



# Supporting Documents

## ND Forest Service

### Community Forestry Grants



## Table of Contents

ND Forest Service Community Forestry Contacts	Page 2
Tips for Successful Grant Writing	Page 3
Cultural Resources Fact Sheet	Page 4
Planting and Three-Year Maintenance Plan	Pages 5-7
Vicinity Map Examples	Page 8
Design Plan Examples	Page 9
Equipment Rates	Page 10-11

*--Revised February 2018--*



# North Dakota Forest Service Community Forestry Personnel

**Gerri Makay** - Community Forestry Manager

North Dakota Forest Service  
NDSU Research Extension Center  
PO Box 219  
Carrington, ND 58421  
Phone 701.652.2951  
Fax 701.652.2055  
Email: Gerri.Makay@ndsu.edu

**Joel Nichols** - Community Forestry Specialist

North Dakota Forest Service  
916 East Interstate Ave. Suite #4  
Bismarck, ND 58503-0560  
Phone 701.328.9948  
Fax 701.328.9947  
Email: Joel.Nichols@ndsu.edu

**Mary O'Neill** - Community Forestry Specialist

North Dakota Forest Service  
6824 Hwy 32 S  
PO Box 604  
Lisbon, ND 58054-0604  
Phone 701.683-4323 ext 12  
Fax 701-683-5895  
E-mail: Mary.Oneill@ndsu.edu

**Mary Fisk** - Bismarck Office Manager North Dakota  
Forest Service

916 East Interstate Ave. Suite #4  
Bismarck, ND 58503-0560  
Phone 701.328.9944  
Fax 701.328.9947  
Email: Mary.Fisk@ndsu.edu

# Tips for Successful Grant-Writing

Keep in mind that a successful grant is based on two things - the quality of the project and the ability of the applicant to successfully carry out the project. A few helpful tips to keep in mind:

1. **Do your homework.** Read the guidelines thoroughly before you begin writing. Be certain that you are applying to the right program. Contact the ND Forest Service well in advance to coordinate project planning efforts during the process of completing the application.
2. **Prepare a timeline** backwards from the April 30 deadline that will allow you enough time to think through the project, draft, revise, and edit your proposal. You are also encouraged to contact ND Forest Service well in advance of the April 30 deadline to receive assistance with the review of the application and opportunity for corrections/changes.
3. **Fill out a practice application.** Make blank copies of the application form.
4. **Draft your application narrative and budgets.**
  - o Be concise and specific in your narrative.
  - o Maintain a positive tone; write in an active voice.
  - o Answer all questions. Write "not applicable" rather than leaving the question blank.
  - o Make sure your budget supports the goals of your project.
  - o Itemize where asked.
  - o Check your math.
  - o Specific information will give the review committee a clearer picture of your project.
5. **Put yourself in the reviewer's position.** Don't overload the reader with too much unnecessary information or verbose language. Simple, everyday language will best convey your ideas. Plan and organize your application with a well-structured outline. Each part should provide necessary information about your organization or project. Have someone not directly involved with your organization read the application. Having read only the application, ask their opinion about what your needs are, what you are requesting, and your ability to conduct the project.
6. **Submit a draft or discuss your proposal with ND Forest Service staff for review and feedback.** This doesn't guarantee funding, but staff can help you strengthen your proposals. Build this into your timeline. **Provide documentation of your visit with staff on page 1 of the application.**
7. **Revise according to feedback.** Incorporate outside comments into your proposal, double-check spelling, grammar, readability, and math.
8. **Is your application complete?** Follow the application instructions carefully. A checklist is part of the application. Use it to make sure nothing has been overlooked. Has everything been signed by the correct people? **The ORIGINAL and seven (7) copies are required.** **Do you have the appropriate number of copies,** support materials, etc.? Retain one copy for your records.
9. **Submit the complete application by the April 30 postmarked deadline.** Faxed applications will not be accepted. Original signatures are a must.

Adapted from: ND Council on the Arts, 2011

*Applicants should contact ND Forest Service staff with any questions.*

# CULTURAL RESOURCES FACT SHEET

## *What are Cultural Resources?*

Cultural Resources are evidence of past human activity. This might include pioneer homes, buildings or old roads; structures with unique architecture; prehistoric village sites; historic or prehistoric artifacts or objects; rock inscriptions; human burial sites; earthworks, such as battlefield entrenchment, prehistoric canals, or mounds.

People have lived in North America for at least 12,000 years. Archaeologists and historians have divided this time span into prehistoric and historic periods. The prehistoric period extends from the earliest arrival of humans in North America to the coming of the European explorers. The historic period begins with the arrival of these explorers and continues up to the present.

These nonrenewable resources often yield unique information about past societies and environments, and provide answers for modern day social and conservation problems. Although many have been discovered and protected, there are numerous forgotten, undiscovered, or unprotected cultural resources in rural America.

*Several Federal, state, and local laws have been enacted to preserve cultural resources. The most important of these is the National Historic Preservation Act of 1966. Under this and other legislation, Federal agencies, including the U.S. Department of Agriculture, are required to protect cultural resources.*

### **SOME BENEFITS OF CULTURAL RESOURCES**

Cultural resources provide many useful benefits to people today. They:

- Expand our knowledge and understanding of history.
- Provide scientific data. Archeological sites for example, can provide information not available from historic records on droughts, floods, and erosion over thousands of years.
- Provide jobs during the renovation process. Preserving cultural resources may also stimulate other community improvements.
- Attract tourists, who bring money into the community.
- Provide information that will help solve conservation and natural resource problems. Some modern irrigation techniques, for example, are actually based on prehistoric methods.

### **YOUR ROLE**

**Every American has a stake in the protection of cultural resources.** All of the protected and restored cultural resources that we enjoy today have one thing in common: some individual, group, or organization went to work to protect and preserve for future generations to come.

If you know of an undeveloped cultural resource, do your part to preserve our country's heritage. Contact a local historical society, museum, archeological society, university archeology (sociology, anthropology) department, or your local natural resources conservation service office.

<http://www.nrcs.usda.gov/technical/ECS/culture/mission.html>

# North Dakota Forest Service

## Planting and Three-Year Maintenance Plan

### Community Tree Planting Projects

February 2018

#### NOTICE

**Successful projects have great tree selection, planting, and care techniques in common. Follow this plan so that your trees will thrive. Failure to select and plant trees according to these instructions may result in replanting recommendations. Replanting is costly and reduces survival, so direct your efforts to select and plant your trees according to the following techniques the first time!**

#### YEAR ONE

##### Tree Selection:

- Trees and shrubs shall be nursery-grown and shall meet American Standard of Nursery Stock standards. Businesses that sell nursery stock must have a valid nursery license.
- Trees must be of good vigor with normal well-developed branches and vigorous root systems; and must be free from injury, pests, disease, nutritional disorders, or root defects.
- Deciduous trees must be a minimum of 1.0 inch caliper (measured 6 inches above ground line). Coniferous trees must be at least 3 feet in height.
- Conservation stock is acceptable only for conservation plantings.
- Understand the terms of the nursery's guarantee.

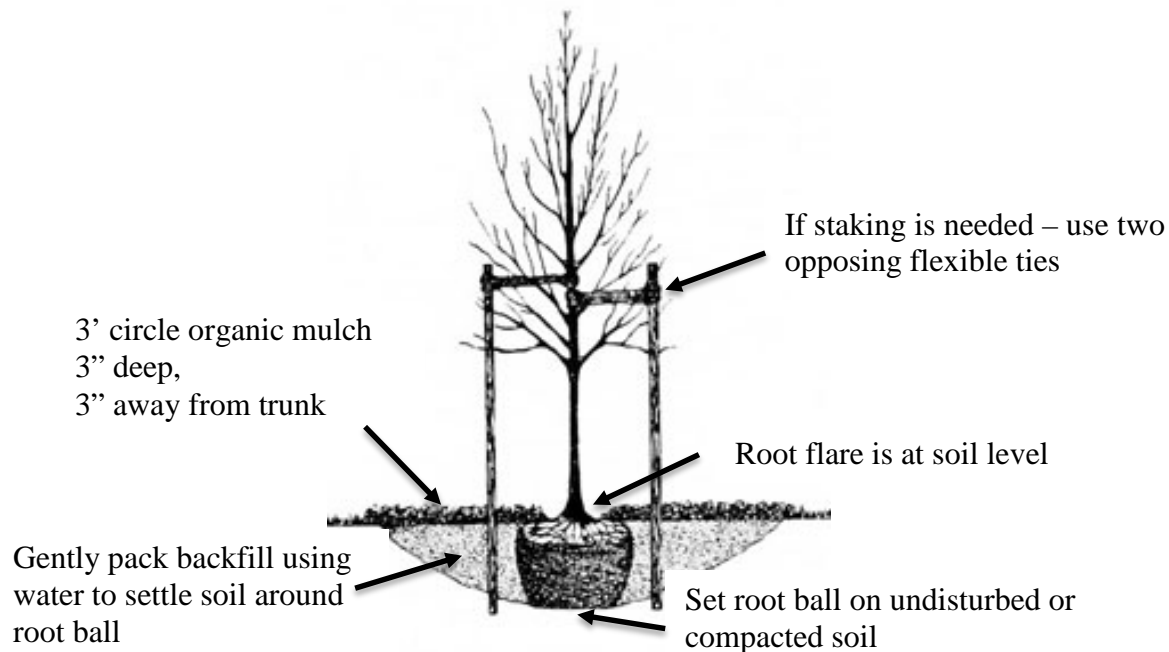
##### Pre-Planting:

- Locate underground and above utility lines – ND One Call **811** or **800-795-0555**  
<http://www.ndonecall.com/>

##### Tree Planting:

- See diagram following this section.
- Keep roots moist; this is especially critical for bare-root trees.
- Remove turf from planting area.
- Dig planting hole wide and shallow. The hole should be at least 3 times wider than the root spread.
- Remove all twine or rope from trunk and branches.
- Remove planting container and burlap or any other material such as wire or plastic that would constrict root growth.
- If containerized material is to be planted, cut circling roots by slicing the root ball vertically from top to bottom with a sharp knife in 3 or 4 well-spaced lines around the root ball.

- Use the soil that came from the planting hole to backfill, less any rocks or debris.
- Do not use amendments in the planting hole. This discourages roots from expanding outside the planting hole, which can lead to girdling roots.
- Make SURE that root flare is at soil level. Many trees arrive from the nursery with soil on top of the root flare and stem tissues. This extra soil **must** be removed from the top of the root ball in order to expose the root flare. **Planting too deeply is one of the most common reasons for unsuccessful tree planting projects.**
- Water tree at planting to remove large air pockets. After backfilling, gently firm soil – do not pack soil. Heavy packing will remove air spaces and can potentially damage fine roots.
- Do not mound soil against trunk of tree.
- Apply organic mulch such as wood chips or shredded bark 3 inches deep in a 3-foot diameter circle around the trees, keeping the mulch 3 inches away from the trunk.
- Staking is optional and may not be necessary unless the site is extremely windy, the tree has an unusually small root system or an unusually large canopy, or the tree is vulnerable to vandalism.
- Prune only dead or broken branches.
- Fertilizer is not recommended for newly planted trees.
- **Any tree planted with the top of the root flare below natural ground level shall not meet the requirements for tree planting projects until it is replanted at the proper depth.**



### Inspection:

- Contact NDFS Community Forestry Staff:
 

Joel Nichols	Bismarck Office	701-328-9948	<a href="mailto:Joel.Nichols@ndsu.edu">Joel.Nichols@ndsu.edu</a>
Mary O'Neill	Lisbon Office	701-683-4323 ext.12	<a href="mailto:Mary.Oneill@ndsu.edu">Mary.Oneill@ndsu.edu</a>
Gerri Makay	Carrington Office	701-652-2951	<a href="mailto:Gerri.Makay@ndsu.edu">Gerri.Makay@ndsu.edu</a>

## After Planting:

- Water tree as needed, especially during dry periods. Deep watering is better than shallow watering. Continue watering until the ground freezes.
- Inspect trees for disease or insect problems.
- Monitor health and vigor of trees.
- In fall, wrap thin-barked trees with tree wrap. Remove the wrap in spring.
  - Thin-barked trees include lindens, mountain-ash, and silver maple. Fruit trees may also benefit from wrapping in fall to prevent rodent damage.

## YEAR TWO

- Continue to monitor tree health and vigor. Inspect for disease and insect problems. Inspect evergreen trees for winter injury and fruit trees for rodent damage.
- Notify nursery or contractor to replace any trees that have died. Refer to planting contract for guarantee.
- Remove tree wraps in spring.
- Remove stakes after one year.
- Refresh and extend mulch as needed.
- Begin pruning to train trees for correct form one year after planting. Remove no more than ¼ of the foliage in one season. Retain lower branches on trees to help increase trunk taper more quickly.
- Continue deep watering as needed, until ground freezes.
- Wrap trees as needed for winter protection.

## YEAR THREE

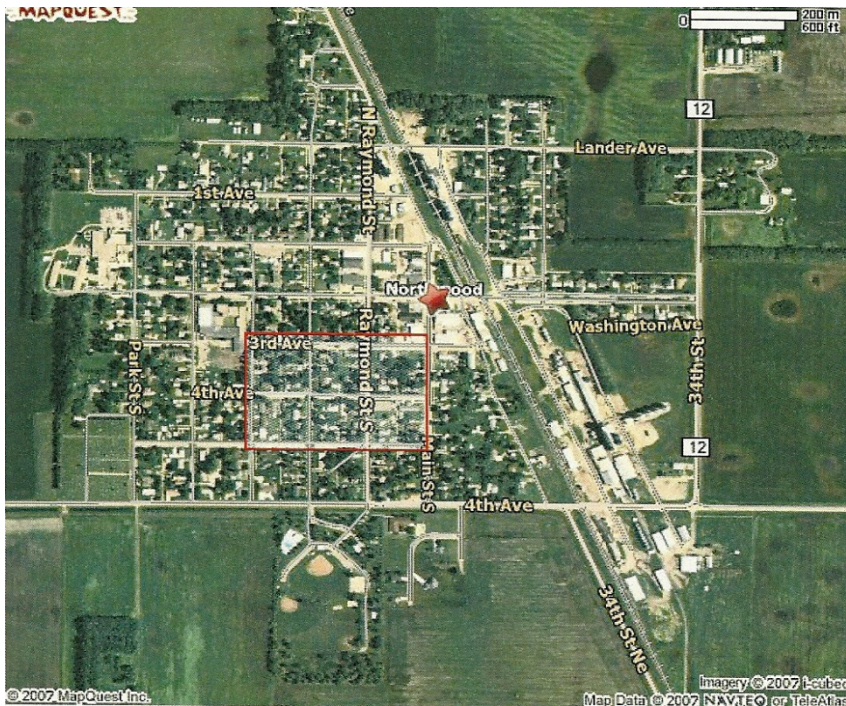
- Continue to monitor tree health and vigor. Inspect for disease and insect problems. Inspect evergreen trees for winter injury and fruit trees for rodent damage.
- Replace any trees that have died.
- Remove tree wraps in spring.
- Refresh and extend mulch as needed.
- Continue corrective pruning. Remove no more than ¼ of the foliage in one season. Remove lower branches on trees once they begin to interfere with foot traffic or maintenance equipment.
- Continue deep watering as needed, until ground freezes. Do not over-water.
- If necessary, a fertilizing schedule may begin during third or fourth year.
- Protect trees from mechanical, herbicide, and salt damage.
- Wrap trees as needed for winter protection.

## References:

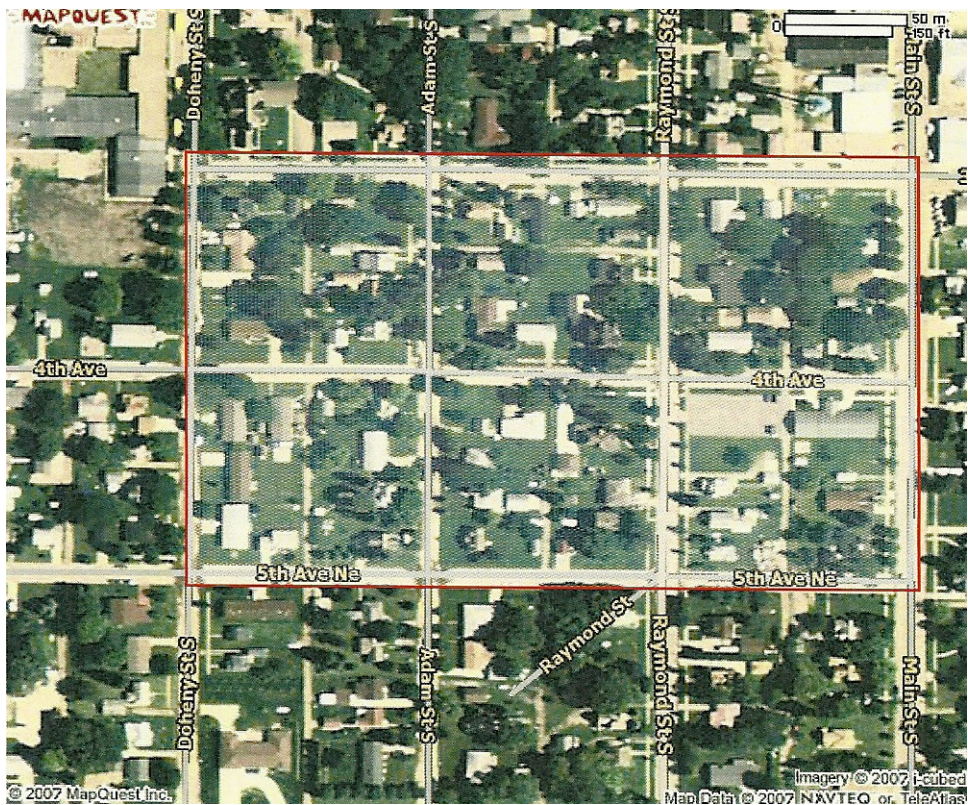
- American Association of Nurserymen. ANSI Z60.1-1990. American Standard for Nursery Stock. 1250 I Street, N.W., Suite 500, Washington, DC 20005
- [http://www.treesaregood.com/treecare/resources/New\\_TreePlanting.pdf](http://www.treesaregood.com/treecare/resources/New_TreePlanting.pdf)
- <http://www.ag.ndsu.edu/pubs/plantsci/trees/h531.pdf>
- Shigo, Alex L. 1991. *Modern Arboriculture*, New Hampshire, Shigo and Trees, Associates, 424 pp.
- Watson, Gary W., and E.B. Himelick. 2005. *Best Management Practices: Tree Planting*. International Society of Arboriculture, Champaign, IL. 41 pp.

# Examples of Vicinity Maps

Maps available via [www.mapquest.com](http://www.mapquest.com)



Project area on map is outlined in red







**SCHEDULE OF EQUIPMENT RATES by FEMA** This information can be found at: <https://www.fema.gov/media-library-data/>

Equipment	Specifications	Capacity or Size	HP	Notes	Rate	Unit
Auger, Portable	Hole Diameter	16 In	to 6		\$2.14	hour
Auger, Portable	Hole Diameter	18 In	to 13		\$4.30	hour
Auger, Tractor Mounted	Max. Auger Diameter	36 In	to 13	Includes digger, boom and mounting hardware	\$3.16	hour
Auger	Horizontal Directional Boring Machine	250 x 100	300	DD-140B YR-2003	\$169.40	hour
Auger	Horizontal Directional Boring Machine	50 x 100			\$31.95	hour
Auger	Auger, Directional Boring Machine				\$36.97	hour
Chainsaw	20" Bar, 3.0 cu in				\$1.40	hour
Chainsaw	20" Bar 5.0 cu in				\$2.45	hour
Chainsaw	20" Bar 6.0 cu in				\$2.65	hour
Chainsaw	Bar Length	16 In			\$1.70	hour
Chainsaw	Bar Length	25 In			\$3.45	hour
Chainsaw	Bar Size	18 In			\$1.25	hour
Chipper, Brush	Chipping Capacity	6 In	to 35	Trailer mounted	\$8.60	hour
Chipper, Brush	Chipping Capacity	9 In	to 65	Trailer mounted	\$16.86	hour
Chipper, Brush	Chipping Capacity	12 In	to 100	Trailer mounted	\$24.31	hour
Chipper, Brush	Chipping Capacity	15 In	to 125	Trailer mounted	\$35.00	hour
Chipper, Brush	Chipping Capacity	18 In	to 200	Trailer mounted	\$50.10	hour
Loader, Skid-Steer	Operating Capacity	1000 Lbs	to 35		\$14.15	hour
Loader, Skid-Steer	Operating Capacity	2000 Lbs	to 65		\$37.00	hour
Loader, Skid-Steer	Operating Capacity	3000 Lbs	to 85		\$36.05	hour
Stump Grinder	1988 Vermeer SC-112		102		\$47.00	hour
Stump Grinder	24" Grinding Wheel		110		\$45.00	hour
Trailer, Dump	Capacity	20 CY		Does not include prime mover	\$11.36	hour
Trailer, Dump	Capacity	30 CY		Does not include prime mover	\$13.10	hour
Trailer, Equipment	Capacity	30 Tons			\$14.15	hour
Trailer, Equipment	Capacity	40 Tons			\$15.50	hour
Trailer, Equipment	Capacity	60 Tons			\$18.85	hour
Trailer, Equipment	Capacity	120 Tons			\$28.35	hour
Trailer, Water	Tank Capacity	4000 Gal		With sump and a rear spraybar	\$13.50	hour
Trailer, Water	Tank Capacity	6000 Gal		With sump and a rear spraybar	\$16.55	hour

Trailer, Water	Tank Capacity	10000 Gal		With sump and a rear spraybar	\$19.20	hour
Trailer, Water	Tank Capacity	14000 Gal		With sump and a rear spraybar	\$23.77	hour
Trailer, Water	Tank Capacity	2500 Gal	to 175	Include pump and rear spray system	\$28.70	hour
Trailer, Water	Tank Capacity	4000 Gal	to 250	Include pump and rear spray system	\$50.00	hour
Truck, Pickup				When transporting people	\$0.54	mile
Truck, Pickup	1/2 Ton	4x2 Axle	160		\$12.30	hour
Truck, Pickup	1 Ton	4x2 Axle	234		\$17.65	hour
Truck, Pickup	1 1/4 Ton	4x2 Axle	260		\$19.85	hour
Truck, Pickup	1 1/2 Ton	4x2 Axle	300		\$22.25	hour
Truck, Pickup	1 3/4 Ton	4x2 Axle	300		\$23.10	hour
Truck, Pickup	3/4 Ton	4x2 Axle	165		\$13.40	hour
Truck, Pickup	3/4 ton	4x4 Axle	285	Crew	\$20.80	hour
Truck, Pickup	1 Ton	4x4 Axle	340	Crew	\$22.85	hour
Truck, Pickup	1 1/4 Ton	4x4 Axle	360	Crew	\$26.40	hour
Truck, Pickup	1 1/2 Ton	4x4 Axle	362	Crew	\$26.75	hour
Truck, Pickup	1 3/4 Ton	4x4 Axle	362	Crew	\$27.50	hour
Truck - Water Tank	1000 Gallon Tank		175		\$33.35	hour