

#1: Farmer Joe lives in northwest Iowa where he experienced a very windy spring with lots of soil erosion. He is planning to chop corn silage fields during the first week of September, and his main goal is to reduce soil erosion.

Species Selection:

Management Recommendations:

#2: Farmer Ryan has a diverse operation in south central Iowa, managing a small dairy herd. His crop rotations include sorghum-sudangrass (summer annual), soybeans, corn, then alfalfa. After taking his last cutting of sorghum-sudangrass in late August, he is wondering if cover crops could be cut to provide additional biomass for feed, ideally cut before seeding the following year's soybean crop.

Species Selection:

Management Recommendations:

#3: Farmer Evan is known for his cow/calf operation in southwest Iowa. On top of managing pastureland, he also has fencing around his corn and soybean fields and is known for letting his herd graze corn stalks after harvest. He plans to harvest corn the second week of October, and wants to know if cover crops can provide additional grazing potential to his herd.

Species Selection:

Management Recommendations:

#4: Farmer Ruth has a corn/soybean rotation in southeast Iowa, a college degree in ag business, and prides herself in the farm's positive ROI each year. She is looking for innovative ways to manage nutrient inputs, and is okay experiencing a yield drag as long as the whole farm economics return positive. Her goal is to build N, P, & K values in the top foot of soil through cover crops.

Species Selection:

Management Recommendations:

#5: Farmer Amber strictly follows a corn/soybean rotation in east central Iowa and is known for keeping the family tradition. Her landlord convinced her to seed cover crops between a corn and soybean crop. Amber has a low appetite for risk and her main goal is to avoid soybean yield loss.

Species Selection:

Management Recommendations:

#6: Farmer Mindy follows a corn, soy, alfalfa rotation in northeast Iowa. Between herbicide prices and herbicide-resistant weeds, she's looking for a new way to better control the weed presence during the corn and soybean years. Mindy's goal is to use cover crops to reduce weed pressure.

Species Selection:

Management Recommendations:

Answer Sheet Guide

#1: Goal – reduce erosion

Cereal Rye, drill following silage chop, terminate in spring

Reason: Drill a lower rate after silage chop allows enough time for adequate fall establishment, rye will overwinter, and continue growing in the spring. The actively growing plant provides erosion prevention during the fall and spring months. Terminate ahead of next crop accordingly.

#2: Goal – biomass for livestock feed

Cereal rye or oat

Reason: Drill a high rate of cereal rye or oat, to maximize biomass accumulation. If long enough before first freeze, oat would provide good biomass and cut before frost. If seeding close to a frost, plant cereal rye and cut in spring after adequate growth. (might want to include a legume to balance out C:N ratios)

#3: Goal – grazing potential for cow/calf herd

Cereal rye, oat, radish, turnip mix, seeded early

Reason: Aerial seed mix into standing corn, around August timeframe. Ideally time with rain event. Harvest corn normally, let livestock graze following corn harvest.

#4: Goal – N, P, K content in soil

Legume and Brassica mix

Reason: Legumes will fix N, brassicas will draw up P, K, & micros from lower in soil profile. Seed aerially in August, or drill following harvest. (best tuber growth occurs with earlier seeding)

#5: Goal – Avoid yield drag

Oat, Radish, Turnip, & winter kill legume

Reason: Choose winter kill species to avoid termination risks in spring ahead of crop. Seed aerial in August/September to maximize cover crop growth.

#6: Goal – Weed Suppression

Cereal rye

Reason: Seed cereal rye at a high rate, either aerial in August/September, or drill immediately following harvest. Rye will overwinter and grow in the spring. Plan to terminate either with herbicides or mechanically roller/crimp. Could plant green if grower is comfortable with that option. To combat weeds, must rely on residue shading out young weed populations.