

Livestock Research Protocols

Economic and Soil Health Impacts of Grazing Cover Crops in Cattle Operations

Objectives: 1) To determine the economic impact of utilizing cover crops as forage;

2) To track changes in soil health when grazing cover crops

Farmer-cooperators will:

- Take photos throughout the project and keep in contact with PFI with updates and questions.
- June September 2018, 2019, 2020: plant cover crop(s) of choice. PFI staff is available to discuss recommendations as requested. Record what cover crop(s) were seeded on which fields, field size, seeding date, rate, method and costs.
- Fall 2018, 2019, 2020: graze or harvest cover crop if biomass growth and weather allow.
- Spring 2019, 2020, 2021: graze or harvest cover crop if biomass growth and weather allow.
- When grazing cover crops, keep track of animal moves and what forage/crops/residue is present.
 Record dates animals moved into and out of each field, paddock size and hours of labor attributed to grazing.
- **Just before grazing**, take forage biomass samples in each paddock to estimate amount of forage grazed or harvested by cattle. Use a 1 sq. ft. quadrat.
- When harvesting cover crops, document method, equipment used, labor needed, plant stage and date at harvest and number of acres harvested.
- Terminate cover crop with preferred method. If needed, discuss termination recommendations with PFI staff.
- Allow Derek Rothe to take soil health samples twice a year for three years, and assist Derek in determining control and treatment fields for soil health sampling.

Grazed Cover Crop (treatment)	Ungrazed Cover Crop (treatment)	No Cover Crops or Grazing (control)
2018-2021		

Practical Farmers of Iowa will:

- Help set up trial protocol, monitor progress of project and provide support when needed.
- Work with each farmer to complete an economic analysis.
- Publish results in a PFI research report, on PFI website, and potentially other outlets.
- Provide \$25/acre cost-share on acres enrolled in the project; up to \$10,000/year
- Provide \$550 compensation each year of the project, after data is turned in.