## **Cover Crops on Brightly Farms**

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Cover crops seem to be on everyone's mind these days, especially with vegetable growers. There is adequate time in vegetable production to plant cover crops and have them effectively grow. Growers are planting anything from annual grasses to biennial Brassicas.

Our farm is located in Hamlin NY, about five miles north of Brockport near Lake Ontario. We have been experimenting with cover crops, which were once thought of as an afterthought. Now, in recent years, we have put forth a great deal of thought and investment into cover crops. We have used everything from forage oats to clover to radishes. We try to cover nearly every acre with some sort of cover crop. Early in the season we will try to use crops like clover, radishes, cowpeas, or annual rye grass. All these crops need is time to develop and grow to get the best results. Later in the year we will use a faster growing crop like wheat- which we like because even if it grows two inches in the fall, the roots will continue to grow some in the winter and will hold the soil together while still giving the soil some cover. Another option we use is mixing the crops in a "cocktail." Examples would be mixing radishes and peas, clover and oats, or wheat, peas and radishes. This allows greater soil microbial diversity. It also allows nitrogen to be fixed by a legume (peas/clover) and then to be immediately taken up by the catch crop ( radishes or grasses).

Radishes are getting a lot of talk recently. These are a great crop if they fit in your rotation. They should be planted between August 1<sup>st</sup> to the absolute latest of August 25.<sup>th.</sup> The ideal plating date in this area would be around the 5<sup>th</sup> to 10<sup>th</sup>. If planted too early they could bolt and produce seeds, and if planted too late they will not gain any size to achieve root depth or nitrogen uptake. We like to drill them, or this year plant them on 30 inch centers with a planter. With drilling the radishes we reduce the planting rate by half vs. broadcasting. We can also mix crops more thorough with the drill. The 30 inch center radishes have some promise. We no-tilled radishes alone. We also tried spreading forage oats on top, vertical tilled the oats in, then planted the radishes on 30 inch centers after. Both came out well. We were pleased at the uniformity of the radishes and the overall growth. We plan on no-tilling corn right into the radishes this spring.

Another topic with cover crops is the effect they have on reduced tillage. The biggest difference we have seen with cover crops and reduced tillage is that planning is critical. If one needs to plant early in the spring, a crop like clover- which can be difficult to kill, should be managed and possibly avoided. There will be more residue on top so attachments on the planter like row cleaners may need to be put on to allow optimal seed to soil contact. One thing on our mind is slug control. We have not had a slug problem yet, but it is on our mind. One option to hopefully address the slug issue would be to use a vertical tillage tool to "set" the material down. We do use this method on crops like squash and cabbage- where slugs would be devastating.

Cover crops can do everything from build soil microbial activity, catch and make nitrogen, to replace a tillage pass for a grower. There are many options for cover crops these days and they should be chosen on a farm to farm basis.