

# ADDING SPRING FORAGES TO THE ROTATION

## DIFFERENCES IN SMALL GRAINS AND SMALL GRAIN/PEA MIXES

As producers plan their forage systems for the year, spring forages usually make up a sizable portion. This time of year, growers are looking for species and mixes of species to provide the tonnage and/or quality needed for their farm. We are often asked about differences in spring cereal grains and how they might be integrated into one's rotation. Let's dig into this a little more:

### SPRING SMALL GRAINS:

In general, spring small grains fit in many operations because they lower the TDN in the ration, which means less energy. Lower energy levels keep heifers and dry cows from becoming too overweight, providing flexibility for many producers in higher management systems. For most spring grains, the typical recommendation is to harvest in boot stage (or between boot and dough stage) for silage. Spring grains can be planted in fall as well, giving livestock multiple grazing cycles, especially when planted in late summer. Many producers can spread manure prior to planting the following annuals in late summer.

- **SPRING TRITICALE** is best suited for grazing pasture. Our team has found spring triticale to be durable, and somewhat tolerant of disease. It's perfect for grazing and

when manure pits or lagoon water need to be applied. However, because of its large stems, hay wilting and silage packing can be more difficult. Plant spring triticale around 90-100 lbs. per acre.

- **SPRING BARLEY** is another high-quality option. Barley provides a quicker harvest, which allows for more double cropping flexibility. Another major selling point for barley is its excellent value as a silage crop – most comparable to whole-plant corn silage (about 90-95% of corn's value). Seed at approximately 2 bushels (48# bushel) per acre, between 80-100 lbs.
- **SPRING OATS** usually need at least 75 days to maximize production. Seed at 2-3 bushels per acre (32# bushel) approximately 65-95 lbs.



**MANAGEMENT CONSIDERATIONS:**

Generally, spring planted small grains will respond well to nitrogen applications from 80-140 lbs., depending on use. Although, if manure is applied, nitrogen may not be needed. With oats and spring barley, the ideal stage for silage harvest is in boot stage (wilt to 65% moisture), while for hay production the recommendation shifts to late boot stage. Keep in mind, because triticale heads become more unpalatable as the crop becomes more mature, it shouldn't be harvested later than milk stage.

**SMALL GRAIN AND PEA MIXES:**

A popular practice across the northern Corn Belt is adding forage peas alongside a spring grain. Peas mixed with spring grains offer more palatable and high-quality silage than planting a small grain alone. Adding peas to spring grains usually increases crude protein levels by at least 2-3%, while reducing NDF (neutral detergent fiber) by 3-8 points.

Ideally, producers are seeding oats, spring barley or spring triticale around 40-50 lbs. per acre, alongside anywhere from 50-80 lbs. per acre of forage peas (since seed size varies by pea variety, the final seeding rate could vary— higher seed rate with larger seeded varieties).

**SILOBUSTER PLUS PEA MIXES:**

Our SiloBuster Plus mixes offer an elite combination of quality forage peas and forage oats/barley/triticale. These proprietary mixes are ideal as nurse crops or for straight forage. SiloBuster mixes can be planted in early spring to serve as a nurse crop or early fall to fulfill forage needs.

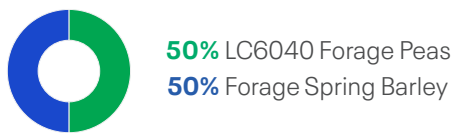
**MANAGEMENT CONSIDERATIONS:**

Harvest should always be based on the maturity of the small grain, not the peas. Depending on the livestock being fed, the stage could fluctuate. For lactating cows, boot stage should be desired to achieve the higher RFQ's needed. If feeding beef animals, heifers or dry cows, consider harvest a bit later, at soft dough where RFQ results should still equal 100.

Fertility recommendations for small grain and pea mixes will vary based on soil test levels. According to University of Wisconsin, "[...] small grain/pea forage will remove about 11 lbs. P2O5 and 44 lbs. K2O per acre per dry matter ton harvested. On lower fertility, low organic matter soils, about 25 lbs. actual nitrogen per acre should be applied if an under-seeding (of alfalfa or clover) is not included. With under-seeding, N rate should be reduced to 15 lbs. per acre. On low fertility soils (55 to 70 ppm potassium and 10 to 15 lbs. phosphorus), 55 lbs. P2O5 and 150 lbs. K2O per acre will be needed to produce a 2 to 3.5 ton/acre crop. Soil testing will provide accurate fertilizer recommendations."

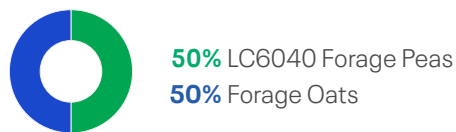
**SILOBUSTER PEA & BARLEY MIX\*** 100 - 150

Elite combination of forage peas & forage barley, ideal as nurse crop or straight forage.



**SILOBUSTER PEA & OAT MIX\*** 100 - 150

Elite combination of forage peas & forage oats, ideal as nurse crop or straight forage.



**SILOBUSTER PEA & TRITICALE MIX\*** 100 - 150

Elite combination of forage peas & forage triticale, ideal as nurse crop or straight forage.

