# Can "planting green" suppress troublesome glyphosate resistant weeds in no-till soybean? NCR SARE Partnership Program Project ONC21-094

## 2021 Summary

**Objective:** Compare planting green and late termination of cereal rye to current UW-Extension recommendations and burndown termination for weed suppression

Locations: Palmyra North (2), Palmyra Southwest, East Troy One Palmyra site abandoned due to freeze damage

Target species: Marestail, giant ragweed, waterhemp

### **Treatments:**

Control-No rye, Burndown (glyphosate + LV4) with residual herbicide (sulfentrazone + cloransulam).

Rye PRE termination- 40 and 80 lb/a (pls), identical herbicide.

POST termination- 40 and 80 lb/a (pls), LV4 burndown, same residual, rye terminated (at anthesis) with glyphosate.

Follow-up treatment with 2,4-D choline + glyphosate if warranted.

### **Experimental Design:**

Randomized Complete Block, 4 reps, 30 x 175', plot combine harvest, 2 center rows.

#### 2021 Summary:

2021 growing season conditions warmer and drier than normal, GDD 119% of mean (NWS Sullivan).

Seeding rate impacted aboveground biomass (AGB) production and canopy but not other responses.

Delayed termination increased rye biomass 13x.

Marestail population reduction 45 DAP (days after planting) relative to control: PRE termination, 64%: POST termination, 98%

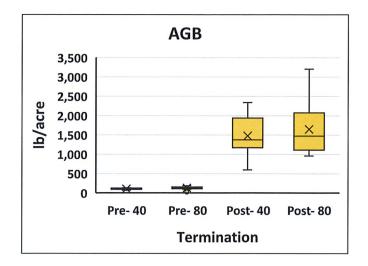
Giant ragweed suppression similar at East Troy site.

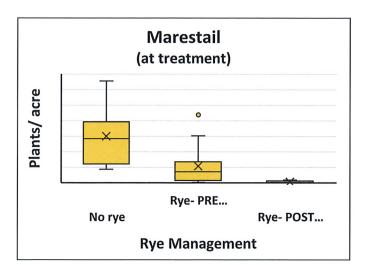
Late termination suppressed mares tail apparently delayed weed emergence.

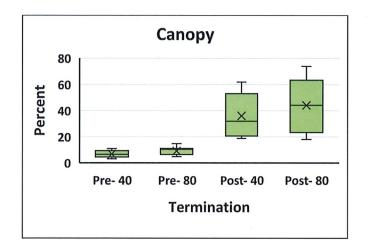
- If this observation holds true in years with normal rainfall, one POST application may provide season long control along with lower potential for resistance development.

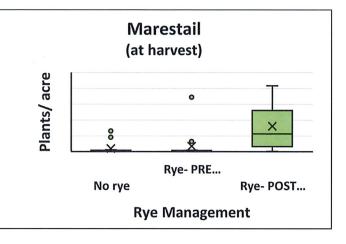
Soybean yield relative to control:

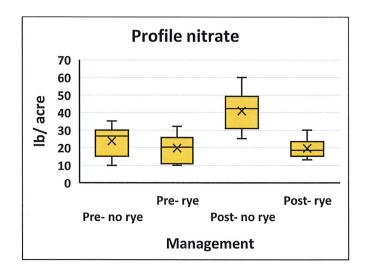
PRE termination, 100%; POST termination, 71% Results partially confounded BUT demonstrate the importance of adaptive management.

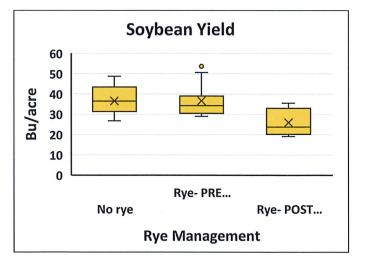






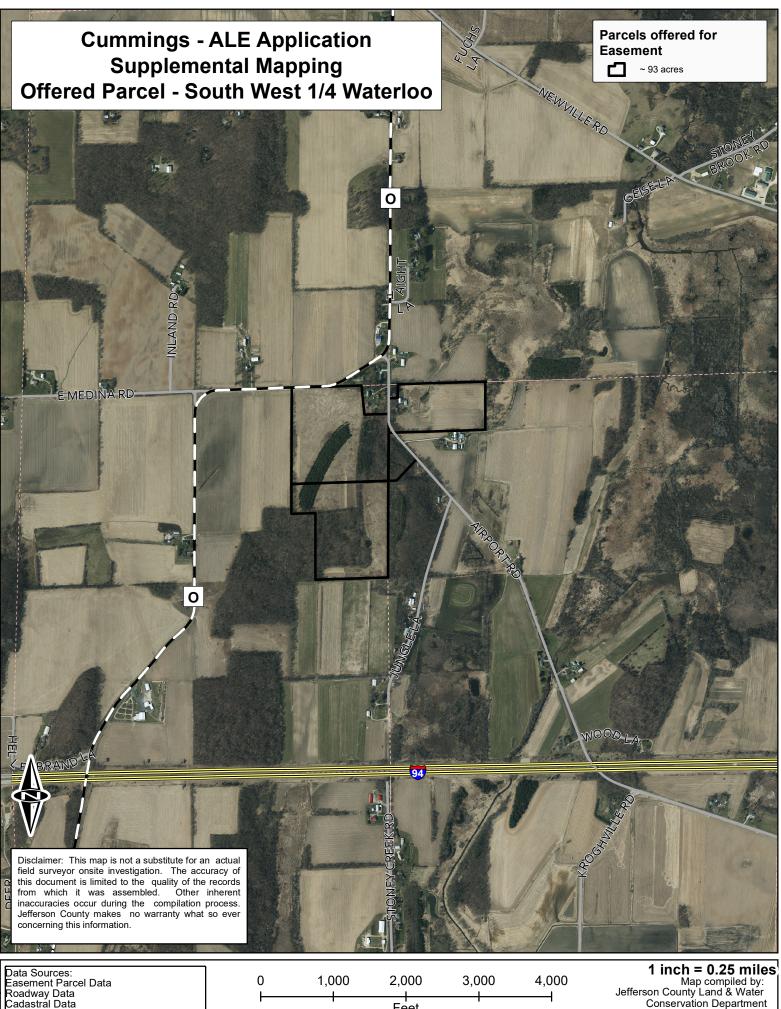












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June 2022

Jefferson County, Land Information Office

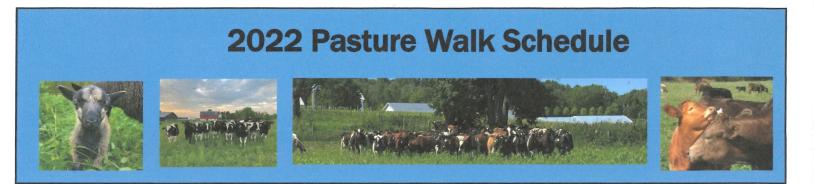


Data Sources: Jefferson County, Land Information Office Land Use & Offered Property: Derived by Jefferson County LWCD

1,000 1,500 2,000 0 250500 \_ Feet

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Map compiled by: Jefferson County Land & Water Conservation Department June 2022



June 23, Thursday 6:00—8:00 pm Kenosha County **Starry Nights Farm,** 7500 352<sup>nd</sup> Avenue Burlington, WI. Beef Grazing Farm. EQIP Cost share for beef grazing & Rain Fall Simulator Demonstration. <u>Register here</u> or www.renewingthecountryside.org

Clover Valley State Habitat Area, N8153 HWY 89, Whitewater,

WI. Grazing Warm Season Grasses on WDNR Land.

Register here or www.regenerativegraziers.com

July 12, Tuesday 6:00—8:00 pm Walworth County

July 21, Thursday 5:00—8:00 pm Waukesha County **Gwenyn Hill Farm,** N3W29350, Bryn Drive, Waukesha, WI. Grazing warm season grasses. Multi Species rotational grazing Dairy, Beef & Sheep. Register here or www.glacierlandrcd.org

July 27, WednesdayPado Farms, Paul Habeck, W6011 Cty Road W, Cascade, WI.6:00-8:00 pmEQIP Cost share for grazing farms, Rotational Grazing Beef.Sheboygan CountyRegistration coming soon.

August 11, ThursdayBrattset Family Farm, N2437 Brattset Lane, Jefferson, WI. Con-2:00—6:00 pmservation Women in Agriculture.Jefferson CountyRegister here or www.wiwic.org

December 6,TuesdayWinter Grazing & Soil Health Workshop, Community Engage-9:00am - 3:00 pmment Center, Whitewater, WI, Allen Williams Main Speaker-<br/>Asked Registration Coming soon.

Questions to: Kirsten Jurcek (920) 342-9504 or kirsten@glacierlandrcd.org







