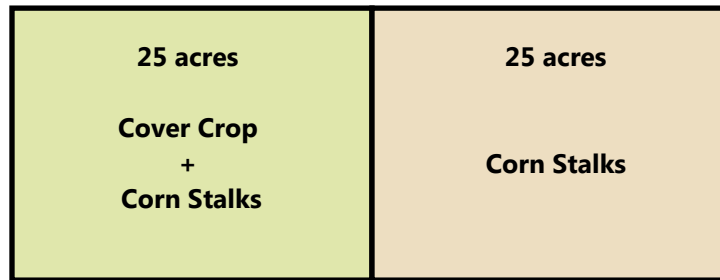


Livestock Research Protocols

Grazing Cover Crops and Crop Residue

Objective: To measure the utilization of crop residue by cattle when cover crops are or are not present.



same animal density (lbs/ac) in each paddock

Farmer-cooperator will:

- Summer 2016, interseed cover crop(s) of choice in 25 acres of the 50 acre field designated for the trial. Leave the other 25 acres un-seeded. Record what cover crop(s) were seeded, the date, rate, and method of seeding.
- Fall 2016, graze cover crop and crop residue in both paddocks, splitting the paddocks with temporary fencing. Graze each paddock during the same time period, with the same animal density (lbs/ac). Record the dates cows moved into and out of the field.

On the day animals start grazing and on the day animals are taken out of the field:

- Take biomass samples from both paddocks using quadrats. Randomly toss the quadrat five times and clip all biomass within the quadrat, down to the soil surface. In the paddocks where cover crops and crop residue are present, separate out the residue from the cover crop biomass. Let air dry for two weeks, then weigh. You may send samples to the PFI office for drying and weighing.
- Take a forage sample of the cover crop to send in for nutritional analysis.
<https://www.dairylandlabs.net/feed-and-forage/submit-a-sample>
- Weigh both groups of cows.
- Weigh each protein tub.

Other data to collect:

- Track cover crop seed and application costs.
- Keep labor estimates involved with grazing the 50 acres.

Practical Farmers of Iowa will:

- Monitor progress of project and provide support when needed.
- Analyze the data and publish results in a PFI research report, on PFI website and potentially other outlets.
- Pay the Farmer Cooperator a fee of \$550 at the conclusion of the project in 2016.

Contact: Meghan Filbert, (515) 232-5661, meghan@practicalfarmers.org

The terms of this Research Protocols document are subject to the terms of the individual Research Cooperator's Memorandum of Understanding agreement with PFI. To the extent these terms may differ or conflict, the Memorandum of Understanding shall control.