Results of cover crop "grazing"
***All spring "grazing" ended prior to GS 30

- The rye + oat mixture provided superior late fall forage in terms of total dry matter production, crude protein/acre, and TDN/acre compared to rye or barley.

- Despite a heavy winter-kill on the oat, the rye + oat mixture also provided superior early-spring forage under the same terms defined above.

- The addition of a brassica (rape, turnip, radish) to the cover crop mixture provided early-fall forage on par with that of the rye + oat mixture. The brassicas, however, lacked the winter-hardiness to warrant an early-spring grazing.

- Fall grazing reduced dry matter and nutrient yield available for an early-spring grazing by about 40% compared to forage not grazed in fall. However, the total dry matter and nutrient production of pasture grazed in both late-fall and early-spring equaled or exceeded that of pasture grazed only in early-spring. In other words, if your goal is early-spring pasture, do not graze in fall. If your goal is maximum utilization of the forage, you can graze both fall and spring.

- Crimson clover and vetch do not display enough fall or early spring growth to make a significant contribution to forage yield or quality at a late-fall or early-spring grazing.

- The fall moisture content of all mixes was around 85%; in early-spring, moisture content was around 75%. High moisture content can inhibit daily dry matter intake in grazing animals.

Rye + Oat – November 9.

Cover crop rye on April 3.

Table 1. Yield and quality on Nov 9, 55 days after planting.

Mix	DM Yield lbs./ac	%CP	%TDN	lbs. CP/ac	lbs. TDN/ac
barley	1589	31.8	83.3	505	1324
rye	1115	31.8	85.9	355	958
rye + oat	1924	22.7	82	437	1577
oat	1447	24.4	83.5	285	1208
barley+ clover+ hairy vetch+ radish	1787	27.3	82	488	1465
rye+ oat+ clover+ rape+ turnip	2305	26.4	82.1	608	1892
oat+ clover+ rape+ turnip	1942	25.5	81.2	495	1577

Same plants grazed in fall and again in spring

Table 2. Yield and quality of fall grazed mixes on April 3, prior to GS30 on barley.

Mix	DM Yield lbs./ac	%CP	%TDN	lbs. CP/ac	lbs. TDN/ac
barley	1592	19.1	84.1	303	1338
rye	1712	15.4	85.9	272	1470
rye + oat	2689	17.9	82.0	481	2205

Table 3. Yield and quality of mixes grazed *ONLY* on April 3.

Mix	DM Yield lbs./ac	%CP	%TDN	lbs. CP/ac	lbs. TDN/ac
barley	2638	17.6	78.3	463	2064
rye	2836	13.5	82.8	383	2348
rye + oat	3340	14.0	76.8	468	2563

Cover crop mixes used in the study.

1.5 bu barley
1 bu rye+ 1 bu oat+2# clover+ 2# rape+ 2# turnip
1 bu oat+ 2# clover+ 2# rape+ 2# turnip
1.5 bu rye
1 bu barley+ 5# clover+ 10# hairy vetch+ 2# radish
1.5 bu rye + 1 bu oat
1 bu oat

* For future mixes use 1.5 bu oat.

Oat, rape, and turnips- Nov 9.