

# Trumbull SWCD Aerial Seeded Cover Crop Program

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While the use of cover crops is certainly not new, experimenting with the cool season crops seems to be minimal in Trumbull County. There are a number of producers that have been using cover crops in the county, but Soil & Water put forth an effort to expand the use with minimal risk to farmers.

In 2020, Soil & Water offered a pilot program for any farm wishing to enroll up to 50 acres of aerially seeded cereal rye. We ended up enrolling six farms totaling 223 acres. Steve Zvara of Precision Aerial Ag. Service Inc. flew on our seed at a rate of 70 lbs./acre at the end of October. The end of October is a little late to be flying on a cover crop, but cereal rye is the crop for the job. Cereal rye is very tolerant of cold and is winter hardy, so it can be planted later in the fall than many other cover crops. Many producers like cereal rye for this reason, as the cool-season upright is an excellent choice for erosion protection.

Before winter hit and the snow started to fly, we saw very little growth out of the cereal rye that was flown on. However many of the fields experienced much more growth once the warm temperatures of spring arrived. Most of the cereal rye was terminated with herbicides; however it can also be accomplished by crimping or tillage.

Our 2021 cover crop program differed by using an oats and radish mix, and limiting the number of acres to 20 acres per farm. When experimenting with cover crops, it's best to start with a small field, and continue their use for at least four years to determine their efficacy. The program expanded to 12 farms and 331 acres this past year. The mix was 30 lbs. oats and two lbs. radish per acre. Our mix was light on radish due to the possibility of a pungent odor from radish decay. Methyl mercaptan, the same odorant in natural gas, can be released which can mimic the smell of decomposition.



Oats and radish seeded into wheat stubble in Bloomfield (9/22/21)

We had been advised that if you really want to get the maximum growth out of the radish to seed it before the end of August. On August 25<sup>th</sup> Precision Aerial Ag. Service Inc. once again flew on our mix, as well as a couple other fields with cereal rye. You may think that August 25<sup>th</sup> is pretty early to be flying on a cover crop; and it is. Most farmers and our pilot like to seed when beans start to turn yellow, or when there is 50% sunlight penetration in corn. We had neither of those things, despite most farmers getting an early start on planting with a dry spring. We did however get lucky with rain showers immediately following our seeding about a half hour after Mr. Zvara finished flying on the cover crops. Rain is extremely important following cover crop seeding, especially with an aerial application.



Minimal growth of oats and radish seeded into corn in Farmington (12/22/21)

So, what have we seen this year? The biggest take home message so far seems to be that aerial seeding into standing corn doesn't seem to be the most successful practice. While most bean fields seem to have good growth of both the oats and radish (mostly oats), corn fields seeded with the mix have had limited success. One corn field in Kinsman has had no observable growth so far, while another in Mesopotamia has had sparse radish growth. A field in Bloomfield seeded into wheat stubble had the earliest emergence of cover crop due to plenty of sunlight right after seeding. Something that was brought to our

attention when seeding before the end of August was the time of harvest in beans. One of our program participants reported that the oats were so tall that they caused the combine to "growl" while harvesting his beans this fall. So if at all possible, get to those fields first.

Oats and radish are both winter-kill species. As long as the ground freezes over winter, there should be no termination necessary for this mix of cover crops. The down side of winter-kill cover crops is that there may be no green residue for the spring thaw that would protect from erosion of vulnerable topsoil.

As cover crops become a more widely used best management practice, we hope to promote and implement more fields with a wider variety of species and mixes in the county. A surveyed group of farmers indicated that erosion is their number one reason for using cover crops. We here at Trumbull SWCD hope to expand the benefits of cover crops on fields in our county. Some other benefits of cover crops include building soil structure, improving drainage, increasing organic matter, weed suppression, attracting pollinators and increasing microbial activity to name a few. Trumbull SWCD hopes to continue our cover crop program by increasing the number of producers using cover crops on their fields and diversifying species and mixes to maximize the benefits they have to offer.



Oats and radish seeded into soybeans in Bloomfield (12/2/21)

If you have any questions about cover crops or wish to inquire about future Trumbull SWCD cover crop programs, contact Eric Zamary at 330-637-2056 x 8621 or [eric@trumbullohswcd.org](mailto:eric@trumbullohswcd.org).