

Mob or Rotational Grazing for Pastures

Long-term effects of grazing management on forage yield, species diversity, and quality



A 4-year grazing study assessed how mob and rotational grazing methods affected the yield, longevity, persistence, and quality of perennial cool-season pastures



What are mob and rotational grazing?

Different grazing strategies have been practiced by livestock producers for decades. Of these, two strategies have come to dominate much of the industry:

Rotational Grazing

- ❖ 28-35 day rest periods
- ❖ 3-5 day grazing period
- ❖ Moderate stocking rate
- ❖ Consistent grazing events throughout the year
- ❖ Common with domesticated forage species in the eastern U.S.

Mob Grazing

- ❖ 70-90 day rest periods
- ❖ 2-3 day grazing period
- ❖ Intensive stocking rate
- ❖ Variable yield, only a few grazing events per year
- ❖ Common with native forage species that do not tolerate frequent and low grazing

Which method is best suited for Northeast U.S. grazing?

Year 0 (2014): Eight 0.25 acre paddocks were seeded in late summer with a **mix of alfalfa** (12 lbs/ac), orchardgrass (5.2 lbs/ac), tall fescue (8.6 lbs/ac), white clover (4.2 lbs/ac), and narrowleaf plantain (4.2 lbs/ac). Four paddocks were assigned as **rotational grazing**, and four were **mob grazed**.

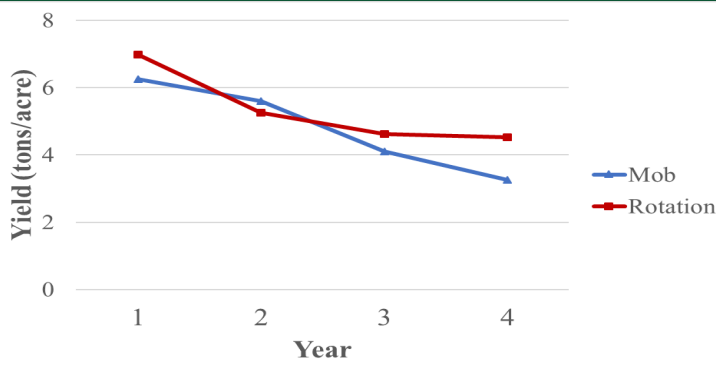
Years 1-4 (2015-2018): Each year **six rotational grazing events** occurred (15 steers/paddock, May – Oct), while **two mob grazing events** occurred (40 steers/paddock, June and Sept.). Prior to grazing events, paddocks were subsampled for **forage yield and quality**. During the mob grazing events, all paddocks were sampled for **changes in forage species content**.



Cattle grazing a rotational paddock during summer, 2018.

What we learned from four years of mob vs. rotational grazing:

- ❖ Forage **yield steadily declined** over time, but did so **faster under mob** grazing
- ❖ **Grasses persisted** better under **rotational** grazing, while **alfalfa** persisted better under **mob** grazing
- ❖ **Fiber** levels were much **poorer under mob** grazing



Cumulative forage yield over a 4-year period between mob and rotationally grazed paddocks.

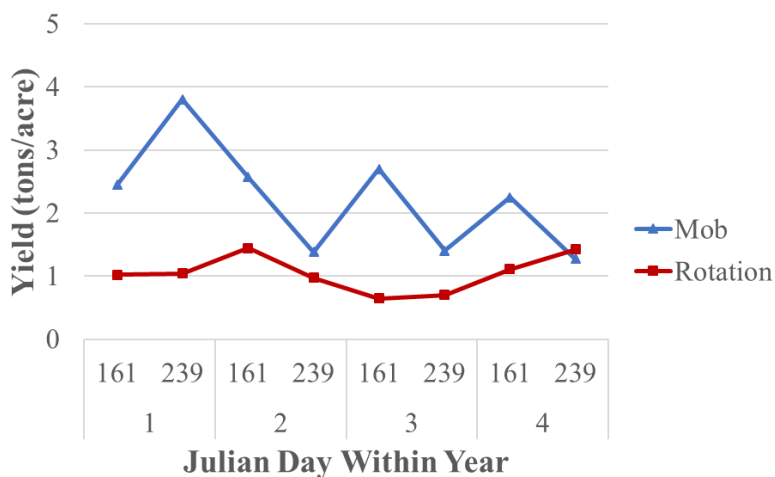
By the numbers, final values from mob & rotational grazing for 4 years

- ❖ **Yield: Mob = 3.26 ton/acre, Rotational = 4.54 ton/acre**
- ❖ **Orchardgrass Stand: Mob = 23%, Rotational = 79%**
- ❖ **Alfalfa Stand: Mob = 26%, Rotational = <1%**
- ❖ **ADF: Mob = 44%, Rotational = 35%**



Changes in forage yield within each year:

- ❖ Forage yield per harvest was initially greater under mob grazing, but began declining after Year 1
- ❖ Forage yield per harvest varied greatly between mob grazing harvests
- ❖ By the end of Year 4, rotational grazing yield was similar to mob grazing



Per harvest forage yield over a 4-year period between mob and rotationally grazed paddocks.

Take-home message:

Rotational grazing

- is an excellent strategy for low input cattle operations
- Yield declined faster under mob grazing than rotational grazing
- Forage quality was superior under rotational grazing, likely due to less mature plants

Mob grazing

- Provides much greater yields than rotational grazing at similar time points throughout the year
 - BUT allows fewer grazing events
- May be suitable for operations requiring large amounts of forage at specific times of the year