

# WHEAT

## COVER CROP FACT SHEET FOR IOWA

**Wheat** (*Triticum aestivum*) is a cool-season annual grass, effective as a cover crop for weed suppression, erosion control, and as a livestock grazing supplement. (Photo by Jason Johnson)



### Identifying Features

- » Bunch grass with upright tillers
- » Leaf blades twist clockwise
- » Medium-sized clasping, hairy auricles
- » Leaf margins are smooth near the base and rough near the tip
- » Medium ligule, may be toothed

### Cultural Traits

- » Cool-season annual grass
- » Minimum germination soil temperature: 38° F
- » Cold tolerance temperature: -15° F (W) 20° F (S)\*\*\*
- » Seeding date: Mid August to Mid October\* (W)
- » Seeding date: Mid August to Late September\* (S)

### Planting Information\*

- » **Drill/Plant** at  $\frac{3}{4}$  - 1½ inches (60 lbs./acre PLS\*\*)
- » **Broadcast** (66 lbs./acre PLS)
- » **Aerial** (75 lbs./acre PLS)

\*Refer to Midwest Cover Crop Council ([midwestcovercrops.org](http://midwestcovercrops.org)), local NRCS office recommendations, and/or pertinent financial assistance program requirements for location specific seeding dates and rates.

\*\*Pure Live Seed

\*\*\*W=Winter Wheat S=Spring Wheat

### Additional planting information:

- » ~11,000 seeds/lb. (1 bushel = 60 pounds)
- » If grazing or weed suppression is desired, increase seeding rate.
- » Broadcasting without incorporation is usually less dependable than drilling or broadcasting with incorporation.
- » Use a low seeding rate for areas with sandy soil or that are prone to dry periods in early spring.



Spring Wheat Winter Wheat



Seedling



Vegetative



Cover crop grass growth comparison

### C:N (Carbon:Nitrogen) Ratios

- » Winter Wheat 20:1

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Wheat cover crop in southeast Iowa.



Winter Wheat Harvest

## Performance

Dry matter = 2,000 - 5,000 lbs./acre per year  
(Biomass quantity is dependent on planting and termination dates and precipitation.)

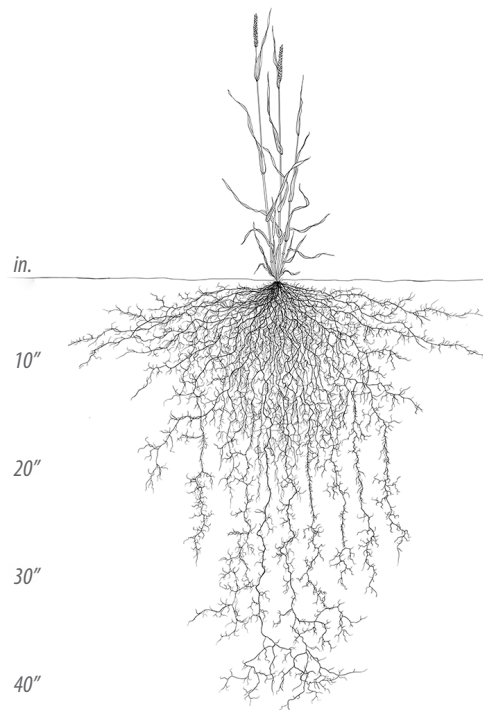
### Performance Ratings

» Cash crop interseed ( <i>early vegetative</i> )	Very good
» Cash crop overseed ( <i>late seed fill</i> )	Excellent
» Grazing quality	Excellent
» Mechanical forage harvest	Excellent
» Nitrogen fixer	NA
» Nitrogen scavenger	Excellent
» Weed suppression	Very good
» Compaction fighter	Good
» Erosion control	Excellent
» Lasting residue	Excellent
» Quick grower	Very good
» Drought tolerance	Good
» Low fertility tolerance	Very good
» Shade tolerance	Good

concern. For crop insurance compliance, follow NRCS cover crop termination guidelines.

- » Wheat does not grow as aggressively as cereal rye in the spring.
- » Early season nitrogen applications can help reduce the effects of nitrogen tie-up by the cover crops.

## Wheat Plant and Root Structure



Drawing provided by Conservation Cropping Systems Initiative ([ccsin.org](http://ccsin.org))

## Additional Considerations

- » **Increased pest pressure:** Wheat could increase risk of spring cutworm; wheat is a host for penetrans root lesion nematode.
- » **Termination:** Time cover crop termination based on goals and experience level. To reduce potential negative impacts on cash crops, consider terminating earlier in the season when conditions are dry or when green bridge or nitrogen tie-up are a

This fact sheet is a collaborative effort of USDA's Natural Resources Conservation Service (NRCS) and Iowa State University Extension and Outreach to provide cover crop options and information for Iowa landowners.