

Weston County Natural Resource District Newsletter

JANUARY 2019

Historical Black Hills— Timber

Austin Sommerville, NWTF Forester

District Supervisors

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David Tysdal
Vice-Chairman

Emily Hartinger
Treasurer

Gene Norman
Supervisor

Tucker Hamilton
Supervisor

District Staff

Lacey Sloan
Coordinator

Austin Sommerville
NWTF-Forester

USDA-NRCS Staff

Paul Eitel
NRCS, District
Conservationist

District Hours

Monday-Friday
7a.m. – 3:30p.m.
307-746-3264

Photographs of the Custer Expedition in the 1870s indicate that the Black Hills have changed much since then. It is still predominantly ponderosa pine, but the forest structure and density have changed considerably. The old photos show stands of far fewer trees than today, but stands composed of older, larger trees exceeding 20 inches in diameter. Almost absent were the abundant stands of 2-inch saplings growing like dog hair that we see now. Regeneration in the Black Hills is more prolific than most other ponderosa pine forest. This is primarily due to our precipitation peaking in late spring/early summer, which is favorable for seed germination. Regeneration in most other ponderosa pine forest, where precipitation comes later in the summer, is more episodic.

The precipitation patterns have not changed enough in the last 100 years to explain the change in forest structure. What has changed is the frequency of natural wildfires. Frequent ground fires historically maintained openness of mature ponderosa pine forest by having a thinning effect on seedlings and saplings. The high mortality inflicted on seedlings and saplings opened the understory and reduced ladders for ground fires to climb into the forest canopy. With thick bark and a tendency to self-prune, ponderosa pine forest are well adapted to low-intensity surface fires and they seldom damage mature trees. It was the frequency of fire kept the intensity of most fires low by preventing heavy fuel loading between fires.

Historically, Black Hills forest burned every 10-35 years. That pattern ceased with the Euro-American settlement in the late 1800s, fire suppression became a priority for settlers and that has continued into present times. We have gotten so good at fighting fires on the ground that most fires started from lightning are limited to 1-10 acres instead of burning thousands of acres as they may have in previous centuries. Some of our forest now have not burned in over 100 years. After a century of aggressive fire suppression, we now have increased fuel loading on the ground and an increase in density of small trees. We still have wildfires that burn thousands of acres, but now they burn far hotter with much higher tree mortality. Wildfires of today are more likely to become stand-replacing fires.

In recent decades, we have learned the benefits of returning surface fires to the landscape. Prescribed fires, which are planned fires conducted under controllable conditions, have been an effective tool of removing moderate amounts of surface fuels while controlling excessive amounts of regeneration after a timber harvest. Our current problem is that we have let fuel and regeneration accumulate for too long and most of our forest are too dense to safely burn. For that reason, we have relied on pre-commercial thinning to remove the excessive volume of small diameter trees. Pre-commercial thinning is a management tool for reducing the amount of small diameter trees in the forest. Resource-stressed trees are less resilient to disease, insect infestation, and adverse weather. Decreasing the stock density reduces competition among trees to increase growth rates and improve tree health. A thinned forest is also less susceptible to catastrophic wildfire after the removal of excess saplings that often serve as ladder fuels for a ground fire to climb into the forest canopy. Increased spacing between the over story trees prevents fire from spreading from crown to crown.

The Black Hills are no longer the wild place that it was in the 1800s. With a resident population near 250,000, our land now supports energy, cattle, timber production and tourism. People have become part of the landscape just like the weather and the trees. We can't stop suppressing wildfires, but we have options to manage for healthy forest that supports our modern land use.



Hardening Off Your Seedlings



Hardening your off your seedlings is just another way to increase the chances of survival for your crops. Whether it be flowers or vegetables, you are helping the seedlings gradually acclimate to a brighter light and colder temperatures of the outside world. This process slows plant growth, allowing the plant to store more food internally and strengthen the outer leaf layers.

To harden off your transplants:

- 1) Start a week or two before you plan on setting your transplants in the garden. Stop fertilizing and reduce the amount of water the plant receives. Water them just enough so that they do not wilt.
- 2) Take plants out for short 30 minute periods during the warmest part of the day and place in light shade. Make sure that they are protected from harsh winds, and construct a windbreak if necessary.
- 3) Gradually increase the amount of time the plant spends outside and the light intensity they are exposed to.

There is such a thing as “to much of a good thing” and it is possible to over harden your seedlings. This in some varieties can cause the plant to bolt, prematurely producing seed or flower.



**WESTON COUNTY NATURAL
RESOURCE DISTRICT IS ON
FACEBOOK!**



Bluebird houses are available for sale through the District Office.

The houses are built by the Wyoming Honor Conservation Camp and come fully assembled. The bluebird houses are priced at \$15each.

To purchase a bluebird house, please contact the District Office. Bluebirds are returning to our area and houses should be installed soon to achieve the best chance of occupancy.

Helpful Advice: To attract Bluebirds it is best to hang houses 4-6 feet off the ground facing East. To prevent crowding a minimum of 300 feet between each house is ideal. To learn about how to attract other species to your area visit: www.birdsandblooms.com/birding/attracting-birds

Info and Photos of Trees from Order Form

For more information about the trees offered this year please visit the following websites:

- * <https://static.colostate.edu/client-files/csfs/pdfs/08byrgd-www.pdf>
- * Or stop by the District Office

COMMUNITY TREE GRANTS AVAILABLE!!!

This is up to a **\$500 grant** for tree planting in Weston County in public locations! If you or your organization would like to apply give us a call!!
Deadline for submitting is March 5th 2019!





2019 WCNRD Tree Order Form

Order # _____

Bareroot Trees - lots of 25 per species only
DECIDUOUS - height vary by species

SPECIES	# of units	COST	TOTAL
02 Cotoneaster		\$35.00	
04 Chokecherry		\$35.00	
06 Native Plum		\$35.00	
09 Nanking Cherry		\$35.00	
11 Wild Rose		\$35.00	

T Ponderosa Pine		\$35.00	
35 Prairie Sky Poplar		\$35.00	
40 Manchurian Apricot		\$35.00	
106 Eastern Red Cedar		\$35.00	
110 Rocky Mountain Juniper		\$35.00	

Large Tube Trees - lots of 50
5" - 12" top height, 7"x2" tubes

SPECIES	# of units	COST	TOTAL
Black Hills Spruce		\$85.00	
Colorado Blue Spruce		\$85.00	
Eastern Red Cedar		\$85.00	
Meyer Spruce		\$85.00	
Ponderosa Pine		\$85.00	
Rocky Mountain Juniper		\$85.00	
Scotch Pine		\$85.00	

Planting Supplies

Item	# of units	COST	TOTAL
Fabric Mulch (6x300ft) Rolls		\$0.40/ ft	
		\$100/roll	
Tree Protectors sun/ wind		\$4.00	
Tree Protectors 4 ft.		\$4.00	
Anchor Pins box of 500-\$60		\$0.15/each	

Crestwood-Large Shrubs
Sold Individually- 5 gallon size

SPECIES	# of units	COST	TOTAL
Barberry		\$20.00	
Dogwood 'Red Twig'		\$20.00	
Forsythia 'Meadow Lark'		\$20.00	
Common Lilac		\$20.00	
Mockorange		\$20.00	
Potentilla		\$20.00	
Siberian Pea Shrub (caragana)		\$20.00	
Spiraea 'Anthony Waterer'		\$20.00	
Spiraea 'Neon Flash'		\$20.00	
Spiraea 'Snowmound'		\$20.00	
Cotoneaster 'Cranberry'		\$20.00	
Ninebark Diablo		\$20.00	

Crestwood-Large Potted Trees
Sold Individually- 5 gallon size
Height varies by Species typically 3-6'

SPECIES	# of units	COST	TOTAL
Aspen, Quaking Clump		\$30.00	
Birch, Paper Clump		\$30.00	
Chokecherry, Canada Red		\$30.00	
Crabapple ' Indian Magic'		\$30.00	
Crabapple ' Prairiefire'		\$30.00	
Littleleaf Linden		\$30.00	
Purple Robe Locust		\$30.00	
Shademaster Locust		\$30.00	
Amur Maple		\$30.00	
Oak, Bur		\$30.00	
Oak, Northern Red		\$30.00	
Oak, Pin		\$30.00	
Narrowleaf Cottonwood		\$30.00	
Golden Willow		\$30.00	
Navajo Globe Willow		\$30.00	

Total Before Tax	\$
Sales Tax (6 %)	\$
TOTAL AMOUNT DUE	\$

Payment Must Accompany Order with 6% tax!
 Make Check Payable and return to:

Weston County Natural Resource District
 1225 Washington Blvd. Suite 3
 Newcastle WY, 82701
Questions Call: (307)746-3264 ext4
Visit: www.westoncountynrd.org

Orders must be received by April 5, 2019



2019 WCNRD Seedling Tree Order Form

Order # _____

CONDITIONS OF SALE

1. No plant purchased from the WCNRD or their distributors may be resold as a living plant.
2. Bare root trees are available in multiples of 25 per species only.
3. Large Tube trees are available in multiples of 50.
4. Payment must accompany order. Refunds will not be given for cancelled orders after 3/1/2016.
5. If trees ordered are not available, a refund will be issued, unless a substitution is requested.
6. The CSFS Nursery/WCNRD is not responsible for errors in inventory count
7. No guarantee of survival.
8. TREES WILL BE DELIVERED IN MAY. WE WILL CONTACT YOU PRIOR TO PICK UP DATE.

Signature		Date	
Name (Please Print)		Mailing Address	
City		State	Zipcode
Acres of ownership		County	
		Daytime phone:	
		Evening phone:	
		E-mail address:	

Shrubs

- Buffalo Berry:** native, drought resistant
- Caragana:** medium to tall, does well in poor soil
- Chokecherry:** tall, can be poisonous to livestock, fast growth
- Cotoneaster:** drought resistant, fast growth
- Coyote Willow:** suckers, fast growth in moist soil
- Golden Current:** small/med height, drought resistant, edible fruit
- Lilac:** excellent cold hardiness, fast growth
- Nanking Cherry:** fast growth, edible fruit
- Native Plum:** tall, does well in moist soil, fast growth
- Red-Osier Dogwood:** small/med, not suited for dense clay
- Saskatoon Serviceberry:** tolerates variety of soil types
- Skunkbush Sumac:** drought resistant, fast growth
- Wild Rose:** low to ground, fast growth, suckers
- N.M Privet:** very tall, alkaline tolerance, native
- Mockorange:** medium height, cold hardy.

Deciduous Trees

- Aspen:** tall, poor drought resistance
- Bur Oak:** hardy, drought resistant, slow growth
- Narrowleaf Cottonwood:** fast growth, medium drought tolerant
- Prairie Sky Poplar:** rapid growth, cottonwood cross, usually cottonless
- Locust:** drought resistant, rapid growth
- Manchurian Apricot:** small, fast growth, drought resistant, winter hardy
- Golden Willow:** requires moist soil
- Hackberry:** tall tree, drought resistant
- Northern Catalpa:** medium growth rate, wide range of moisture conditions tolerated.

Conifer Trees

- Austrian Pine:** tall, drought resistant
- Bristlecone Pine:** native, slow growth
- Colorado Blue Spruce:** tall, slow growth
- Eastern Red Cedar:** medium, drought resistant, very adaptable
- Ponderosa Pine:** tall, fast growth
- Rocky Mountain Juniper:** drought resistant

Payment Must Accompany Order!
 Make Check Payable and return to:

Weston County Natural Resource District
 1225 Washington Blvd. Suite 3
 Newcastle WY, 82701
Questions Call: (307)746-3264 ext 111
Visit: www.westoncountynrd.org

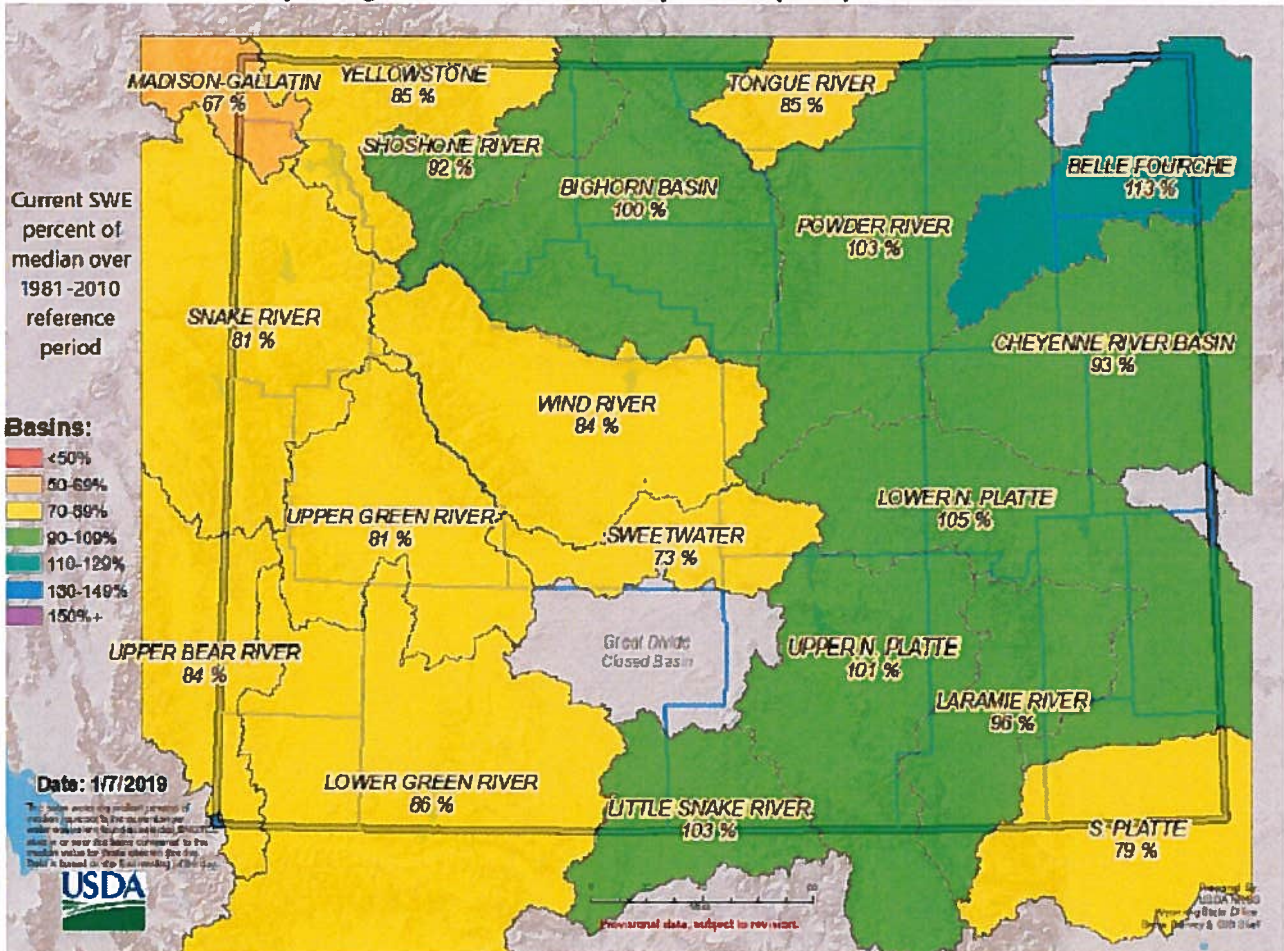


Follow the Weston County Natural Resource District on Facebook to get updates and tree information!



Black Hills Snow Readings 2019

Wyoming Basins Snow Water Equivalent (SWE) % of Median



SAVE THE DATE: AUGUST 31st 2019





Contact us...

Weston County Natural Resource District
1225 Washington Blvd. Suite 3
Newcastle, WY 82701
Phone: 307-746-3264
E-mail: Lacey.Sloan@wy.usda.gov

Bulk Rate
U.S. Postage
Rate
Newcastle, WY
Permit No. 52

The mission of the Weston County Natural Resource District is to provide leadership in conserving the natural resources in Weston County by providing information, education and technical assistance to meet the needs of our users.

Meetings are held the second Wednesday of every month at 3:00 p.m. at the USDA Service Center. Members of the public are welcome to attend.

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UPCOMING EVENTS

January

21st– Office Closed (Equality Day/Martin Luther King Day)

February

12th– WCNRD Board Meeting @3PM, USDA Service Center

18th –Office Closed (Presidents Day)

March

5th– Tree Grants are Due to the District office by 3:30

12th- WCNRD Board Meeting @ 3pm, USDA Service Center

April

5th: Seedling Tree Orders Due to the District office by 3:30 p.m.

8th - WCNRD Board Meeting @ 3pm, USDA Service Center

May

May 3rd– TREE PICK UP DAY (7am to 330PM ONLY)

Rural Cost Share applications will be available to pick up mid month