

# Livestock Research Protocols

## Alternative Free Choice Minerals for Goats, Spring and Summer 2015

**Objective:** To determine if there are quantifiable health benefits in goats provided free choice minerals and kelp versus standard mineral blocks.

**Farmer-cooperators, Cheryl and Mike Hopkins will:**

- Feed the same group of goats different mineral mixes over 5 week periods throughout the grazing season using a portable, sheltered trough feeder.
- Feed a salt block for one week between 5 week mineral treatments.
- Mineral treatments will include a mineral block, loose mineral mixes and kelp.
- Take observation of herd health signs during each mineral treatment: hoof health, hair coat, body condition scores (BCS) and general health observations.
  - BCS at least 5 adult animals from each treatment group, at least once a month. BCS is on a 1-5 scale; 1=emaciated and 5=obese. Score the same animals each time.
- Take observation of animal behavior during each mineral treatment: consumption rate, pica (consumption of odd or unusual things), and/or avoidance of certain minerals.
  - Mineral blocks or loose minerals will need to be weighed before and after treatment period to calculate consumption rate.
- Note the amount and price of purchased and consumed mineral, and the rate of supplementation.
- Take FAMACHA scores throughout the grazing season, at most every two weeks.
- Keep grazing records.
- If fecal egg counts are taken, make sure to record date and current mineral treatment.

|                     |                                   |
|---------------------|-----------------------------------|
| <b>May 23</b>       | <b>Mineral block</b>              |
| <b>June 27</b>      | <b>Salt block</b>                 |
| <b>July 4</b>       | <b>Loose mineral treatment #1</b> |
| <b>August 8</b>     | <b>Salt block</b>                 |
| <b>August 15</b>    | <b>Loose mineral treatment #2</b> |
| <b>September 19</b> | <b>Salt block</b>                 |
| <b>September 26</b> | <b>Loose mineral treatment #3</b> |



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## *Research Protocols*

**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 \$550 at the conclusion of the project in 2015.