

Wheat



Wheat can be effectively utilized as a part of a diversified rotation or as a cover crop. Roughly 75% of U.S. wheat acres are grown in arid regions or areas with short growing seasons, and wheat has proven to be adaptable to minimum till or no-till conditions. Wheat responds well to in-season crop input applications, especially fertilizer, which reduces runoff, maximizes uptake and allows better efficiency of inputs and management of costs.

Soil Health Benefits

Adding wheat to a corn and soybean rotation adds diversity, improves soil structure, and provides good residue cover which reduces soil erosion. Wheat has a fibrous root structure because it is a grass. Its roots go deep into the soil profile, helping to develop soil structure and improve water infiltration. Arid climates increase this benefit. Living roots from species like winter wheat also provide soil stability in the fall, winter and spring.

Other Benefits

- Different growing season than other cash crops
- Changes window to plant cover crops after harvest
- In certain areas, three crops in two years

Considerations

- Assess whether you have the time, labor and equipment to harvest wheat in the summer.

- The input costs are often not as high for wheat as they are for other cash crops, but the cash flow or timing of expenditures is different and needs to be considered.
- Adding wheat to your rotation will require the use of herbicides with different modes of action. Track the herbicides you are using and ensure they will be effective against the weed species present in your fields.
- Wheat has to be managed properly for disease and multiple applications of fungicide are common.
- Access to local markets to sell wheat.
- Adding a new cash crop to your rotation will bring about new pests that might not typically be seen in other crops. Work with your agronomist to make sure you have an effective plan if you decide to incorporate wheat into your rotation as a cash crop.

Spring wheat and winter wheat can help improve soil health

Winter wheat serves as a great rotation crop and cover crop to keep nutrients in the field and may improve soil health by increasing soil organic matter. Winter wheat can be added to a standard corn-soybean rotation, will add diversity, and allows a producer to have a window of time to plant cover crops after wheat harvest. Winter wheat can also be used as a cover crop after corn or soybean harvest.

Spring wheat is a good rotation crop, allowing farmers to break up disease cycles and control weeds by rotating chemistries.

Wheat as a cover crop

Wheat can be an attractive cover crop option because seed is sometimes more readily available than other cover crops and can be more cost-effective when compared to others.

Soil Health Benefits

- Builds soil organic matter
- Reduces erosion
- Continuous living root
- Creates biomass
- Helps with water infiltration
- Grazing opportunity

Other Benefits

- Flexible
- Can drill or broadcast it
- Overwinters well
- Weed control

As a cover crop, wheat can be managed similarly to cereal rye. However, wheat is easier to manage and does not grow as tall as cereal rye in the spring, making it easier to plant into. It also grows slower, allowing for a longer window to terminate.

Considerations

- Know your weather. Evaluate normal planting and frost times. Consider how your cover crop selection works into the rotation. If planting wheat as a cover crop after corn or soybeans, make sure to consider how much time you have to plant. The earlier the wheat is established the greater the fall growth, but wheat can be planted into later fall and will come up in the spring.
- Plan for proper termination timing. Allowing the wheat to get too tall can cause nitrogen tie up issues, if planting corn into the wheat cover crop. To avoid nitrogen tie up issues when planting corn into wheat, make sure to supply adequate nitrogen at planting time.
- Ensure proper set up of no-till equipment. When planting into wheat, it can be difficult if your planter row is directly in alignment with the wheat row. This could cause planting depth issues.
- Seeding rates will also vary depending on how early or late the cover crop is planted.

Visit soilhealthpartnership.org to learn more about utilizing wheat as part of a diversified rotation or as a cover crop.



Facebook: [soilhealthpartnership](https://www.facebook.com/soilhealthpartnership)

Twitter: [@SoilPartners](https://twitter.com/SoilPartners)

Instagram: [soilpartners](https://www.instagram.com/soilpartners)

soilhealth@ncga.com / 636-733-9004

FIND US ON SOCIAL MEDIA

