

# The Clearwater SWCD Conservator



**Our mission is simple** - to promote the wise use and improvement of our county resources, in order that future generations will inherit an economically viable county that has made wise choices in resource management.

*Inside this issue:*

Turnips & Radishes for Winter Grazing 2

Insert: Tree Order Form

SWCD Board Positions Open in 2014 3

Well Sealing Financial Assistance 3

Species Spotlight: Bur Oak 4

Clearwater SWCD  
312 Main Ave N, Ste 3  
Bagley, MN 56621

218-694-6845, ext. 4  
www.clearwaterswcd.org

## Rain Gauge Monitors Needed

By Nathan Nordlund, Program Technician, Clearwater SWCD

Do you ever wish you knew exactly how much rain or snow you received in that last storm? If so, here is your chance to find out! The Clearwater Soil and Water Conservation District (SWCD) is looking for more rain gauge observers to join the ranks.

Here is what the program is all about:

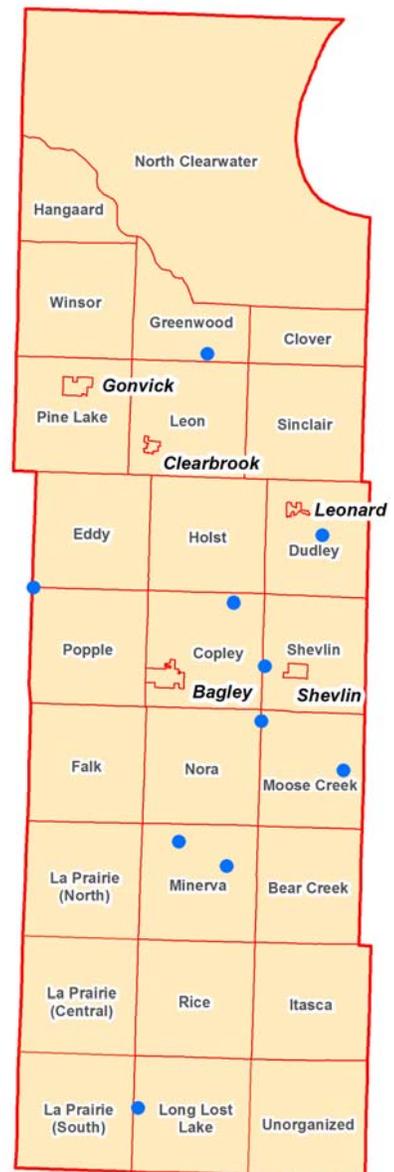
The Clearwater SWCD works in conjunction with the Minnesota DNR's State Climatology Office to monitor precipitation totals throughout the county. Data from this program is used for a wide array of projects, studies and forecasting, including flood prediction modeling in the Red River Basin.

We at the Clearwater SWCD would like to see monitors in

each township throughout our county. An increased coverage in our county would provide more insights into how precipitation events affect our agricultural community and others downstream from us. As a volunteer observer, you will be provided with a calibrated "All-Weather Rain Gauge" to assist you in gathering accurate data. Our office will handle the entry of data that you submit to us on a monthly basis. All you have to do is collect the sample each day and record the value on data sheets we provide.

Take a look at the map and see if you live in a township that could benefit from your precipitation reports. If so, please get a hold of our office (218-694-6845, ext. 4) and we will work out the details with you!

**Blue dots indicate the location of current monitors. Townships without dots reflect locations where observers are needed.**



### Top 10 Reasons to Plant Trees this Spring



Photo courtesy of USDA NRCS.

9. Trees lower air temperature in the summer by evaporating water in their leaves and increase air temperature in the winter by storing heat during the day and releasing it at night.
8. Shade trees can keep buildings up to 20°F cooler in the summer.
7. Trees improve water quality by intercepting
10. Planting trees is a great way to get outdoors and can be good exercise.

(Continued on page 4)

# Growing Turnips and Radishes on your Winter Feeding Area

By Brooke Knick, Soil Conservation Technician, NRCS

Winter hay is becoming more and more expensive, so utilizing and enhancing every acre of feed can bulk up your beef and lessen the winter drain on the checkbook. Planting a forage crop in winter feedlots can help prolong your grazing season, break up compaction, battle weeds and absorb nutrients that might otherwise run-off. Plus, by using forage turnips and radishes, the seed mix will only be a few dollars an acre and help maximize your profit. Adding forage radishes and turnips into an existing perennial pasture is also a good financial investment.



Cattle grazing on forage turnips.

Picture from <http://plantcovercrops.com/grazing-cover-crops/>

Seeding a winter feeding area should be done as soon as possible after the cattle are removed. This gives the seeded crop a chance to stay ahead of the weeds. Turnips and radishes can be seeded when soil temperatures reach 50 degrees F. Seeds should be planted 1/4 to 1/2 inch deep. Turnips and radishes prefer a moderately deep loam. They do not do well in high-clay soils or wet areas. Turnips grow fast and can be grazed as early as 70 days after planting or when the forage is 12 inches tall. Turnips reach maximum production in 80 to 90 days.

If there will be access to a low-quality hay, seed a winter feeding area with 1# turnips and 1# radishes. Be sure to choose a tankard-shaped or forage variety radish and turnip to avoid the risk of choking. If there will not be access to other roughage, add grass annuals to the mix such as 1/2 BU to 3/4 BU of oats. Barley, ryegrass, cereal rye, wheat and triticale are other options. Your seed dealer can help you design a mix that works for you.

Turnips and radishes are cool season crops that even grow well in the heat of summer. Then in fall they remain green and lush after most forage crops go dormant. Plus, with their high crude protein content, turnips and radishes can produce good animal gains when other pasture forages are relatively low in quality. Due to their high protein, turnips and radishes should be used like a concentrate feed, meaning animals should be slowly weaned on to them for 30 minutes/day for one week prior to heavier grazing, or the area grazed should be limited and an alternative feedstuff should be provided. Livestock should not be hungry when turned out to turnips and radishes for the first time so that they do not gorge themselves.

Turnips and radishes have a high water content, so 10-15 pounds/head of a high-fiber roughage should also be available. This could be an adjacent pasture, corn stalks or a low-quality hay. Turnips and radishes should not be more than 2/3 of the cattle's diet. And in dairy cows, turnips and radishes should be less than 1/4 of their diet to avoid flavoring the milk. It will be easy to tell if the cattle do not have enough dry fiber because the cow pats will be runny.

Until accustomed to turnips and radishes, it may take cattle a few days to develop a taste for them. The leaves are slightly bitter until the first frost. Cattle will eat the slightly bitter leaves, but after the frost, they target them. Immediately after a sudden weather change such as frost, hail or drought, nitrates can accumulate in plants. If nitrate toxicity is a concern, the forage can be tested. Also, high nitrate levels can be managed for by seeding more forage species, allowing access to pasture or by feeding a low-quality hay. More forage variety leads to happier and fatter cows.

For more information on cover crops, contact the Natural Resources Conservation Service at **312 Main Ave N in Bagley**. Or call **218-694-6584, extension 3**.



The USDA is an equal opportunity provider and employer.

# 2014 Tree Order Form

Clearwater Soil & Water Conservation District

312 Main Ave N, Suite 3, Bagley MN 56621

Phone/Fax (218) 694-6845, ext. 4 ■ www.clearwaterswcd.org

Name \_\_\_\_\_

Date \_\_\_\_\_

Address \_\_\_\_\_  
Street or Box City Zip

Phone \_\_\_\_\_

Email \_\_\_\_\_

Please provide your email address if you have one. We will use it to remind you when trees are in & also for our e-newsletter.

**This column  
is for office  
use only.**

**NEW: MULTI-VARIETY NATIVE SPECIES PACKS**

| Species   | Size                       | Price/Bundle | # of Bundles | Total Cost | Packed |
|---|----------------------------|--------------|--------------|------------|--------|
| <del>Bird &amp; Crouse Small Pack: Cranberry, Highbush (5); Dogwood, Gray (5); Hawthorn, Downy (5); Hazelnut (5); Nannyberry, Viburnum (5); 25 total</del>                        | same sizes as listed below | \$31.50      | SOLD         | OUT        |        |
| <del>Bird &amp; Crouse Large Pack: Cranberry, Highbush (25); Dogwood, Gray (25); Hawthorn, Downy (25); Hazelnut (25); Nannyberry, Viburnum (25); 125 total</del>                  | same sizes as listed below | \$132.50     | SOLD         | OUT        |        |
| <del>Jam &amp; Jelly Small Pack: Cherry, Pin (5); Chokecherry, Common (5); Grape, Riverbank (5); Plum, American (5); Serviceberry, Juneberry, Alleghany (5); 25 total</del>       | same sizes as listed below | \$31.50      | SOLD         | OUT        |        |
| <del>Jam &amp; Jelly Large Pack: Cherry, Pin (25); Chokecherry, Common (25); Grape, Riverbank (25); Plum, American (25); Serviceberry, Juneberry, Alleghany (25); 115 total</del> | same sizes as listed below | \$123.00     | SOLD         | OUT        |        |

**Multi-variety tree packs are in limited supply, order soon for best availability. NO SUBSTITUTIONS.**

**Call us with  
any  
questions!**

Drought tolerance: T = Tolerant; A = Average tolerance; S = Sensitive to drought;  
Acceptable site drainage: P = Poor drainage; M = Moderate drainage; E = Excessive drainage

| Species  | Drought Tolerance - Site Drainage | Size     | Price/Bundle | # of Bundles | Total Cost | Packed |
|--|-----------------------------------|----------|--------------|--------------|------------|--------|
| <del>Climbing Vine: Grape, Riverbank (10)</del>    | T - P, M, E                       | 12 - 18" | \$13.00      | SOLD         | OUT        |        |
| <del>Cherry, Nanking (25)</del>                    | T - M, E                          | 18 - 24" | \$27.50      | SOLD         | OUT        |        |
| <del>Cherry, Pin (25)</del>                        | A - M, E                          | 12 - 18" | \$27.50      | SOLD         | OUT        |        |
| <del>Chokecherry, Black (25)</del>                 | T - P, M, E                       | 18 - 24" | \$27.50      | SOLD         | OUT        |        |
| <del>Chokecherry, Common (25)</del>                | T - M, E                          | 18 - 24" | \$27.50      | SOLD         | OUT        |        |
| <del>Crab, Midwest Manchurian (25)</del>           | S - M                             | 18 - 24" | \$27.50      |              |            |        |
| <del>Crab, Red Spine (25)</del>                    | S - M                             | 18 - 24" | \$27.50      | SOLD         | OUT        |        |
| <del>Cranberry, Highbush (25)</del>                | T - P, M                          | 18 - 24" | \$27.50      | SOLD         | OUT        |        |
| <del>Currant, Black (25)</del>                     | A - P, M                          | 12 - 18" | \$27.50      | SOLD         | OUT        |        |
| <del>Dogwood, Gray (25)</del>                      | T - M, E                          | 18 - 24" | \$27.50      |              |            |        |
| <del>Dogwood, Red (25)</del>                       | A - P, M                          | 18 - 24" | \$27.50      | SOLD         | OUT        |        |
| <del>Elderberry, American (25)</del>               | A - M                             | 18 - 24" | \$27.50      | SOLD         | OUT        |        |
| <del>Hawthorn, Downy (25)</del>                    | T - M, E                          | 18 - 24" | \$27.50      | SOLD         | OUT        |        |
| <del>Hazelnut (25)</del>                           | A - M, E                          | 8 - 18"  | \$27.50      | SOLD         | OUT        |        |
| <del>Lilac, Common (25)</del>                      | A - M                             | 18 - 24" | \$27.50      | SOLD         | OUT        |        |
| <del>Lilac, Villosa (25)</del>                     | A - M                             | 18 - 24" | \$27.50      | SOLD         | OUT        |        |
| <del>Nannyberry, Viburnum (25)</del>               | T - P, M, E                       | 12 - 18" | \$27.50      | SOLD         | OUT        |        |
| <del>Ninebark (25)</del>                           | T - P, M, E                       | 18 - 24" | \$27.50      | SOLD         | OUT        |        |
| <del>Plum, American (25)</del>                     | T - M, E                          | 18 - 24" | \$27.50      | SOLD         | OUT        |        |
| <del>Serviceberry, Juneberry, Alleghany (25)</del> | S - M                             | 18 - 24" | \$27.50      | SOLD         | OUT        |        |

**CONIFERS**

| Species                                    | Drought Tolerance, Site Drainage | Size       | Price/Bundle | # of Bundles | Total Cost | Packed |
|--|----------------------------------|------------|--------------|--------------|------------|--------|
| <del>Cedar, White (25)</del>               | A - P, M                         | TR 8 - 14" | \$26.00      | SOLD         | OUT        |        |
| <del>Fir, Balsam (25)</del>                | A - S, P - M                     | TR 8 - 14" | \$26.00      | SOLD         | OUT        |        |
| <del>Pine, Jack (25)</del>                 | T - M, E                         | 5 - 8"     | \$14.75      | SOLD         | OUT        |        |
| <del>Pine, Red (Norway) (25)</del>         | S - M, E                         | 6 - 12"    | \$14.75      |              |            |        |
| <del>Pine, Red (Norway) (25)</del>         | S - M, E                         | TR 8 - 24" | \$26.00      |              |            |        |
| <del>Pine, White (25) - ALMOST GONE!</del> | S - M                            | 6 - 12"    | \$14.75      |              |            |        |
| <del>Pine, White (25)</del>                | S - M                            | TR 8 - 16" | \$26.00      |              |            |        |
| <del>Spruce, Black (25)</del>              | A - P, M                         | 5 - 18"    | \$20.00      | SOLD         | OUT        |        |

**CONIFERS, continued**

|                               |          |            |         |      |     |  |
|-------------------------------|----------|------------|---------|------|-----|--|
| <del>Spruce, White (25)</del> | S - M    | 6 - 12"    | \$14.75 | SOLD | OUT |  |
| <b>Spruce, White (25)</b>     | S - M    | TR 8 - 16" | \$26.00 |      |     |  |
| <del>Tamarack (25)</del>      | A - P, M | 4 - 12"    | \$25.00 | SOLD | OUT |  |

**TALL TREES**

| Species                                       | Drought Tolerance, Site Drainage | Size     | Price/Bundle | # of Bundles | Total Cost | Packed |
|---|----------------------------------|----------|--------------|--------------|------------|--------|
| <del>Ash, Green (25)</del>                    | A, P - E                         | 12 - 18" | \$27.00      | SOLD         | OUT        |        |
| <del>Birch, Paper (25)</del>                  | S - P, M                         | 18 - 24" | \$27.00      | SOLD         | OUT        |        |
| <del>Birch, Yellow (25)</del>                 | S - P, M, E                      | 6 - 12"  | \$27.00      | SOLD         | OUT        |        |
| <b>Cottonwood, Siouxland(25)-ALMOST GONE!</b> | T - P, M, E                      | 18 - 24" | \$27.00      |              |            |        |
| <del>Hackberry (25)</del>                     | T - P, M, E                      | 18 - 24" | \$27.00      | SOLD         | OUT        |        |
| <del>Maple, Red (25)</del>                    | S - P, M                         | 18 - 24" | \$27.00      | SOLD         | OUT        |        |
| <b>Maple, Silver (25)</b>                     | T - P, M                         | 18 - 24" | \$27.00      |              |            |        |
| <del>Maple, Sugar (25)</del>                  | S - M                            | 18 - 24" | \$27.00      | SOLD         | OUT        |        |
| <b>Oak, Bur (25)</b>                          | T - M                            | 18 - 24" | \$27.00      |              |            |        |
| <b>Oak, Red (25)</b>                          | S - M                            | 18 - 24" | \$27.00      |              |            |        |
| <b>Poplar Cuttings, Hybrid (25)</b>           | S - M                            | 18 - 24" | \$27.00      |              |            |        |
| <del>Walnut, Black (25)</del>                 | T - M                            | 18 - 24" | \$27.00      | SOLD         | OUT        |        |

| TREE TUBES            |   |  | COST   | Quantity | Total Cost | Packed |
|-----------------------|---|--|--------|----------|------------|--------|
| Tree Tubes, 60"       |   |  | \$3.75 |          |            |        |
| Stakes for tree tubes | call Clearwater SWCD to find out stake prices |  |        |          |            |        |

| DEER REPELLANT    | SIZE        | Plants Treated | COST    | # of Boxes | Total Cost | Packed |
|-------------------|-------------|----------------|---------|------------|------------|--------|
| Plantskydd Powder | 1 lb. Box   | 200-400        | \$25.00 |            |            |        |
| Plantskydd Powder | 2.2 lb. Box | 400-800        | \$44.00 |            |            |        |

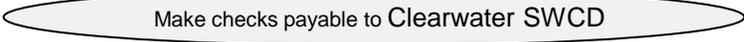
| CLEARWATER COUNTY PLAT BOOKS                             |  | SHIPPING          | COST    | Quantity | Total Cost | Packed |
|--|--|-------------------|---------|----------|------------|--------|
| 2011 Plat Book (add \$5.00 and we will mail book to you) |  | \$5.00 (optional) | \$28.00 |          |            |        |

Where did you hear about our tree sale? Mark all that apply.  Shopper Order Form  SWCD website  SWCD eNewsletter  
 Word of mouth  Poster, where? \_\_\_\_\_  Newspaper ad  Other, please specify \_\_\_\_\_

I understand the Clearwater SWCD does not guarantee survival, size, or replacement of tree stock. Due to the perishable nature of the stock, the Clearwater SWCD will not be responsible for the condition of trees after pick up or if picked up after the scheduled dates. It is not the intent of the SWCD to compete with private nurseries.

\*\* Denotes species which may not be entirely hardy in the county.

Signed \_\_\_\_\_ Date \_\_\_\_\_

|  |               |
|--|---------------|
| Total Cost of Trees, Deer Repellants, Plat Books, & Shipping                         | _____         |
| Add MN Sales Tax 6.875% (total cost x .06875)  | _____ + _____ |
| Example 1: \$27.50 x .06875= 1.890625 so your tax is \$1.89                          |               |
| Example 2: \$108 x .06875= 7.425 so your tax is \$7.43                               |               |
| <b>TOTAL =</b>   | _____         |
|  |               |

Planting Site:  
 County \_\_\_\_\_ Township \_\_\_\_\_ Section \_\_\_\_\_

**TERMS**

Payment must accompany all orders unless other arrangements have been made with the Clearwater SWCD office. For assignments of payment through NRCS and FSA programs, please contact our office to make arrangements. Tax-exempt individuals or organizations must have a tax-exempt certificate completed and filed with this office.

**TREE PICK-UP INFORMATION**

The SWCD office will notify you of any changes to the scheduled pickup dates. Please check our website for updates at [clearwaterswcd.org](http://clearwaterswcd.org). The pickup site is located at the DNR Forestry storage building north of Bagley on Hwy 92. Questions please call 218-694-6845, ext. 4 or email [kathy.rasch@mn.nacdn.net](mailto:kathy.rasch@mn.nacdn.net) Pickup times and dates are as follows:  
**Thursday, April 24th 4-6 / Friday, April 25th 3-7 / Saturday, April 26th 8-1. Due to staff shortages, prior arrangements must be made to pick up trees outside scheduled hours.**

**SWCD SERVICES & INFORMATION:**

Please call our office with any questions about trees, tree planter rental, quotes for custom tree planting, SWCD services, or programs, 218-694-6845 ext. 4.



# File before June 3 to Run for SWCD Supervisor

By Emily Lindell, Office Manager, Clearwater SWCD

On Election Day this fall, two positions on the Clearwater Soil and Water Conservation District (SWCD) Board of Supervisors will be up for election. The seat for Nomination District Three, representing Clover, Dudley, Greenwood, Leon and Sinclair Townships; and the seat for Nomination District Four, representing Popple Township and the City of Bagley, will both be on the ballot.

Individuals concerned about water quality and soil erosion in Clearwater County should consider filing between May 20 and June 3 to run for one of these Supervisor offices for the Clearwater SWCD. Candidates are elected county wide, but must reside in one of the nomination districts up for

election. Soil and Water Conservation District Supervisors are elected to four year terms.

"Supervisors play an important role in how our community deals with a wide variety of resource management issues, including wetlands, water quality, soil erosion, forestry, agricultural practices and conservation education," noted Kathy Rasch, District Manager with the Clearwater SWCD.

"Serving as a supervisor is a terrific opportunity for people who want a voice in how we manage our environment," she said.

SWCDs are special purpose units of government that manage and direct conservation programs, such as the state Cost Share Program, Clean Water Fund grants, tree sale and Comprehensive Local Water

Management Plan. Those who serve on the Clearwater SWCD board play an important and rewarding role in public service.

Supervisors meet monthly to discuss the business of the SWCD, including state grant allocations to landowners, district conservation priorities, coordination with other local units of government and state agencies and legislative priorities. Supervisors do not receive a salary, although they do receive compensation for attending meetings and are reimbursed for expenses.

Those interested in running for Supervisor should file at the County Auditor's office between May 20 and June 3, 2014. Additional information about the SWCD can be found online at [clearwaterswcd.org](http://clearwaterswcd.org) or by calling the office at 218-684-6845, extension 4.

Supervisors play an important role in how our community deals with a wide variety of resource management issues.

Those interested in running for Supervisor should file at the County Auditor's office between May 20 and June 3, 2014.



## Seal That Well!

Have you recently drilled a new well, leaving the old one unused? Or maybe there has been an abandoned well on your property for years. In either case, the Clearwater SWCD would like to help you protect our groundwater. We have funding to share **up to half** of the cost of sealing your unused well!

Unsealed wells pose a threat to our underground water supply. Any number of pollutants are given a direct path to the critical water supplies below when a well is left unsealed. Minnesota law requires that all wells either be in use, be under a maintenance permit which allows an individual to retain the well for future use, or be sealed.

Clearwater County relies almost entirely on ground water as its drinking water source, whether residential or private. Protecting this crucial source of drinking water is a priority activity of the Clearwater SWCD. If you have an unsealed well on your property that is not in use, please contact our office to see if your well sealing project qualifies for cost share assistance.

By Nathan Nordlund, Program Technician, Clearwater SWCD

Unsealed wells pose a threat to our underground water supply. Clearwater SWCD has funding to share **up to half** of the cost of sealing your unused well!



## Top 10 Reasons to Plant Trees this Spring,

continued from page 1

rainfall, slowing and filtering rainwater runoff and reducing the amount of pollutants reaching our waters.

**6.** Trees reduce flooding by slowing spring snowmelt and capturing and storing up to 60% of rainfall. One acre of trees can capture and store up to 400,000 gallons of rainfall or 14 inches of rain per year.

**5.** One acre of trees can remove 2.6 tons of carbon dioxide from the air each year. This is equivalent to about 2700 miles driven in a car getting 30 mpg.

**4.** Appropriately placed trees can reduce home energy costs up to 25%.

**3.** Trees and shrubs are one of the best anchors of soil on streambanks and lakeshores. They reduce erosion, shoreline loss and sedimentation in the water, preventing harm to fish and other aquatic life.

**2.** Trees and shrubs provide essential habitat for most of our birds, frogs and other amphibians, beneficial insects, and other animals.

**1.** One tree produces nearly 260 pounds of oxygen each year. One acre of trees produces enough oxygen for about 18 people.

**Remember: The best time to plant a tree is 20 years ago, the second best time is today!**

## Clearwater Soil and Water Conservation District

Clearwater SWCD  
312 Main Ave N, Ste 3  
Bagley, MN 56621  
218-694-6845, ext. 4  
[www.clearwaterswcd.org](http://www.clearwaterswcd.org)

**Our mission is simple -**  
to promote the wise use and improvement of our county resources, in order that future generations will inherit an economically viable county that has made wise choices in resource management.

## Species Spotlight—Bur Oak

By Kathy Rasch, District Manager, Clearwater SWCD

Bur oak is a familiar tree to Minnesota forests and woodlands. A member of the white oak family, it is the only one which grows this far north in Minnesota. Bur oak is a large tree reaching up to 80' tall. If given the room, it will develop a canopy larger than its height. Minnesota's largest bur oak is in Olmstead County. It is 60' tall, 80' wide and has an impressive 275" dbh (diameter at breast height, 4.5 ft from the ground). The national champion bur oak is in Kentucky. It measures 96' tall, with a 103' wide canopy.

Bur oaks also have the biggest acorn of all the oaks, and lots of animals in our area depend on them. Squirrels, bears, mice, deer and even birds like wood ducks, blue jays and the ever more common wild turkey enjoy acorns as an important food. Acorns are also edible for human use if prepared correctly to remove the tannins.

Tolerant to a wide range of site conditions, bur oaks are found throughout the state and midwest. They are cold hardy to zone 2 and tolerate soil pH from 5.5 – 8.0. A moist, well drained, fertile loamy soil is ideal but they will grow in a range of soil types and moisture levels, although they do not tolerate flooding well. If growing in dry, droughty sites they tend to be somewhat scrubby in appearance. They prefer full sun, but will grow in light or partial shade.

Bur oaks are long lived but slow growing trees. Planting a few periodically is a good practice to ensure a constant supply of acorns long into the future on your property. Many wild animals will thank you for it.

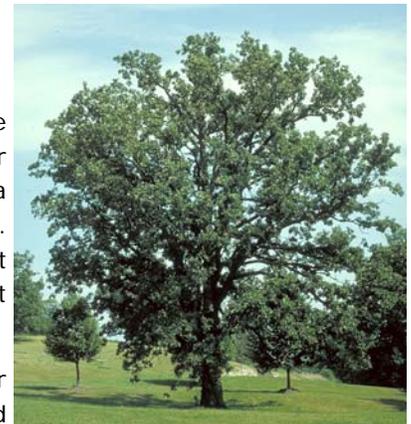


Photo courtesy of Mn/DOT



Photo courtesy of US NRCS