Objective: Determine the impact of contract grazing cover crops on the 1) economics and 2) soil health in row-crop fields.

Hypothesis: Contract grazing of cover crops will improve economics and soil health, providing benefits to both graziers and row-crop farmers.

Farmer-Cooperator will:
- Take photos throughout the project and keep in contact with PFI with updates and questions.
- Establish cover crop grazing contract with partnering farmer.
- June - September 2019 and 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. Record what costs are covered by both parties.
- Fall 2019 and 2020: graze cover crop if biomass growth and weather allow.
- Spring 2020 and 2021: graze cover crop if biomass growth and weather allow.
- When grazing cover crops, keep track of animal moves and what forage/crops/residue is present and note the cover crop height at onset of grazing. Record number of animals, average animal weight, dates animals moved into and out of each field, paddock size and hours of labor attributed to grazing.
- Keep financial records of payments made to each party involved in contract grazing.
- Fall 2020 and 2021: record cash crop yield from each of the three plots.
- Terminate cover crop with preferred method. Record costs associated with termination. If needed, discuss termination recommendations with PFI staff.
- May 2020 and 2021: Take soil health samples from three locations in each plot each year after spring grazing ends. Samples should be taken at a 6-in. depth and sent to AgSource Labs in Ellsworth, IA for a routine soil health analysis.
- Turn in all info and data pertinent to this trial to Practical Farmers of Iowa by the end of the project.
- Host a PFI field day to share your experience contract grazing cover crops.
- Become a PFI member in order to participate.

<table>
<thead>
<tr>
<th>Grazed Cover Crop (treatment)</th>
<th>Ungrazed Cover Crop (treatment)</th>
<th>No Cover Crops or Grazing (control)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Fall 2019-Spring 2021</td>
</tr>
</tbody>
</table>

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 a field day payment of a $600 honorarium and up to $600 in expense reimbursement.
- Provide cover crop cost-share at $25/acre on acres not already receiving other cost-share sources.
- Provide $550 honorarium after data is submitted each year of the project.

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

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