

Cover Crops: Is Aerial Seeding a Fit for Your Operation?

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Over the last decade, cover crops have been proven as one of the most effective tools for preventing erosion and improving water quality. Aerial seeding cover crops is quickly becoming a common practice because of the benefits it offers. It's cost-effective and saves the producer time and labor. But most importantly, it allows the cover crop to be planted while the cash crop is still in the field. By doing so, the cover crop will have plenty of time to become established and produce good fall growth before winter sets in. Successfully implementing a cover crop strategy does require an added layer of management but does not need to be complicated. This article will touch on a few key points to keep in mind when considering an aerial application.

Seed Selection: Defining a goal for the cover crop and selecting crop species accordingly is an important first step. Regardless of the desired outcome, there is a cover crop that will help accommodate the goal. There are, however, some limitations to commonly used cover crop species. Seed with deeper planting requirements is not recommended for aerial application since the seed will have limited seed-to-soil contact. Cereal grains like wheat or rye typically establish well by aerial seeding. Larger seeded legumes like cowpeas require better seed-to-soil contact than aerial seeding will provide. Another factor to consider is seed size if applying a mixture of multiple cover crops. Large differences in seed size can result in an uneven distribution of the various crop species. Resources are available through the NRCS that group seed varieties together by size for consistent distribution during aerial seeding. Lastly, time to establishment should also be taken into consideration, especially in the northern U.S., where shorter growing seasons are a limiting factor. Generally speaking, aurally seeded cover crops are slower to establish than drilled cover crops. Slow-to-establish species are at an even greater disadvantage when cooler temps are on their way. Oats, rye, and

certain brassica species will quickly establish in the fall and early winter, while legumes like vetch, field peas, and some clovers are slower to establish.

Aircraft and Applicator: Uniformity within a cover crop's stand is important and can be achieved via aerial seeding, but it requires the aircraft to be properly calibrated. Making adjustments to the seed spreader is a simple process but testing to ensure that everything is adjusted for optimal conditions is necessary. Landowners should ask their aerial applicator if they do dry pattern testing, if they've handled the species of cover crops they want seeded, and if they can ensure that the seed will be flown on uniformly to help determine the best pilot for the job.

Timely Application: For the cover crop to establish properly, adequate soil conditions and time are required. This is especially important when aerial seeding because the seed is forced to germinate on the surface of the soil rather than from within the soil. Soil moisture and residue are the critical factors. Seeding shortly after a rain is best, but not always possible. If the cover crop is seeded too late and there is already residue on the ground, the seeds will not germinate because they never reach the soil. The general rule of thumb for planting a cover crop into corn is when the lower leaves have turned down, and the top leaves are starting to drop. For soybeans, it's when they begin to turn. Ultimately, every farm is different and local conditions should take precedence over the above recommendations. This will allow for a good distribution of seed, good soil contact, and adequate sunlight penetration. Getting the cover crop up and growing early ensures a good stand; when the current crop's residue comes at harvest, the cover crop will be tall enough to continue to grow through the residue.

A cover crop program will take some time to see results and can take some experimentation to find the optimal strategy. An aerial application can be a great option to help any operator accomplish their cover crop goals. Seeking out skilled professionals like reputable seed suppliers and aerial applicators will make the process much easier.

If you're interested in learning more about cover crops or how Peoples Company can manage your farmland for sustainability and appreciation, please call 855.800.5263 or email LandManagement@PeoplesCompany.com.