East Polk SWCD 240 Cleveland Ave PO Box 57 McIntosh, MN 56556

Phone: 218-563-2777 www.eastpolkswcd.org



# Contacts

#### **Local County Feedlot Contacts**

**East Polk SWCD** 

PO BOX 57 McIntosh MN 56556



218-563-2777

West Polk SWCD 528 Strander Ave Crookston MN 56716 218-281-6070 x4

### **MPCA Area Offices**

**Detroit Lakes:** Metro: 651-296-6300 218-847-1519

**Brainerd: Toll-Free Number:** 218-828-2492 800-657-3864

**Duluth:** 218-723-4660





# **2021 Registration Reminder**

This is a reminder if you haven't updated and submitted your feedlot registration for 2021 it is due by December 30, 2021. MN law and the Minnesota Pollution Control Agency require feedlots owners to update their registration every 4 years. It is also important that you contact your County Feedlot Officer if you have had any changes to your site, closed or sold a site, so we can update our records.

Registration can be done by filling out the included form and returning it to the East Polk SWCD, over the phone, or by going online to https:// webapp.pca.state.mn.us/services/login. If doing your registration online you will need to create an account and follow the prompts. The goal is to have updated registration for all sites completed by December 30, 2021. If you need assistance with registration, please contact the East Polk SWCD at 218-563-2777 or klein.eastpolk@gmail.com.



# **County Feedlot Officer Update**

## Jenna Wiersma—District Technician



Jenna joined the team in April as part of a seasonal internship. She recently became a permanent member of the team as a District technician in October. Prior to joining us, Jenna had fulfilled many other seasonal internships and work terms for many agencies. Such as US Fish and Wildlife Service, MN Department of Natural Resources and Student Conservation Association. Her previous roles include wildland firefighter, biological intern, general labor/maintenance, and biologist.

Jenna grew up locally on a farm near Erskine and graduated from Win-E-Mac in 2015. She then moved to Fargo and earned her bachelor's degree in Zoology/ Biology at North Dakota State University. An outdoor enthusiast, she spends most of her time outside whether it be looking after livestock on her farm or hiking with her two Boston terriers.

Jenna's responsibilities have been stream and lake monitoring, assisting with the tree program, shoreline restoration program, buffer program and wetland conservation program. She will be taking over as lead for the tree program, feedlot program and AgBMP loan program, while still maintaining other previous responsibilities.

# Alfalfa During Drought Conditions U of M Extension

### Alfalfa Uses a Lot of Water

Because of its high stem density and dense canopy, alfalfa has a high rate of water use. Alfalfa uses 0.1 to 0.3 inches of water per day.

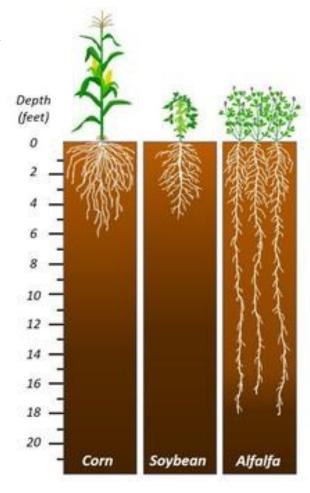
Daily water use is influenced by plant growth stage and environmental factors like air temperature and wind speed. For example, on a windy, 90° F day in Minnesota, alfalfa will likely use 0.30 inches of water.

Water use is greatest when alfalfa has a full vegetative canopy before harvest and is greater during summer months when solar energy and air temperatures are greatest.

Water use declines following harvests and is less in the spring and fall when the sun's energy and air temperatures are lower.

### **Crop Water Use and Forage Yield**

Over the growing season alfalfa may use more total water than other crops because of its long growing season. There is generally a linear relationship between crop water use and forage yield, although aspects of this relationship vary somewhat based on other environmental factors. Water use ranges from 4 to 7 inches per ton of forage depending on the environment.



### Alfalfa Tolerates Drought, But is Not Resistant

Alfalfa has an extensive root system that enables it to extract water from deep in the soil profile (Figure 2). Alfalfa roots are mostly concentrated in the top 4 feet of the soil, but it is not uncommon for roots to reach depths of 16 feet.

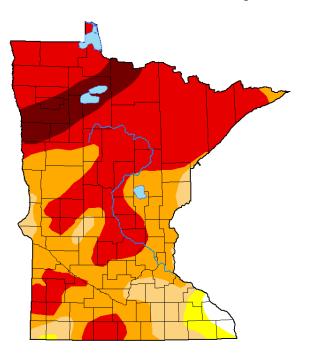
In response to soil moisture deficits, alfalfa increases its root mass and length. Alfalfa survives severe moisture deficits by going dormant. In the Midwest, alfalfa plants can survive several months in dormancy. In some climates dormant alfalfa can survive for years.

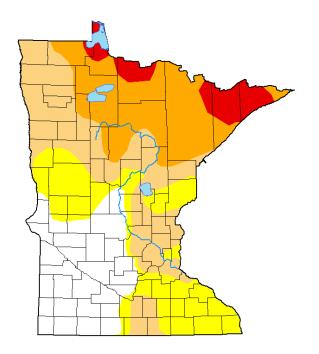
During the onset of drought, alfalfa plants increase carbohydrates stored in the crown to allow the plant to survive dormancy. When water becomes available alfalfa regrows rapidly from buds on the crown.

# 2021 Drought Maps U.S Drought Monitor

August 24, 2021

November 2, 2021





Category	Historically observed impacts
D0	Soil moisture is low; pasture and row crops are stressed
	Fire danger increases
	Weather is good for construction projects
	Lake and river levels decline; water temperatures rise
D1	Winter snow events are canceled
	River and lake levels are lower than normal
D2	Ground is hard; seed corn is short; feed is expensive; crop yields are low
	Fire danger is high; burn permits are required
	Landscaping is stressed; leaves change colors early
	Bears search for food; trout runs are hampered; fish kills occur
	River flow is very low; snowpack is significantly lower; well levels decrease
D3	Corn is harvested early; emergency haying and grazing are authorized
	Wildfires are widespread
	Surface waters are near record lows

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