The Noble Foundation has a rich history in forage small grain breeding and development dating back to the early 1950s. In 2015, a field demonstration program was put into action with the sole mission of taking recently released, commercially licensed and available Noble Foundation forage varieties, and strategically placing them into real world, on-farm settings.

Five varieties were planted in two-drill-width wide plots (with four replications) at five producer sites in western Oklahoma. Each site was subjected to the same farmer management practices as the field in which they were planted. Producer field days were hosted at each farm in late fall and winter to showcase how these varieties are performing within each field.

In mid-September 2015, we planted five of the six commercially available Noble Foundation varieties (Heavy Grazer II oat available from East Texas Seed Co. and Maton II rye, NF101 wheat, NF201 triticale and NF 402 oat available from Oklahoma Genetics Inc.; Bates R54 rye available from Athens Seed Co. was not planted in 2015-16) into a field with the producer’s small grain selection as a check.

The selected sites were located near Cookietown, Apache, Chickasha, El Reno and Ames. Of those sites, four were no-till planted and one (Chickasha) was established using conventional tillage. Two of those sites (Cookietown and El Reno) were grazed sites, and three were not. At the ungrazed locations, we mowed a strip in each plot to demonstrate the regrowth potential of each variety. We banded 30 pounds per acre of phosphate or P2O5 with 10-34-0 fertilizer in the furrow at planting. Industry experience indicates that if a producer is seeking early fall forage production, it is important to band fertilizer with your seed to facilitate early growth. Most of our sites had very little soil moisture at planting, and there were concerns over stand establishment. Within 30 days, most sites had received some moisture and the planting progressed along nicely.

All sites were sprayed once for armyworms in the fall.

On Dec. 2, 2015, and Dec. 3, 2015, we hosted the first round of the producer field days beginning in Cookietown on Noble Foundation cooperator Jimmy Kinder’s farm. Upon driving up to the site, it was very evident the cattle in this pasture had found and totally consumed every stem of both varieties of the oats. Similar results were also experienced at El Reno. This generated good discussion on variety selection and cattle preference for grazing oats over other small grains. On the second day, we started at Chickasha, our only conventional tillage location. The audience here had similar discussions about variety selection and cattle preferentially grazing oats over other small grains. On the second day, we started at Chickasha, our only conventional tillage location. The audience here had similar discussions about cattle selectivity of oats and how winter-hardy they would be in our climate. From there, we traveled to Apache to the farm of Alan Mindemann, also a Noble Foundation cooperator. In my opinion, the Mindemann site was by
far the most productive and impressive site to see in regards to demonstrated forage potential. At this site, two days prior to the field day, forage quantity measurements were taken using a rising plate meter, and the relative numbers were impressive (see Table 1).

Anecdotally speaking about the grazed sites, there appears to be a substantial difference across the varieties in selection and preference by grazing cattle. This observation led to questions and discussion about cattle grazing behavior when these varieties are managed as monocultures versus multispecies forage mixtures.

The small grain demonstration field days in December proved to be a good success as our initial field demonstration program event and seemed to provide a great venue for producers to observe first-hand the new Noble Foundation small grain forages.

The second round of the demonstration field days were held March 3-4. We will provide more information about the outcomes with a later update. The exact locations to all five sites can be found at http://bit.ly/NFDemoSites.