



Planning & Planting

NRD works with Landowners and Communities to Improve Property with Trees

It's a brisk winter day in Nebraska. The sun is shining but the wind is sharp as Kyle Yrkoski stands on the edge of a cornfield with a landowner in Seward County, just south of I-80. The landowner, Mitch Springer, has a house nearby that is well protected by trees. "In the summer, you can't even see the house from here," he says. He's looking to add the same screen of protection to the few acres of farmland adjacent to his home place, where a thick layer of corn stubble covers the rich, dark earth. Currently he rents the farmland out, but someday he may sell it for acreages. While he has no immediate plans to change ownership of the property, he is looking ahead and considering how he could improve the value of the land and enhance his investment.



forester for the Upper Big Blue Natural Resources District. "Regardless of whether he sells the land for more housing development or continues to have it farmed and possibly add livestock grazing, the trees are going to add value and give him options." On this property, trees will provide protection from the elements and added privacy. "Adding trees

is going to be something he's glad that he did in a few years," said Yrkoski. There is a lack of certified arborists in Nebraska outside of the major metro areas. Yrkoski recently completed

the statewide arborist certification training program. As one of the few certified arborists in this district, he is pleased to be bringing a high level of expertise to under-served rural areas. This certification benefits district residents as Yrkoski will be a local resource for all tree related concerns.

Step one is simple: **plant trees.**

(continued on page 2)

"Trees really open up the possibilities for your property," explained Yrkoski, district

(Above) Mitch Springer, a landowner in Seward County, met with NRD District Forester Kyle Yrkoski to plan out a future potential tree project on his property. (Below) Yrkoski checks out the fabric weed barrier around a young tree that the NRD planted 2018 at a park in York.



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UPPER BIG BLUE NATURAL RESOURCES DISTRICT
BLUEPRINT



“There’s an old saying that the best time to plant a tree was 10 years ago and the second best time is today... It’s never too late to start.”

Tree plantings aren’t a one-size-fits-all solution. That’s why Yrkoski meets with district landowners who want to add trees to create a customized plan. He asks many questions as part of this process: What are you hoping to accomplish with trees? Are you looking for a windbreak to protect a house or crops? Do you want to improve wildlife habitat? Do you want a living privacy fence or an ornamental enhancement? How quickly do you need results? The answers to these questions guide Yrkoski’s recommendations for the project. The NRD also works with communities on urban planting needs, such as improvements to city parks.

Last spring, the town of Stromsburg made use of these services when they worked with the NRD to add about 500 trees to expand the campgrounds area at Buckley Park.

For large-scale plantings, Yrkoski typically visits the property to look at geographic considerations including boundary lines, power lines, nearby roads and water ways, and trees that are already present to make sure that any additional trees planted will be well set up for growing success. Yrkoski then creates a proposal for the landowner that maps where trees could be installed, how many, and of which varieties. The plan includes a total cost for labor and trees as well as projected cost-share funds available. The Upper Big Blue, like other NRDs across the state, offers financial assistance to qualifying landowners for large-scale planting projects, such as windbreak installations, renovations, or extensions, and wildlife conservation plantings. Cost-share funds are also available for communities for improvements, including trees, in public nature areas.

Once a tree plan is complete, Yrkoski works with the landowner to fine tune the project and answer questions. Sometimes the landowner gets started with planting the following spring (NRD trees are planted each year from April to June) and other times they delay a year or two

before enacting the plan. While pricing may vary slightly from one year to the next, a planting plan can easily be updated depending on when the trees will be installed. Collaborating on a tree plan with the NRD does not obligate a landowner to implement the plan, and since there is no cost to the landowner to consult on these types of projects, there is no risk involved in getting started.

Yrkoski encourages landowners who are thinking about trees to reach out to the NRD. After all, trees are a long maturing investment. “There’s an old saying that the best time to plant a tree was ten years ago and the second best time is today,” said Yrkoski. “While you may wish you had put in trees a long time ago, it’s never too late to start. You’ll be glad you did in a year or two.”

Yrkoski joined the Upper Big Blue NRD in 2015 as a water technician and moved into the role of district forester in spring 2020. A lifelong Nebraskan with roots in agriculture, Yrkoski has a passion for conservation through tree planting. His family has raised cattle and farmed row crops in the Osceola area since the 1800s and has always been dedicated to planting trees and preserving wildlife areas. He has forestry experience from his previous position with the Upper Loup NRD in Thedford, where he was responsible for designing windbreaks and installing more than 200,000 trees and shrubs.

Yrkoski suggests that landowners or communities interested in adding trees in spring 2021 call him as soon as possible to start creating a plan to ensure best tree selection. Tree orders are taken annually from November to March, but some varieties typically run out each year. Yrkoski is available to visit sites and make recommendations for improvement to existing tree projects, as well as to plan for new ones. Contact him at trees@upperbigblue.org or call (402) 362-6601. ♦♦♦

Drip Tips: *Protect your trees in times of drought*

Some forecasters are predicting lower than usual rainfall for Nebraska in 2021 (see page 5). In case that happens, here's how to protect your trees in a water scarce year:

1. Trees planted in the last 10 years may need supplemental watering to survive during a drought. Even well-established trees that are 20+ years old may show stress if there are sustained high temperatures and low moisture.
2. Concentrate watering under the tree's canopy for a long enough duration that water is getting beyond the turf-rooting zone to a depth of 8-12" or more.
3. Don't add fertilizer! Adding fertilizer could cause a rush of growth and further stress your plants with higher water demands.
4. Use mulch or biodegradable fabric barrier (pictured below) around trees to suppress weeds and lock in moisture. Don't use rocks or pea gravel around trees, as this will increase the temperature at the base of the tree and cause less moisture to be absorbed through the soil.
5. Installing new trees? Be sure to plant drought resistant varieties.



STORM DAMAGED TREES?

There's an NRD program for that!

From ice and snow to lightning strikes, high winds, and floods, there are many acute stressors that could spell disaster for trees on your property.

The NRD is here to help you replace trees that have been lost as a result of a storm. Our Storm Damaged Trees program is designed to encourage tree plantings on both public and private property. The program includes consultation with our district forester as well as access to cost-share funds for a replacement tree.

Cost-share funding will be considered for 4' – 8' nursery stock replacement trees. This program is not for replacement of trees that have been damaged or have died due to winter kill, disease, or insects. Cost-share through this program is not available for the removal of damaged or dead trees, stump removal or maintenance. Funding will be considered for planting on public lands, and rural or urban private lands. The amount of district funding available is dependent on the annual budget.

Publicly Owned Property – The district will match 50 percent of the local share of the project cost of storm damaged trees on public right-of-way and public property with a maximum cost-share of \$10,000.

Private Property – The district will match 50 percent of the private entity, or rural or urban homeowner's share of the project cost of storm damaged trees on private property, with a maximum cost share of \$300 per homeowner. ◆◆◆





Better Soil=Better Health, For Plants & People

Project GROW Winter Workshop stresses healthy soils as the foundation of agriculture

Soil health is in the hands of farmers. This was the key take away from the 2020 Project GROW Winter Workshop, hosted by the Upper Big Blue Natural Resources District in December. Most of the speakers were virtual, but the information on how to improve soil health and profitability were real and applicable for the nearly 100 people gathered in-person and online.

The main speaker was Dr. Jill Clapperton, international soil health expert. Due to the pandemic, Clapperton joined the Project GROW event from her farm in Washington. Clapperton is the principal scientist and owner of Rhizoterra Inc, a science-based organization dedicated to increasing soil health around the world through research and education. Clapperton explored a variety of topics pertaining to soil health and its links to human health during her sessions. Recordings of Dr. Clapperton's presentations, as well as the other Project GROW speakers' sessions, are now available online.

Clapperton presented on the complex web of organisms at work in the soil, from mites to mycorrhizal fungi, and the predator-prey relationships that govern a healthy soil system. Clapperton advocates for practices including reduced tillage, reduced chemical inputs, diverse crop rotations, incorporating livestock grazing, and cover crops (photo at top) as ways to increase the biological activity in the soil. Improving the soil has many benefits, from increasing its water and nutrient holding capacity, to reducing erosion, to improving water quality.

Clapperton made the case that producers can focus on soil health and be profitable—it doesn't have to be an either/or scenario.

This message was echoed later in the day when Dan Leininger, a water conservationist with the NRD, and local producer Scott Gonnerman presented on the progress made at the Project GROW (Growing Rotational crops on Wellfield) demonstration fields in York. In the most recent growing season, the fields were profitable as Leininger and Gonnerman implemented soil health practices on the city's wellfield, such as planting soybeans into a standing cover crop of rye on one of the fields. "I like planting green," Gonnerman said, showing a photo of the minimal disturbance method he used when planting the soybeans. After emergence of the beans, he used a roller/crimper to flatten the rye (center photo).



Gonnerman, who was named a master conservationist by the *Omaha World-Herald* in 2018 for his farm practices, talked about how he has increased the water infiltration rate of his own fields dramatically in the span of 10 years through investments in soil health. In a recent test, his soil infiltrated two inches of water in less than two minutes. While the Project GROW demonstration fields are only in year three of a five-year project to restore the soil structure, Gonnerman and Leininger noted that the infiltration rate is increasing there as well, which means less erosion, flooding, and nutrient loss.

Water Quality and Quantity Concerns

Tatiana Davila, a groundwater geologist with the Nebraska Department of Environment and Energy, spoke to event attendees on the topic of water quality in Nebraska. Davila manages the Wellhead Protection Program and Source Water Protection Program for the state, helping communities guard their groundwater against contamination by working collaboratively with stakeholders from the local, state, and federal levels. “Everyone is a stakeholder when it comes to water,” she explained. Nebraska is a groundwater dependent state, both for drinking water and irrigation. “The majority of samples show that groundwater in Nebraska is of very high quality,” Davila noted. “However, the samples also show a number of contaminants continuously show up in certain areas of the state in high concentration,” such as nitrate-nitrogen, atrazine, and a variety of chemicals linked to agricultural production. Studies have linked these contaminants to a variety of health concerns, including pediatric cancers and birth defects. Nebraska has some of the highest rates of pediatric cancers in the U.S. explained Davila. Continuing to improve agricultural practices and remediate for legacy nutrients in the groundwater system is vital to the health and wellbeing of Nebraskans.

The final speaker of the day was state climatologist Al Dutcher. Dutcher recapped the weather patterns in Nebraska in 2020 and predicted some possible weather outcomes to look for in 2021. He also looked at weather patterns that will affect other grain and soybean producing nations including Brazil, Australia, and South Africa to predict how global markets might respond to future events. The fall 2020 period in Nebraska was warmer and dryer than normal and Dutcher predicts drought conditions will continue through the winter and possibly into the spring.

That forecast makes the Winter Workshop emphasis on soil health all the more important, says Leininger. “Good soil health is really a buffer against weather extremes,” he said. “We’re having more frequent big rain events and then long periods without much moisture. When the soil is healthy and has a good infiltration rate, it will lock in all the moisture from a heavy rain instead of having it run off. Having the soil covered means that it will hold onto moisture longer, even in times of drought.” ◆◆◆



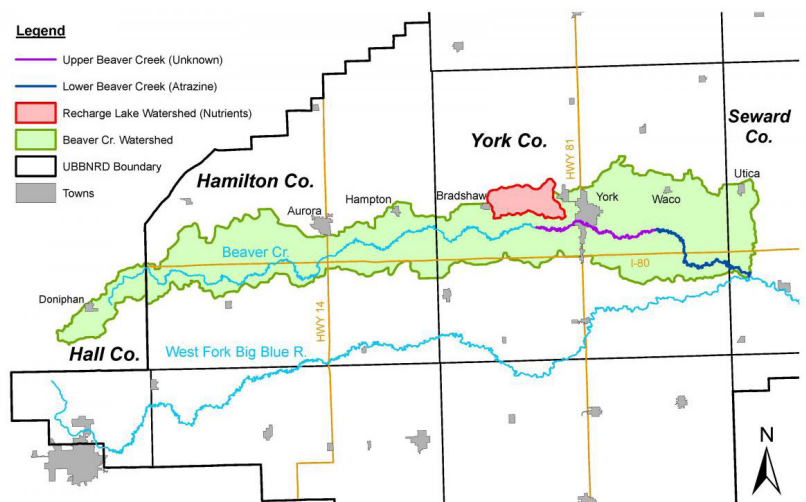
We're Listening.

Local decisions & actions for Beaver Creek Watershed impairments

A group of community members began meeting in December 2020 to discuss the Water Quality Management Plan that will be implemented in the Beaver Creek watershed. Based on the recommendations of this stakeholders group, the NRD will apply for additional federal funding to make conservation practices more accessible to producers who farm in the watershed with the goal of improving water quality in the area.

Through this process, stakeholders will hear from a number of agencies concerning existing conditions and available programs that offer assistance for the installation of best management practices in the watershed. The stakeholders will use this information to identify and prioritize implementation practices that will be supported by local landowners.

The recommendations from the stakeholders group will be presented to the board of directors and the general public during an open house in the spring. See full details about this project and the open house at www.upperbigblue.org/WQMP.





NRD Hosts State Land Judging Contest, District Schools Rank High

Despite challenges due to the pandemic, students from 32 Nebraska FFA chapters met in McCool Junction to compete in State Land Judging in fall 2020. The Upper Big Blue Natural Resources District partnered with the USDA Natural Resources Conservation Service to host the annual competition.

To accommodate the health and safety of participants and volunteers, everyone wore face masks and a staggered start time allowed for less interaction between schools at the judging location.

Land Judging is a high school competition that challenges students to gain a better understanding of soil structure and land evaluation. Teams consist of four students from the same FFA chapter, and a few individuals who qualified separate from a team. Each participant learns how to recognize the physical features of the soil, determine land capability for crop production, and evaluate management practices needed for proper stewardship.

Burke Scholarship Application Deadline Approaching

Each spring, the board of the Upper Big Blue Natural Resources District selects two recipients as Burke Scholars. Carrying on the name and legacy of conservationist and former NRD board member Raymond Burke, the students chosen each receive \$2,000 to put toward their higher educational pursuits in natural resources or a related field at a Nebraska college or university. Full details and application are available at www.upperbigblue.org/education. Applications for 2021 are due April 23 and include three letters of recommendation that must be received by the deadline. ♦♦♦



Teams and individuals from the Upper Big Blue Natural Resources District finished at the top of the competition. The team from Heartland Community Schools in Henderson earned the first place finish and the team from Fillmore Central in Geneva was not far behind in second. Jackie Schelkopf of Fillmore Central came in first in the individual rankings and Alex Goertzen of Heartland finished second.

The top five Nebraska teams will advance to the national competition hosted in Oklahoma City in May 2021. ♦♦♦



(Top) The first place team from Heartland Community Schools: Alex Goertzen, Aaron Goertzen, Tyler Lewis, and Lauren Quiring. Not pictured, coach Stephanie Miller, Heartland Ag Educator.

(Above) Students judge soil composition and other variables. Special thanks go to individuals and businesses that volunteered their resources to make this competition happen, including local landowner Paul Underwood, Brisk Builders of McCool, and Piepers Potties of York.

(Left) NRD Water Conservationist Dan Leininger leads a group of ag students from Concordia University on a soil health field trip at the Project GROW demonstration fields in York.



Board of Directors Transitions

Three longtime members of the Upper Big Blue Natural Resources District were celebrated in December for their collective 83 years of service to the people of the district. Gary Eberle, Douglas Bruns, and Merlin Volkmer each concluded their terms of service after decades of board membership.

“We appreciate the leadership these men have provided through their involvement in the board all these years,” said David Eigenberg, general manager of the NRD. “We want to thank them publicly for their dedication to our mission to protect lives, protect property, and protect the future of our district. The level of institutional knowledge and experience they possess will not be easy to replace on our board.”

Cover Crops Considered



Field trip focuses on soil health practices

What are cover crops, what benefits do they offer, and what are barriers to adoption of the practice for local producers? These were some of the questions explored on a recent class trip that brought students from McCool Junction to the NRD office for a lesson on soil health. The trip concluded with a visit to a field where a rye cover crop was in great shape, despite the low January temps (above). *District ag teachers: contact the NRD to arrange a field trip or a guest speaker for your class.*



In January Rodney Grotz (York), Richard Bohaty (Seward), and Kendall Siebert (Henderson) began their first terms as NRD board members, filling the vacancies left by Bruns, Eberle, and Volkmer. ◆◆◆



BLUEPRINT



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- Douglas L. Dickinson, Seward, [Sub-district 3](#)
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- John Miller, Aurora, [Sub-district 6](#)
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2021 CONSERVATION TREE PROGRAM ORDER FORM

Please select the location where you prefer to pick up your order:

- Each species must be ordered in lots of 25
- Sales Tax is calculated by the county in which the order will be picked up.
- You will be contacted after April 1 to pick up your order.
- The Upper Big Blue NRD will plant orders (within the District's boundaries) of 150 or more for an additional \$1.18/tree. Call **402-362-6601** for assistance creating a planting plan.

Name _____

Address _____

City, Zip _____

Telephone _____

Email _____

RESERVE YOUR SEEDLINGS BY MARCH 30

Small Acreage Packages contain 10 each of five species, 50 trees total, for \$55 plus tax--a great value!

- | | | | |
|---|--|--|--|
| <input type="checkbox"/> West Package | <input type="checkbox"/> East Package | <input type="checkbox"/> Wildlife Package | <input type="checkbox"/> Flowering Package |
| <ul style="list-style-type: none"> • Ponderosa Pine • Rocky Mountain Juniper • Bur Oak • Chokecherry • American Plum | <ul style="list-style-type: none"> • Bur Oak • Centennial Cotonestear • Swamp White Oak • Crabapple • McKenzie Chokeberry | <ul style="list-style-type: none"> • Chokecherry • Elderberry • Woods Rose • Golden Currant • Red-Osier Dogwood | <ul style="list-style-type: none"> • Serviceberry • Red-Osier Dogwood • Common Lilac • Crabapple • Caragana |

Seedling Bundles contain 25 each of a single species and cost \$1.18 per tree (\$29.50 per bundle) plus tax.

- | | | | |
|---|---|--|---|
| Conifers | Deciduous | Fruit & Nut | Shrubs |
| <input type="checkbox"/> Black Hills Spruce
<input type="checkbox"/> Co. Blue Spruce
<input type="checkbox"/> Eastern Red Cedar
<input type="checkbox"/> Jack Pine
<input type="checkbox"/> Norway Spruce
<input type="checkbox"/> Ponderosa Pine
<input type="checkbox"/> White Pine | <input type="checkbox"/> Cottonwood
<input type="checkbox"/> Hackberry
<input type="checkbox"/> Hawthorne
<input type="checkbox"/> Honeylocust
<input type="checkbox"/> Peachleaf Willow*
<input type="checkbox"/> Red Maple
<input type="checkbox"/> Sandbar Willow*
<input type="checkbox"/> Silver Maple* | <input type="checkbox"/> Black Cherry
<input type="checkbox"/> Black Walnut*
<input type="checkbox"/> Bur Oak*
<input type="checkbox"/> Catalpa
<input type="checkbox"/> Crabapple
<input type="checkbox"/> Hazelnut*
<input type="checkbox"/> Manchurian Apricot
<input type="checkbox"/> Red Oak
<input type="checkbox"/> Swamp White Oak* | <input type="checkbox"/> American Plum*
<input type="checkbox"/> Buffaloberry
<input type="checkbox"/> Caragana
<input type="checkbox"/> Chokeberry
<input type="checkbox"/> Chokecherry*
<input type="checkbox"/> Cotonestear
<input type="checkbox"/> Elderberry*
<input type="checkbox"/> False Indigo*
<input type="checkbox"/> Gambel Oak
<input type="checkbox"/> Golden Currant |
| | | | <input type="checkbox"/> Gray Dogwood*
<input type="checkbox"/> Honeysuckle
<input type="checkbox"/> Lilac
<input type="checkbox"/> Nanking Cherry
<input type="checkbox"/> Redosier Dogwood*
<input type="checkbox"/> Russian Almond
<input type="checkbox"/> Sandcherry
<input type="checkbox"/> Serviceberry*
<input type="checkbox"/> Skunkbush Sumac
<input type="checkbox"/> Villosa Lilac |

***Recommended for use in Riparian Forest Buffer Projects along streams.**

Your Cost (Number of Small Acreage Packages Ordered _____ x \$55) + (Number of Seedling Bundles Ordered _____ x \$29.50) = \$ _____

Sales Tax (7.5%--Geneva, David City, Wilber, York) (7%--Clay Center, Hastings, Osceola, Seward) or (5.5%--Aurora) _____ / \$ _____ **Your Total** = \$ _____

PLEASE RETURN WITH PAYMENT TO: Upper Big Blue NRD
 319 E 25TH ST
 YORK, NE 68467

---NRD USE ONLY---

DATE ENTERED _____ CALLED / MAILED / ONLINE / E-MAIL / WALK-IN _____

DATE PAID _____ CHECK # _____ CASH _____ CC _____ ONLINE _____

SPECIAL INSTRUCTIONS _____