

Research log:

## 2018

- **April 28:** moved 4 rams into plot area, W. buffer zone. Strip graze. Seed grazing area with hay seed mix
- **may 1:** exposed strip graze along N buffer zone; closed access on W. buffer zone up to corner. Seed grazing area with hay seed mix. Mowed grazed area that was moved out of grazing. 5" mow cut with zero turn mower
- **may 4:** exposed strip graze along E buffer zone, Seed grazing area with hay seed mix. Mowed grazed area that was moved out of grazing. 5" mow cut with zero turn mower
- **may 7:**
  - Adam and Brook spent 1.5 hrs (1:15ish to 2:45)
  - fixing and adding stakes, painting stake areas, and adding tufts.
  - setup electronet on first grazing section (37.5 ft wide; strip goes east to west; 1st north strip). Setup shade cloth in section
    - seeded each section in plot that allows for seed with 0.75 lbs of trefoil. This works out to roughly a 15 lbs/a seeding rate. Only seeded with Trefoil, not hay seed mix.
- **may 8:** move rams into plot grazing 1/3 area 1; exposed roughly 1/3 of strip to rams
- **may 11:** expand ram grazing area to 2/3 of plot area 1
- **may 14:** expand ram grazing area to full plot area 1
- **may 17:** expand ram grazing area to 1/2 area 2
- **may 17:** mowed area 1
- **may 20:** expand ram grazing area to full area 2
- **may 23:** moved ram grazing area to 1/3 area 3
- **may 24:** mowed area 2
- **may 26:** expand ram grazing area to 2/3 of plot area 3
- **may 28:** expand ram grazing area to full area plot area 3
- **June 2:** moved ram grazing area to 1/3 area 4
- **June 2:** mowed area 3
- **June 5:** moved rams out of area 4 to paddock for medical care (one ram needs medical care)
- **June 7:** moved ewes (9 non-breeding ewes & 1 guard llama) into remaining grazing area, all of plot 4
- **June 10:** water tub pipe in grazing area plot 4 (corner by gate) broke for 12-24 hrs, flooding part of the upper corner of plot 4. Similar to June 10th
- **June 11:** moved ewes off of plot 4
- **June 12:** water tub pipe in grazing area **next to** plot 4 (corner by gate) broke for 12-24 hrs, flooding part of the upper corner of plot 4. Similar to June 10th
  
- **July 13:** collect forage samples (Sam & Adam: 9:15am-2:30pm; Sarah: 9:15am-12:15pm). Collected 6 samples per square, equally divided. Forage cutting tools were not swapped between Sam, Adam, and Sarah. Brook did all measuring and packaging. Samples stored in refrigerator at Ext. office
- **July 16:** picked up samples at Ext office ~10am. Samples were packed in a styrofoam fish box with 2 ice-packs, and shipped next-day via UPS.

- **Sept 11:** penetrometer testing, infiltration testing, and soil cores. roughly 10 cores per plot. 10 penetrometer tests per plot. 4 infiltration testings per plot. (sarah: 2 hrs; Adam: 4 hrs; brook: 7 hrs; angie 7 hrs; emma: 4 hrs)
- **Sept 12:** finished infiltration testing (adam: 2 hrs, angie: 4?). Mailed soil samples.
- **Sept 16:** aerated designated strips. 4 passes of the aerator with the tillage marked at the #3 (of 4) positions, with slight overlap per strip, with each strip done twice.
- **Sept 17:** placed 10-20-20 with trace minerals at roughly 150 lbs/acre rate. Will place more, as well as dolopril, if needed based upon soil sample results.
- **Nov 7th - 14th:** rotated ewes through in Mid november, with the first deep frost Nov 8th. Split the field with a temp line going e-w, and kept them in North section 3 days and south section 4 days. South section went slightly beyond the south plot boundary.

## 2019

- **April:** grazed rams on south side of pasture, just out of range of the plots
  - **June 14/15:** sampled forage biomass and quality
  - **June:** grazed ewes in 3 strips over 10 days, AFTER sampled biomass
  - **Aug:** grazed ewes in 2 strips over 4 days. Irrigated roughly 0.5" over 2 days after sheep left strip
  - **Sept 18/19:** sampled soil quality
  - **Oct:** grazed ewes in 2 strips over 3 days
  - **Oct-Nov:** laid dolopril (300 lbs/acre) and 10-20-20 with trace minerals (~300 lbs/acre). Spreader broke with half the field completed, so it took roughly 25 days until the pasture was finished.
- NOTE:** did NOT aerate this year based upon feedback from Steve Fransen. Aerating this winter when the ground gets a bit harder.

## 2019

- **winter/spring:** field flooded, more than usual. Did not aerate in spring as the ground was too wet.
- **June 16th:** sampled forage biomass, quality, soil samples, soil penetration
- **Mid-late June:** mowed pasture; first time since 2017!
- **early August:** light graze
- **Sept:** light graze
- **mid oct:** equip broke while aerating another field; missed aeration window.
- **Nov:** light graze