



# Livestock Research Protocols

## Grazing Cover Crops for Winter Feed

**Objective:** Continue tracking winter hay requirements and forage provided by cover crops to determine how much winter feed can be offset by grazing cover crops in the fall and spring. Feed cost savings will be calculated & animal gain and performance will be monitored.

**Farmer-cooperators, Dave and Meg Schmidt, will collect:**

*Winter – Early Spring 2014-2015:*

### Animal Info

For each animal in the project, record its ID, species and breed, sex, class or group, date of birth, weaning date (if applicable), and any notes, problems, or treatments that may affect results.

### Stored feed record

Note the date each type of feed was offered to livestock, which animals it was offered to, and the amount fed. Note both quantity of feed (number of units) and the units (such as tons, lb, bales). If using units such as bags or bales, note the average weight of bags or bales. Forages may be sent to Dairyland for quality analysis.

### Purchased feed record

Record all feed purchases, including feed type, the date purchased and vendor, price (both of feed and transport or processing), and units. A description of the feed and nutritional analysis should be included.

### Weights and BCS

Growing animals should be weighed, ideally at the beginning and end of the trial, more often if possible. Mature animals should be weighed at least once to provide a representative weight, and body condition scores of at least five representative animals should be evaluated at the beginning and end of the trial, more often if possible.

*Fall 2014 & Spring 2015:*

#### Field records

Note what cover crop(s) were seeded on which fields, the date, rate, and method of seeding (aerial, broadcast, drilled); as well as the field size.

#### Paddock records

Track every time the animals move from one paddock or pasture to the other, including the paddock name and size, and what forage/crops/residue is present. Record grazing days (the date animals moved into and out of the field), or the date of haying or harvest and paddock size.

#### Weight and BCS

Animal weights must be known to determine stocking density. Body condition scores should be evaluated at least once on at least five mature representative cows. Weighing and BCS scoring at the beginning and end of the grazing period is warranted if the field is grazed for more than about two weeks.

#### Cover crop biomass

Forage biomass should be sampled in each distinct field or paddock, before grazing. Clip the aboveground forage from at least five randomly-selected but representative locations in the pasture of interest – for instance, bend a wire coat hanger into a one-foot square, and toss in the field to select a location. Put the forage in a paper bag (combine samples from within one pasture) and allow to air dry for 4-5 days. Weigh the dry forage and report along with the number of locations clipped and the size of the clipped area.

#### Cash crop yield **\*\*optional\*\***

Yields of cash crops should be reported; ideally, similar fields that received different treatments should be reported (for instance, no cover crops, cover crops but not grazed, and grazed cover crops).

#### **Practical Farmers of Iowa will:**

- Monitor progress of project and provide support when needed.
- Analyze the data, compile with past data and write an updated report.
- Publish results in a PFI research report, on PFI website and potentially other outlets.
- Pay the Farmer Cooperator a fee of \$750 at the conclusion of the project in 2015.