each
Flags, short:
$8 bundle
Flags, tall:
$9 bundle
Clear Choice Weed Killer:
$19.99
Pure Green Insecticide/Fungicide:

District Equipment

No-Till 8 Row Planter:
If we seed $20 per acre + fuel
$10 per acre to rent
Manure Composter:
$50 per hour + fuel
Lander Aerator:
$17 per acre + fuel
15ft. John Deer No-Till Drill:
$10 to rent + $50 delivery

Plantskydd Repellant:

1lb. Granule Shaker $14.95
3lb. Granular Bag $26.95
1Qt. Pre-mixed $21.95
7lb. Granular Bag $44.95
1.3 Gal Pre-mixed $59.95
1lb. Box Powder $29.95
Pump Sprayer $12.95
2.2lb. Box Powder $49.95

About Plantskyd: Apply Before Damage Begins!

Plantskydd Repellent is considered the most cost-effective and environmentally safe animal repellent available. Plantskydd is mad in the USA and is a 100% natural, environmentally friendly product. Its long-term effectiveness is attributable to the tenacity of conditions: up to 6 months over winter and 4 months in the summer. Plantskydd Repellents works by emitting an odor that animals associate with predator's activity, repelling the ani8male before it nibbles on plants. Plantskydd is safe on trees, garde3ining plants, and flowers as well!

Available Equipment

Aerator

No-Till 8 Row Interseeding Planter

Manure Composter

John Deere 1590 15' No-Till Drill

What Is Urban Conservation?

Marjorie McAtee

Last Modified Date: April 01, 2022

Urban conservation is the ecological practice of conserving green areas and natural resources in an urban setting. Yards, parks, and rivers in urban areas can all benefit from urban conservation practices, which typically clean up pollution and encourage population by native plant and animal species. Urban conservation can also include planting more trees, bushes, and flowers in urban areas, which can help to lower temperatures and freshen urban air. Conserving water and energy in urban settings can also be important for the conservation of the world's resources, since most people now live in urban areas. The introduction of more reliable public transport can also help with green urban planning, since it typically reduces carbon emissions in urban areas.

The cleanup of polluted urban waters, and the protection of these waters, can be a big part of urban conservation. Rivers, lakes, coastal areas and other waterways in urban areas are vulnerable to pollution. Cleaning these waters, and protecting them from further pollution, can help restore ecosystems to a state of health. In addition, the people who live in urban areas typically take more enjoyment from clean, healthy waterways where fishing, boating, and other recreational activities can take place. Protecting urban waterways can also increase urban resources, giving the area an additional supply of fresh water.

Many urban planning officials believe that incorporating green spaces into an urban area can make that area more pleasant and perhaps healthier to live. Trees and other plants in city parks and along boulevards help lower air temperatures. Urban areas are typically construction of concrete, asphalt and other materials that absorb sunlight, raising the air temperature in cities. Trees and bushes offer shade to help cool cities. They can also help filter pollution from the city air, while regulations on waste disposal and use of outdoor chemicals can help further curtail pollution.

In smaller cities and towns, conservation can often mean providing places where native animals may live. Many animals continue to live alongside humans in smaller cities and towns. Cultivating native vegetation, protecting against soil erosion, and even sometimes offering shelter to native species can be a part of urban conservation. Even the most rural communities may encourage farmers to cultivate the native plants that indigenous species use for food and shelter. Gardeners and subsistence farmers may be encouraged to collect rainwater in vats or barrels to water crops and plants.

https://www.allthingsnature.org/what-is-urban-conservation.htm

What Can We Do?

Stutsman County Soil Conservation district can provide technical support for implementation of urban conservation. We are able to help you choose native perennials for your garden. Native plants are accustomed to their habitat, they can hold water better than non-native plants, which will save you significant amounts of water. They also tend to withstand the environment better than non-native plants. Native plants are typically more resistant to disease, drought, and other environmental risks than other plants. These are just a few benefits to using native plants.

Rain barrels are becoming popular. They can save money, reducing your water bill by utilizing water caught in the rain barrel. Reduce runoff pollution and erosion. Runoff from rains pick up soil, oil, pesticides, fertilizers and other contaminates and carry them to other area. These are some benefits to have a rain barrel there are many more.

We are promoters of urban conservation and will try to help in any way we can. There are many other opportunities for urban conservation. Call us or stop in and visit with us about your ideas. 701-252-2521 ext. 3 or Business Loop E Jamestown ND 58401

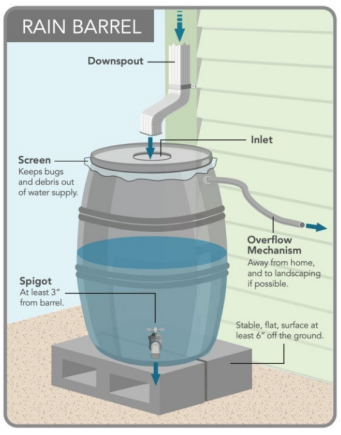


Image courtesy of the City of Palo Alto Stormwater Program

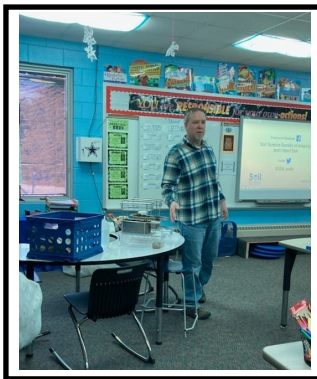
Stutsman County Soil Conservation Around The Community

The Lorax paid a visit to the Soil Conservation booth the Home and Garden Show to help spread the word about trees. The SCD participated in the two day event. Children were given Truffula trees that we made up and other fun activities. A lot of people stopped and visited about trees, pollinators and other conservation.

April was a busy month we promote getting youth involved in picking up garbage throughout the community and for there work they will receive a 5ft American Linden tree.

April 22nd was Earth Day and Stewardship week was from April 24 through May 1st .

For stewardship week we hand out material to all elementary students throughout Stutsman County.



At the beginning of March the Stutsman County SCD and NRCS teamed up and visited all the 5th grade Jamestown classes to talk about soil health. There was an apple demonstration to show how much soil is on the Earth to feed the entire world and a rainfall simulator was brought to show the difference in a no-till vs a conventional tilled systems when an inch or rain falls. We also talked about the importance of trees. Fun was had by all and the SCD is excited to be doing this in the future years.

On March 17th the Stutsman County SCD even had its own leprechaun in the office to spread the importance of soil and water conservation.

Stutsman County Soil Conservation District
1301 Business Loop East
Jamestown, ND 58401-5946

CHANGE SERVICE REQUESTED

All programs and services of the Stutsman County Soil Conservation District are offered on a non-discriminatory basis, without regard to race, color, national origin, religion, sex, age or handicap. In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Board & Staff Members

Stutsman SCD

Board of Supervisors

- Robert Hess, Jud
- Bernie Wanzek, Courtenay
- Cody Kreft, Streeter
- Gloria Jones, Jamestown
- Bob Martin, Jamestown

Find us on the web at:
www.stutsmanscd.net

We are located in the USDA Service Center

1301 Business Loop East
Jamestown, ND 58401

701-252-1920 ext. 3

Tree Planting!

It's never to early too start talking about tree plantings, stop in today!

The District was formed to assist people in Stutsman County through the District Mission:

"To take available technical, financial, and educational resources, whatever their source, and focus or coordinate them so that they meet the needs of the local land user for conservation of soil, water, and related resources."

NRCS

Darin Hirschkorn

District Conservationist

Marc Murdoff

Soil Conservationist

Soil Conservation District

Gina Olson

District Manager

Kade Thompson

District Technician

Dustin Krueger

319 Watershed Coordinator

Cody Hoggarth

Farm Bill Specialist