

2015 Annual Report

Red Cedar Demonstration Farm

Promoting Soil Health and Water Quality through Education

What is the Dunn County Soil and Water Health Partnership?

The Dunn County Soil and Water Health Partnership is just that – a partnership, which consists of community members who are all dedicated to the improvement of soil and water conservation practices. It was formed in the fall of 2014 after several conversations among Dunn County agency staff on ways to benefit the agricultural community of Dunn County.

Why was the partnership formed?

Over the past few years, Dunn County has experienced heavy spring rainfall. Soil is one of the most important fixed assets on a farm. These rainfalls have emphasized to farmers the importance of conserving this asset. Farmers, as well as community members, have expressed concerns regarding soil erosion, improving conservation practices, and better water management. These concerns were brought to the attention of the Dunn County Board of Supervisors and government agency staff. After many conversations, the Dunn County Soil and Water Health Partnership was formed.

What is the Red Cedar Demonstration Farm (RCDF)?

The Red Cedar Demonstration Farm is a partnership dedicated to promoting soil health and water quality through education in Dunn County. Field days are planned at the farm to allow for hands-on demonstration and further understanding of soil and water conservation practices and how they affect farm fields. Ongoing research projects, demonstrations, and informational reports allow for year-round education at the farm.

Dunn County Soil and Water Health Partnership Steering Committee Members Include:

Mark Denk: Farm Business Production Management Instructor from Chippewa Valley Technical College
(715) 577-3036 mdenk1@cvtc.edu

Daniel Prestebak: County Conservationist for Dunn County Division Land and Water Conservation
(715) 232-1496, Ext. 2 dprestebak@co.dunn.wi.us

John Sippl: District Conservationist from Natural Resources Conservation Service (NRCS)
(715) 232-2614 john.sippl@wi.usda.gov

Katie Wantoch: Agricultural Agent for University of Wisconsin—Extension in Dunn County
(715) 232-1636 katie.wantoch@ces.uwex.edu



For more information on the Red Cedar Demonstration Farm, please visit UW-Extension Dunn County website at

<http://dunn.uwex.edu/agriculture/red-cedar-demonstration-farm-2/>

History of RCDF

In the late 1950's, a portion of land near Menomonie was set aside as county farmland for Dunn County. The county farm was an operating dairy and crop farm until the mid-1980's. Since that time, the farmland was rented to local farmers and has been managed by The Neighbors of Dunn County standing committee of the Dunn County Board of Supervisors.



Soybean crop in July 2015

During one of the conversations in 2014, agency staff discussed how it would be ideal to demonstrate some of the best management practices for soil and water conservation practices rather than simply talking about it. These discussions led to the Partnership submitting a proposal to the standing committee of The Neighbors of Dunn County for rental of the Dunn County farmland.

The goals for the project include:

- Demonstrating soil and water conservation management practices for the Dunn County community, area farmers, and CVTC students
- Providing an opportunity for soil and water conservation education, on-farm research, and field demonstrations.

The standing committee approved the proposal in December 2014, and members have been working diligently to achieve these goals. This land is located within the Red Cedar River Watershed resulting in the Partnership dubbing the project the **Red Cedar Demonstration Farm**.

CVTC leases the farmland and is responsible for the management of the crops, including farmland rental payment to Dunn County. The steering committee members meet periodically and guide the management of the property during the terms of the five-year lease agreement.

There are approximately 150 acres of both county-owned and City of Menomonie-owned farmland included in the Red Cedar Demonstration Farm.

2015 Summary Report



Corn crop in July 2015

The year 2015 was the first year of RCDF and was the establishment for various projects and research on the Red Cedar Demonstration Farm.

The following is a description of the projects completed in 2015:

- Soil sampling for site-specific management, or grid sampling, was completed in April. Points in each one acre of the grid were located with GPS. Multiple cores were collected for each soil sample.
- Soil samples provided an estimate of the current fertility of the farmland. Students and researchers can review variations within the fields and how nutrients are distributed spatially.
- Soil samples also estimated the amount of nutrients that should be applied to provide the greatest economic return for future crops.

2015 Summary Report (continued)

- Variable-rate lime applications were completed. Equipment was able to read information from the management map and changed the rate of application as the spreader drove across the field, thus only applying nutrients where needed.
- Farm fields and crop rotations were established.
 - ◊ The large field will be on a corn, soybean, small grain rotation.
 - ◊ The small demonstration field will be on a corn, soybean, small grain, and full season cover crop rotation.
- A weather station was purchased through a UW-Extension Northwest Regional Innovative Grant, for the amount of \$2,500. The weather station is located on the farm and records temperature, rainfall amounts, dew point, relative humidity, and



Variable rate lime application April 2015



Soil Pit at Fall Field Day 2015

soil moisture levels. Data is collected every 10 minutes and sent to a website where it can be viewed by the public and analyzed by researchers and students. The website can be accessed via the UW-Extension Dunn County webpage at: <http://dunn.uwex.edu/agriculture/red-cedar-demonstration-farm-2/>

- A Wisconsin Sustainable Agriculture Research and Education Grant (SARE) was also awarded to the program to help fund the 2015 Fall Field Day and assist with the establishment of fall cover crops at RCDF.
- CVTC utilizes an agreement with local implements dealers for the use of John Deere and Case IH tractors, tillage, planting, and harvesting equipment. This provides the Agri-Science students an opportunity to use the latest field equipment and allows for hands-on education in real-world situations.

- 2015 Fall Field Day: The Fall Field Day was held on September 2, 2015.
 - ◊ An open house during the morning allowed for community members to observe the different soil and water conservation practices being implemented at the farm. They were able to tour the farm as well as view and discuss the different cover crops, soil pits to view various soil types, and the demonstration and research projects happening on the farm.
 - ◊ The Intro to Soil Health and cover crops workshop was offered in the afternoon. This workshop provided producers, crop consultants and agency staff an opportunity to learn about soil health



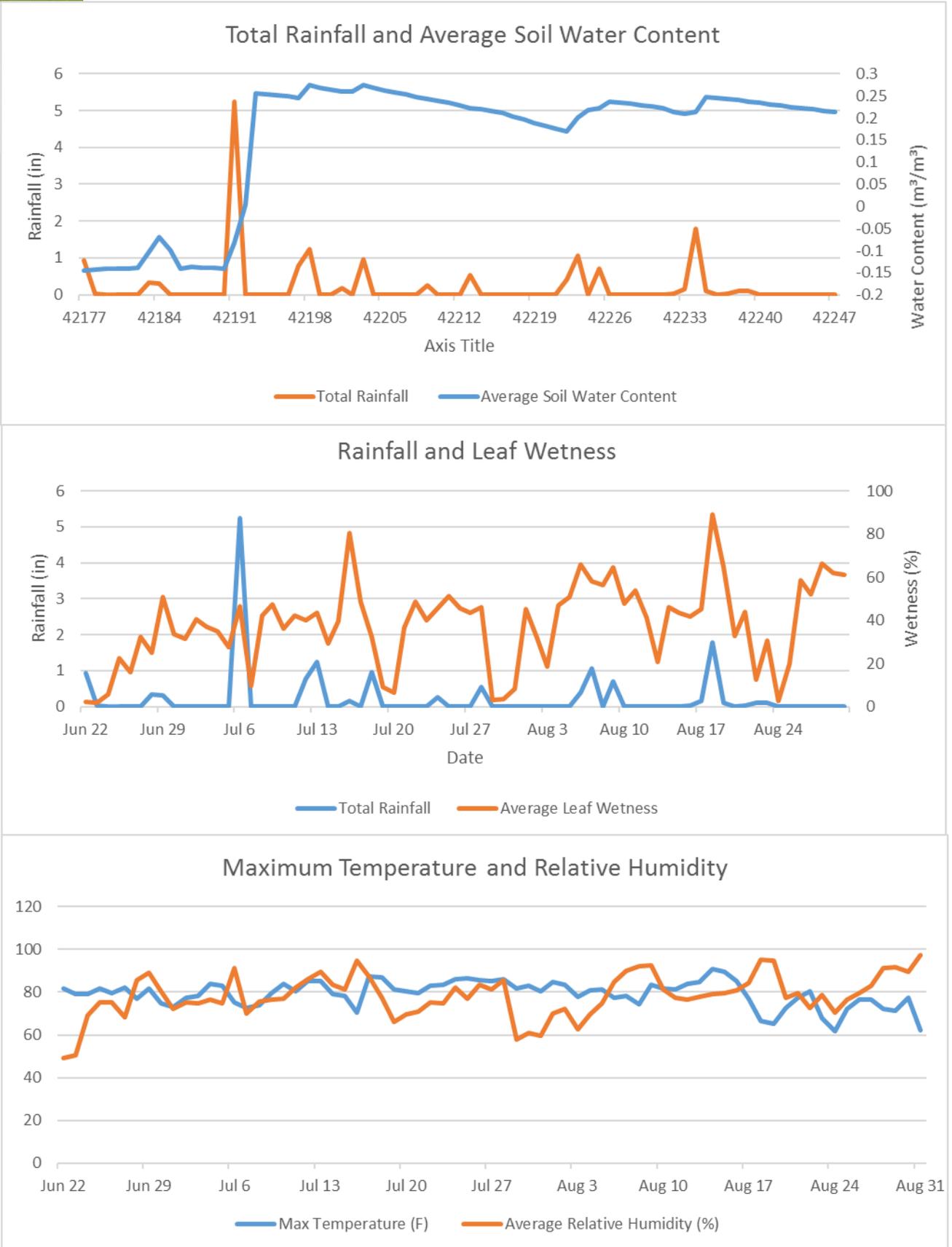
Fall Field Day Sept. 2015

Hobo weather station data for June—August 2015

All data is collected on 10 minute intervals from the HOBO weather station located on the Red Cedar Demonstration Farm.



The HOBO weather station



Red Cedar Demonstration Farm

148.65 Total Acres



Fields

Crop Type

- Corn
- CoverCrop Mix
- Oats
- SoyBeans
- Water
- Check Strips

