

First came cover crop research, then came the **InterSeeder**™



Three functions in a single, brilliantly engineered machine Cover Crop Planter • Liquid Fertilizer and Herbicide Applicator • No-Till Grain Drill



Relay Cover Crops with The InterSeeder™ is a Simple Process

Cover Crop Planter • Liquid Fertilizer and Herbicide Applicator • No-Till Grain Drill

Engineered to Maximize Cover Crop Value

The Concept: Relay Planting Cover Crops

The interseeder is a new machine designed to sow cover crops in standing row crops while applying post emergent directed herbicides and fertilizer. The interseeder plants 3 rows of cover crop for each corn row. By having all these uses on one machine, it reduces the time, energy, and cost of planting cover crops in corn and potentially other row crops. The interseeder facilitates no-till relay planting and makes it possible for farmers to develop a soil cover years round, be environmentally responsible and improve crop yields.

Getting cover crops planted immediately after the corn harvest, one of the busiest times of the year, can make for sleepless nights. Not anymore. Now you can "relay plant" cover crops to make management easier and reduce overall operating costs. And you may be pleasantly surprised by the bottom line boost the InterSeeder™ can give you.

Add the Value of Forage if it Applies

In some years, forage can be grazed resulting in additional income based on the farming operation. At the same time, reduced erosion and runoff, enhanced soil quality, and cover and some nutrition for wildlife are added benefits.

What The InterSeeder Will Do For You

- Reduce costs for planting cover crops
- Simultaneously sidedress N and apply final postemerge herbicide while planting cover crops, all in a single pass
- Makes an ideal small grain drill for added versatility
- Increase corn yield from rotation effect
- Reduce N cost
- Increase forage production
- Provide cover and feed to wildlife

Cover Crops Provide Many Well Known Benefits

- Prevents soil erosion
- Enhances soil carbon
- Reduces drought stress
- Suppresses weeds
- Hold nutrients over winter
- Makes nutrients available to following crops
- Provides supplemental forage



How it Works

At the V7 or earlier corn stage, there is enough sunlight penetrating the canopy for cover crop seeds to germinate and establish.

As corn grows and the canopy increasingly shades the row, the cover crop essentially lies dormant. This prevents the cover crop from competing with corn for nutrients and moisture.

When corn is harvested for silage or grain, the cover crops have already been growing for two months. They flourish and mature earlier than with any other cover crop planting method.

THREE JOBS IN A SINGLE PASS Use the Interseeder at four to six weeks after planting, with corn at no later than V7 stage





The Interseeder applies a precision application of Nitrogen 4" off the corn row.



Herbicide applied in the same pass under the corn canopy precisely targeting the weeds only.



Lastly, the Interseeder plants the cover crop placing 3 rows between 30" corn rows. "We've used the interseeder for two years... its easy to operate, followed the rows well, produced nice even stands, didn't compete with the corn and we're anxious to do more."

> - Bob Buhl Erie County, PA Dairy Farmer





Rear mounted spray and sidedress booms The interseeder can apply a post emergent herbicide between rows and then sidedress fertilizer adjacent to each using this boom setup.



Packing wheels and herbicide nozzles These packing wheels ensure seed to soil contact and accurate planting depth adjustment for each of the three rows between each corn row.



Coulters on planting units These coulters on each allow the interseeder to achieve good seed to soil contact in a wide range of soil and residue conditions.



Double disk openers This tried and true system provides a uniform seed trench in various field conditions.

The Advantages of Relay Planting Cover Crops

- Earlier maturing cover crops can serve as a fall and winter forage
- Mature cover crops work harder in the soil to build soil quality, or soil health
- Improves moisture infiltration
- Reduces erosion and nutrient runoff
- Holds nutrients over the winter, releases nutrients in the spring when terminated for following crops
- Increases organic matter
- Constant cover of the soil surface protects from runoff and potential wind erosion

Oh Yes, The InterSeeder[™] is Also An Excellent No-Till Grain Drill

The InterSeeder is an ideal grain drill for crops like wheat, cereal rye or even soybeans. This versatility makes the InterSeeder a high value investment that will pay for itself faster than many other types of equipment.





Soil pit 3 feet deep. forage root growth

June to April

Reduced Erosion, Increased Organic Matter

Soil erosion can also be an issue on these fields unless a cover crop is established, which is difficult in northern counties. An interseeded cover crop could help to alleviate both of these issues.

Where Stalks Are Removed

An interseeded cover crop can be especially useful where corn stalks are removed for bedding, for example. In these fields, removing stalks removes carbon. Cover crops help offset carbon loss.

Fall Grazing

Some farmers put livestock to work grazing corn stalks. A ryegrass or ryegrass/clover cover crop is a nutritious complement to grazing corn stalks for beef or sheep. Grazing cover crops can be done in the fall or early spring. It



may be necessary to fertilize the cover crop late in the summer to maximize the potential dry matter production in this system.

Nutrient Cycling

Nutrient recycling is an increasingly important practice. Cover crops make it possible, reducing fertilizer costs while helping the environment at the same time.



Spring Forage

This forage crop thrives in April because it is a cover crop planted the year before as a relay cover crop in corn. Of course, the cover crops were planted with an InterSeeder[™].

For Second Year Corn

An InterSeeder helps minimize potential yield loss when corn follows corn, which is common in Pennsylvania. In interseeded fields, second year corn can be planted into a legume grass mix, which provides far better growing conditions for the second year corn. If interseeding is done in row middles the first year, second year corn is best planted next to the original corn rows to avoid planting into a dense cover crop.

One of the first agricultural machines developed in conjunction with the Penn State Agronomy Research Farm

At the Penn State Agricultural Research Farm, developers of the InterSeeder established two studies to evaluate the potential of seeding several cover crop species at the time of corn sidedressing (V7 growth stage).



Corey Dillon, Chris Houser and, Greg Roth

We successfully established ryegrass, red clover, white clover and a red clover/ryegrass mixture interseeded into no-till corn, following both corn and soybeans.

Since the establishment of the cover crop is after the "critical weed free period" in corn, any impact on yield are likely to be small, and more than offset by a combination of the savings in field trips and the value cover crops add.

INTERSEEDER OPTIONS:

The Interseeder is available in a 4 row or 6 row capacity

The Interseeder is also available with the following options:

- Interseeder only with no applicators
- with liquid fertilizer sidedress or herbicide applicator
- with liquid fertilizer sidedress and herbicide applicators
- with liquid fertilizer sidedress and herbicide applicators plus full drill capability



Three functions in a single, brilliantly engineered machine

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