

THE PACK RIVER  
WATERSHED  
COUNCIL  
PRESENTS...

# THE RIVER RANGER

VOLUME 8, ISSUE 2

FALL 2016

## FEATURING:

No-Till Farming—  
Free Demo Day

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Contact us at:  
(208) 263-5310

## No-Till Farming—Free Demonstration on Friday October 14, 2016, at 1:30

No-till farming is a way of growing crops or pasture from year to year without disturbing the soil through tillage. In no-till farming the soil is left intact and crop residue is left on the field. No-till farming mimics the natural conditions under which most soils formed more closely than any other method of farming. The soil is left undisturbed except to place seeds in a position to germinate.

The no-till farming method can lead to improved soil health and fertility. By conserving the soil structure, water infiltration rates increase as well as storage capacity. Organic matter retention and the cycling of nutrients in the soil is also greatly improved.

In many agricultural regions the no-till method can reduce or eliminate soil erosion. Soils with no-till management tend to have more abundant and diverse soil microbes and other beneficial organisms such as mycorrhiza, arthropods, and earthworms. Overall, the no-till method can improve soil biological fertility, making soils more resilient.

Studies have found that no-till farming can be more profitable than conventional methods if performed correctly. Less tillage of the soil reduces the cost of labor, fuel, irrigation and machinery. No-till farming can increase crop yield due to improved water infiltration and storage capacity, and less soil erosion.

No-till farming requires specialized seeding equipment designed to plant seeds into undisturbed crop residues and soil. A seed drill is designed to open the soil, meter out seeds to a specified depth, and then cover them with minimal soil disturbance. Most drills are built to plant small grain but some can be equipped with the option to plant small, dense seeds such as clover and alfalfa as well as

light, irregular seeds such as warm-season grasses.

When purchasing a seed drill, it is important to consider which type of crop you are planting, seed spacing, soil moisture and soil type. Most drills used in the more humid eastern United States use double-disk openers. Drills with hoe,

shovel, or knife-type openers can be used to penetrate hard soils.

If you are interested in learning more, Bonner Soil and Water Conservation District is sponsoring an educational outreach event featuring a no-till drill technique for pasture, grassland, and/or hay planting. Representatives of the Ranchworx Equipment Corporation will be on-site for a demonstration and to answer any questions.

The demonstration will be on Friday, October 14<sup>th</sup> from 1:30 to 3:00 at 10597 North Boyer Rd. The site is located a half mile north of the Bonner County Fairgrounds on the right, before the Schweitzer Mountain Road. Contact Linda (BSWCD) at 208-263-5310 ext. 100 with any questions.



*A farmer is planting using a no-till drill.*

*“Water is personal,  
water is local,  
water is regional,  
water is statewide.*

*Everybody has a  
different idea,  
a different approach,  
a different issue,  
a different concern.*

*Water is the most  
personal issue we  
have.”*

*~Susan Marks;  
OnLine interview  
October 7, 2009*

## Temperatures in the Pack River

The Pack River Watershed Management Plan and TMDL Implementation Plan recommend monitoring the water temperature in the Pack River Watershed. The Pack River Watershed Council and Idaho Department of Fish and Game established a plan to continuously collect water temperature data using permanently installed Tidbit data loggers. On July 31<sup>st</sup>, 2012 we installed eight data loggers within the watershed.

We deployed four temperature loggers in the Pack River ranging from the Pack River General Store to the upper-most bridge crossing. We installed two in Grouse Creek, one in a lower reach near a restoration project and one in an upper reach where bull trout typically spawn. We also installed one in Hellroaring Creek and one in Caribou Creek.

Native fish are particularly sensitive to temperature conditions. The *Lake Pend Oreille Key Watershed Bull Trout Problem Assessment* designates the main-stem Pack River as a key migratory corridor for bull trout between Lake Pend Oreille and spawning tributaries of the upper watershed. The bull trout was listed as an endangered species in 1995 under the Endangered Species Act.

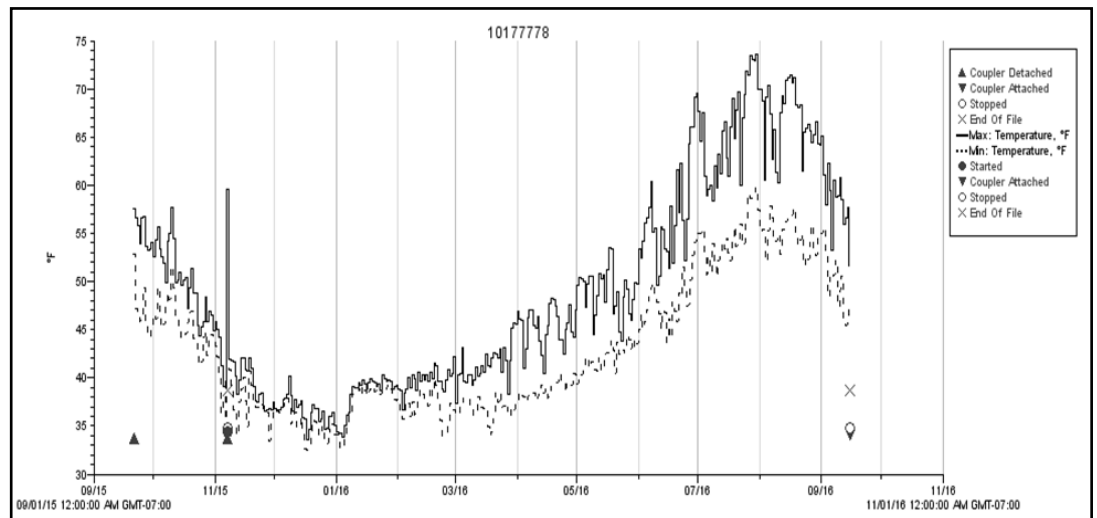
Westslope cutthroat trout, a species of special concern in Idaho, also rely on the Pack River Watershed for habitat. Other aquatic species that depend on the watershed include mountain whitefish, brook trout, brown trout, kokanee salmon, and rainbow trout.

The goal is to continuously monitor temperature and document any improvement in water quality. The upper Pack River Watershed is still recovering from the Sundance Fire in 1967. Riparian vegetation is reestablishing along the streambanks, shading the river. Also several streambank restoration projects and fish habitat projects have been implemented which will improve habitat and temperature conditions.

The graph below shows the daily maximum and minimum temperatures on the Pack River from Sept. 21, 2015 to Sept. 15, 2016. The site is approximately five miles up Upper Pack River Road. The maximum stream temperature reached nearly 73°F during the last week of July. The lowest temperatures were reached during the first week of January, just below 33°F. The greatest daily temperature spread was during July and August.

**Pack River Daily Maximum and Minimum Temperatures**

Sept. 21, 2015 to Sept. 15, 2016



## Thanks for Keeping our Water Clean!

Once again, we thank all the boaters for their great cooperation in the boat inspection process and so far have deterred the quagga and zebra mussels from our clean waterways.

No mussels were found on boats this year, but 107 had weeds that were cleaned off, and 31 boats were hot washed.

Our inspections were up 16% over last year. Hours were extended from 12 per day last year to dawn to dusk this year or around 15.5 hours a day, and each station had a sheriff's deputy onsite two days a week turning back boaters who drove by the stations.

## Last Chance for Tree Seedlings...

Each year the Bonner Soil and Water Conservation District sponsors an annual tree seedling sale. This year the District has sold over 91,485 trees!

We still have some 8" Western White Pine seedlings available for sale – all other species are sold out. Call Linda soon if you would like to order any Western White Pine at 208-263-5310 ext. 100.



Western White Pine

## BSWCD Board Members up for Election

In the General Election on November 8, 2016,

Bonner Soil and Water Conservation District has three of its 5-member board up for election:

**Harry Menser**, **Cassie Tauber**, and **Alice M. Wallace**.

All three are currently serving as board members, and are seeking re-election. These are the only write-in candidates for the General Election. Please write in their three names on your ballot.

For more information regarding Bonner SWCD and the board members, please visit our website, [bonnerswcd.org](http://bonnerswcd.org).

## Fall Calendar

- Oct 13<sup>th</sup>** **Annual SEEP Meeting:** 11:00am to 1:00pm at Idaho Department of Environmental Quality Osprey Conference Room. 2110 Ironwood Parkway, Couer d'Alene.
- Oct 14<sup>th</sup>** **No-Till Drill Demonstration:** Friday from 1:30 to 3:00 at 10597 North Boyer. Located a half mile north of the Bonner County Fairgrounds on the right. Contact Linda at 208-263-5310 ext. 100.
- Oct 18<sup>th</sup> - 19<sup>th</sup>** **Basic SEEP Certification Course:** In Couer d'Alene, Idaho. Topics include site planning, regulations, water quality and BMP's. Contact Marie Pengilly, U of I, at 208-292-2540 or [mpengilly@uidaho.edu](mailto:mpengilly@uidaho.edu).
- Oct 27<sup>th</sup>** **SEEP Recertification Course:** In Couer d'Alene, Idaho. Renew your 3 year SEEP certification. Contact Marie Pengilly, U of I, at 208-292-2540 or [mpengilly@uidaho.edu](mailto:mpengilly@uidaho.edu).
- Nov 1<sup>st</sup>** **Forage & Grazing School:** Tuesday, November 1, 2016, 9am – 4pm at the Ponderay Event Center. Topics will include intensive grazing management for increased pasture productivity, weed control for hay and pasture ground, fertility and soils, using cover crops for grazing, market outlook, and more. Pesticide recertification and continuing education credits will be available. Lunch will be provided. Contact UI Extension at 208-263-8511 for more info. \$15.

*"Anyone who can solve the problems of water will be worthy of two Nobel prizes - one for peace & one for science."*

*~ John F. Kennedy*



# Pack River Watershed Council

The Pack River Watershed Council  
c/o Bonner SWCD  
1224 Washington Ave., Suite 101  
Sandpoint, ID 83864  
208-263-5310



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Bonner Soil & Water Conservation District  
& NRCS  
1224 Washington Ave., Suite 101  
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*“The mission of the Pack River Watershed Council is to improve water quality and riparian habitat in the Pack River watershed for people, fish , and wildlife through education, collaboration, and cooperative projects.”*

*Thanks to Avista Watershed Council Funding, we are able to print and distribute this newsletter.*