



SPRING TREE PRUNING

Many gardeners have questions at this time of year about spring pruning...

- *Will early pruning cause fruit tree leaf and flower buds to develop earlier and possibly be damaged by normal spring frosts?*
- *Should pruning still be done in March and early April or should it be done earlier if conditions have been warm?*
- *What about shade trees? Should any adjustments in the time of pruning be made in response to warm conditions?*

Let's discuss each question, but first it's important to understand woody plant leaf and flower buds were formed last fall. They are already present on branch twigs, so you should be able to find dormant buds when doing a close examination of your plant now. The presence of buds now is normal and does not mean plants are actively growing yet.

...Continued page 4



By Sarah Browning
Nebraska Extension

Join Sarah Browning Saturday, March 1, for the NRD's annual Spring Gardening Workshop. The topic will be Mastering the Basics of Pruning. The free class will be held at the 4H building at the York County Fairgrounds from 10 a.m. to noon. upperbigblue.org/events

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Project GROW Community Garden in York

Reserve your garden plot for the growing season ahead at upperbigblue.org/projectgrow



Clean Water for All

District communities: are you concerned about water quality and human health impacts in your town? The NRD has programs to help you to protect the health of your citizens through improvements and protections for your water supply.

If you have questions about these or other programs, contact NRD Water Department Manager Terry Julesgard (tjulesgard@upperbigblue.org).

Wellhead Protection Area Assistance

The goal of Nebraska's Wellhead Protection Program is to protect the land and groundwater surrounding public drinking water supply wells from contamination. Since approximately 85 percent of Nebraskans receive their drinking water from groundwater, preventing contamination is vital. Having a designated Wellhead Protection Area (WHPA) allows a community to have access to additional funding from the NRD as well as state and federal funding for their water system. The Nebraska Legislature passed LB 1161 in 1998 (Neb. Rev. Stat. §46-1501 – 46-1509), authorizing the Wellhead Protection Area Act. This act sets up a process for public water supply systems to use if they choose to implement a local Wellhead Protection plan. The Nebraska Department of Environment &

Energy (NDEE) is the lead agency for Wellhead Protection Area plan approval. The Wellhead Protection planning process includes identifying the land surrounding the public water supply wells to be protected, identifying potential sources of groundwater contamination within this area, and managing the potential contaminant sources. Emergency, contingency, and long-term plans are also developed for the community water supply, all the while educating and involving the public.

If your community would like to designate a Wellhead Protection Area, the NRD can help you get started. NRD staff can provide guidance and assistance by gathering, interpreting, and delivering the technical information required for WHPA activities.

Municipal Water Quality Assistance Program

This program provides financial assistance to communities for improvements in their water system to mitigate the impacts of non-point source groundwater contamination for the protection and public health of the community's residents. The reasons for system improvements must be related to the impacts of contamination from pollution sources which are non-point in nature (like nitrate contamination from nitrogen

fertilizer over-application through the years), not from point source contamination (like a leaking lagoon at a livestock operation).

Who's eligible? Incorporated cities and villages whose wellhead protection area lies, all or in part, in the district and who have an approved Wellhead Protection or Drinking Water Protection Plan. A community must be facing present or imminent threat of the water supply from non-point pollution and making plans for infrastructure modifications to continue to provide clean, potable water to their residents.



What's in your water?

If a home's water comes from a private well in Nebraska, it may have elevated levels of common nutrients found in agricultural fertilizers. Consuming water with elevated levels of nitrate can have significant health risks. Annual testing of your water is an important way to protect the health of everyone in your home.

The EPA guideline for safe drinking water is less than 10 parts per million (ppm) of nitrate. Municipalities are required by law to provide water that meets the EPA criteria, but for the many Nebraskans whose water comes from a private source, the quality of the water is the consumer's responsibility.

Nitrate is a naturally occurring compound found in soil and water. However, consumption of high concentrations of nitrates has been linked to various adverse health outcomes. Certain human activities can contribute to concentrations of nitrate beyond the level considered safe. Unlike community water systems, private wells owned by individual households (of which about 20 percent of the state rely on for drinking water) do not require contaminant testing or treatment and are most at risk.

For private well owners, it's important to test drinking water annually, as results can change from year to year.

The NRD offers free water testing to determine if a well is providing safe drinking water. Anyone in the district can request a simple at-home test by contacting the office at info@upperbigblue.org or (402) 362-6601. The at-home tests provide fast results but are not as sensitive and accurate as a lab test. For the best results, a sample should be brought to the office for free lab analysis. Instructions for how to collect a sample to bring in for analysis are at upperbigblue.org/water-testing.

If a lab test reveals that the water sample is above 10 ppm, funding is available for the homeowner through the NRD for the installation of a point-of-use reverse osmosis system. A properly installed and regularly maintained reverse osmosis system can reduce the amount of nitrates in water.



Nitrates and Human Health

Numerous scientific studies have looked at the relationship of nitrate in drinking water on human health and linked high concentrations of nitrate in drinking water to adverse health outcomes. The strongest links are for methemoglobinemia ("Blue Baby Syndrome"), colorectal cancer, thyroid disease, and neural tube defects (birth defects of spine, brain, and spinal cord). Agrochemicals in drinking water are also linked to increased heart rate, nausea, headaches, and abdominal cramps; cancers including pediatric brain cancer, kidney cancer, bladder cancer, and non-Hodgkin's lymphoma. Other studies are also examining a possible link between these contaminants and Alzheimer's, diabetes, and Parkinson's disease.

Nebraska has one of the highest rates of some pediatric cancers, which may be linked to agrochemicals in drinking water. When it comes to health concerns and drinking water quality in Nebraska, the most vulnerable populations are young infants (less than six months old), pregnant women and children in-utero, and people with oxygen transport or delivery conditions like anemia, cardiovascular disease, lung disease, and sepsis.

**Point of Use Reverse
Osmosis Water Filtration
System Program:
Do you qualify?
upperbigblue.org/ro**

SPRING PRUNING *(continued)*

...Does pruning cause early leaf and flower bud development?

No, pruning actually has a slight delaying effect on bud growth.

After pruning, a plant has to adjust and begin sending growth hormones to new buds, since the preferred buds at the tips of branches removed are now gone. This process could take about 10 days, so bud development is slowed down a little. Note: it's risky for growers to use pruning to slow down and "protect" flower buds.

Best time to prune fruit trees

Less winter-hardy fruit trees like peach, apricot, and sweet cherry, should always be pruned late, usually mid-March to early April, no matter how much warm mid-winter weather we experience. Pruning is done just before new growth starts. This is also the best practice for the more cold-hardy fruits, like pear, apple, plum, and tart cherry, as well as shade trees.

Why? Pruning at this time has two big benefits. First, there is less chance of cold damage at the pruning sites. Second, plants heal pruning wounds much faster if the cuts are made just before new growth begins.

There's still plenty of time for cold late winter temperatures and freezes, which will slow bud development down. Early pruning leaves plants susceptible to cold temperature injury at the pruning sites.

Best time to prune shade trees

For homeowners who can choose the ideal time to prune, shade trees should also be pruned just before growth begins in spring. If you need to hire an arborist to prune a large tree, anytime before early May would be a great time to do it.



Old Wells... Could you spot one?

Do you have an old well on your property? It's possible that you do, and you don't know it!

Depending on condition, wells can be a direct conduit for contaminants to enter drinking water. Sealing or decommissioning wells is a simple way you can prevent contamination of the drinking water supply and protect the health of everyone who drinks water in that area. Unused wells that aren't properly sealed can provide an opportunity for pollutants such as fertilizer, animal waste, or agricultural chemicals to travel into the aquifer and endanger everyone who consumes water from nearby sources. These wells pose a double danger—children and animals can easily become trapped in them, leading to serious injury or death.

Not sure if you have an old well on your property? Here are some indicators that you might:

- A low spot in your yard
- A windmill tower
- Concrete pads where the legs of a windmill tower once stood
- Depressions where an old well pit or the walls of a hand-dug well may have collapsed
- An old stock tank in an over-grown area
- A small area that is fenced off, especially if there are also pipes sticking out of the ground
- Flat stones, a concrete slab, old boards, metal sheets, or other items that could be covering an old well shaft
- A pitless adapter
- A well pit inside a shed/pump house or crawl space

What should you do if you find an old well on your property or suspect one? Call the NRD. There are cost-share funds available to properly decommission wells.

Educational Opportunities

The Upper Big Blue NRD has several opportunities available for education funding. Whether you're looking for classroom investments or scholarships, check out what's available at www.upperbigblue.org/education.

Burke Scholarships

Each spring, the board of the NRD selects district students 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. Applications are due March 21 and include three letters of recommendation that must be received by the deadline.

Educational Capital Projects Fund

Each year, the NRD sets aside \$10,000 for capital projects that provide an educational benefit for people in our district. Past projects have included outdoor classrooms, an FFA-maintained community garden, and a greenhouse. Projects are not limited to schools. This fund could also apply to projects for adults of all ages.

The purpose of the Educational Capital Projects Fund (ECAP) is to create, develop, or enhance natural resources-related educational capital projects that provide experiential learning environments and opportunities for district citizens. To qualify for the program, educational/conservation projects must be physically located, constructed, and maintained within the NRD's boundary. These educational capital projects are generally constructed on school property, however, they can be located elsewhere if there is a more suitable location (such as a library or other public space). Applications for ECAP funds are due May 1.

Nebraska Water Leaders Academy Scholarship

When it comes to natural resource management in Nebraska, there's a lot to know! If you're interested in

learning more, consider participating in the Nebraska Water Leaders Academy. This one-year program includes trips across the state to see how water is safeguarded and used from the urban east to the arid west. The NRD will sponsor one individual per year to attend the Nebraska Water Leaders Academy. The purpose of this sponsorship is to provide training to those who may eventually serve on the NRD board of directors or in another water leadership capacity. The sponsorship will be provided to any district resident with interest in attending. It is not restricted to those working in natural resources or land management. Applications for this scholarship are due September 1.



Mini Classroom Grants

Teachers, do you have an idea for environmental education in the classroom but lack the financial support to make the idea a reality? A new program from the NRD may be for you. The Mini Classroom Environmental Grant Program promotes

environmental activities and projects in preschools and schools within the district. These grants are offered on a first come, first served basis, and have a maximum of \$300 per teacher or per classroom each year. This program is limited to public or private schools, or homeschool cooperatives. It is not intended for FFA, 4-H, scouts, families, or other groups. Funds can be used by teachers to promote water, soil, wildlife, forest, and grassland education. General ideas that might work into your curriculum include binoculars, microscopes, bird feeders, planting supplies, Earth Day curriculum, life cycle kits, environmental demonstration models, activity supplies, etc. Field trips that include natural resources content may be considered, but the grant may be used for admission to museums and attractions only, not for bussing or meals.

There is no deadline for application, but it is recommended that educators apply at least six weeks ahead of when the funds will be needed. While receipts will not be required, we do request a short project report on how the activity went and what the students learned, due within one month of project completion.

Tree Programs and Resources

Spring is soon approaching, and with it an increased risk for severe weather. The NRD wants to remind homeowners and communities about the **Storm Damaged Tree Program**. This program is designed to encourage replacement planting of trees and shrubs damaged or destroyed due to tornadoes, strong winds, hail, or ice storms. Cost-share funding is available for 4'-8' nursery stock replacement trees.

This program is not meant to replace 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 or stumps.

This program offers 50 percent cost-share to replace trees (up to \$300 for an individual and up to \$10,000 for a community). Funding will be considered for planting on public lands, and rural or urban private property. The person or community applying for the program must agree to maintain the plantings for a minimum of five years as well as be responsible for planting and materials.

If you have trees that are damaged by a storm and you would like them to be replaced using the NRD program, you will need to have a brief site visit from the NRD forester before you remove what remains of the tree(s). The forester will offer recommendations for a work plan for replacement plantings to the applicants. Only those trees that have suffered at least 30 percent damage, as determined by the NRD forester, will be considered for replacement funding.

The community or individual is eligible for funding for one application per storm event, but that application may involve replacing multiple trees. The application for cost-share for this program must be made within one year after the storm occurs and planting must be completed within one year of the date of approval of the application. For full details, visit upperbigblue.org/stormdamagedtrees.

Looking to improve your community canopy? The NRD **Community Tree Program** provides financial assistance to communities for the development or improvement of city or village tree resources. Two levels of participation are offered. The first level encourages cities and villages to develop a new tree improvement program, which qualifies them for the Tree City USA designation. A higher level of district assistance is available to communities that make such a commitment. The second level of assistance is

available to cities, villages and other public entities that have developed a specific plan for tree replacement or new plantings.

Related to the Community Tree Resources Program but with a slightly different emphasis, the NRD also has a **Community Native Grass Resource Program**. This program offers financial assistance to communities to develop or improve city or village properties where the establishment of native grass would be beneficial. Such areas may include, but are not limited to, lands surrounding wastewater treatment lagoons, lands within a Wellhead Protection Area (see page 2), and areas suitable for wildlife habitat improvement.

The NRD's **Parks Program** offers financial assistance to communities for the development or improvement of natural resources in nature areas, campgrounds, and park facilities. This program is available for any city, town, county or school located in the district. The district is not considered the lead agency in park development, but will assist in the funding.

The district will consider—on a case-by-case basis—providing cities and villages with planning and financial assistance for multi-use parks and recreation improvement/development that encourages tree planting, creation of wildlife habitat, open spaces, and other enhancements of natural resources.

Public use areas that conserve soil and water are to have priority. To help reduce damages from flooding, the district promotes publicly-owned linear parks, greenbelts, and other open spaces by offering planning and financial assistance to counties, cities and villages.



Recognitions

In October, NRD secretary Patty Connors was recognized for 15 years with the district. Patty is the face of the district to anyone who stops by the office as she responds to requests in the main reception area. She has also provided leadership for the Conservation Tree Program for years. In December, Rita Hoblyn was recognized for 30 years with the district. As the Projects Department Secretary, Rita provides an essential service to landowners who are applying for funding through the many NRD land treatment programs. Rita makes sure that all of the paperwork is complete so that landowners can access the resources they need.

In December, two directors stepped down from the board and were thanked for their years of service and leadership to the people of the district. Rodney Grotz of York served one term as a director and Jeff Bohaty of Seward served two terms. In January, Mick Northrop and Andy Larkin retired from the NRD. Both had served as part of the maintenance crew for several years.



The BLUEPRINT newsletter is published regularly by the Upper Big Blue Natural Resources District.

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- Bill Stahly, Milford, Sub-district 3
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at www.upperbigblue.org/email



UPPER BIG BLUE NRD 2025 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 31

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

Conifers

- ___ Black Hills Spruce
- ___ Co. Blue Spruce
- ___ Eastern Red Cedar
- ___ Jack Pine
- ___ Norway Spruce
- ___ Ponderosa Pine
- ___ Southwestern White Pine

Deciduous

- ___ Cottonwood (Native)
- ___ Cottonwood (Seedless)
- ___ Hackberry
- ___ Honeylocust
- ___ Silver Maple
- ___ White Oak

Fruit & Nut

- ___ Black Cherry
- ___ Black Walnut
- ___ Bur Oak
- ___ Crabapple
- ___ Northern Pecan
- ___ Red Oak
- ___ Swamp White Oak

Shrubs

- ___ American Plum
- ___ Buffaloberry
- ___ Caragana
- ___ Chokeberry
- ___ Chokecherry
- ___ Cotoneaster
- ___ Elderberry
- ___ Golden Currant
- ___ Hazelnut
- ___ Lilac (Common)
- ___ Redosier Dogwood
- ___ Serviceberry
- ___ Skunkbush Sumac

Small Acreage Packages contain 10 each of five species, 50 trees total, for \$65 plus tax. **LIMITED QUANTITIES AVAILABLE**

East Package

- Bur Oak
- Peking Cotoneaster
- Swamp White Oak
- Crabapple
- Redosier Dogwood

Wildlife Package

- Buffaloberry
- Elderberry
- American Plum
- Golden Currant
- Redosier Dogwood

Flowering Package

- Serviceberry
- Redosier Dogwood
- Lilac (Common)
- Crabapple
- Caragana

Your Cost (Number of Seedling Bundles Ordered _____ x \$29.50) + (Number of Small Acreage Packages Ordered _____ x \$65) = \$ _____

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



PLEASE RETURN WITH PAYMENT TO: Upper Big Blue NRD
 319 E 25TH ST
 YORK, NE 68476

OR ORDER ONLINE AT WWW.UPPERBIGBLUE.ORG/TREES BY **MARCH 15**

DATE ENTERED _____
 DATE PAID _____
 SPECIAL INSTRUCTIONS _____

---NRD USE ONLY---
 CALLED / MAILED / ONLINE / E-MAIL / WALK-IN
 CHECK # _____ CASH _____ CC _____ ONLINE _____