

Consider variety when planting wheat in wildlife food plots

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Winter wheat is a popular planting in wildlife food plots. Planted in late summer/early fall, wheat is inexpensive to plant, easy to establish, and provides excellent forage for deer, rabbits, and wild turkeys through winter and spring. Crude protein averages above 20% and digestibility is excellent with acid detergent fiber levels below 25% until stem elongation in late April. In the Mid-South region, wheat produces a seedhead in mid-May, which matures by early June.

The benefit of wheat seedheads when planted for wildlife is often overlooked. The energy content per weight of wheat seed is comparable to that of corn and grain sorghum, and crude protein content exceeds 12%, which is important in early summer when wheat matures as antlers are growing, does are lactating, and young turkeys and other birds are molting and growing. Deer and turkeys begin eating wheat seedheads in the milk stage. After the seedhead matures, white-tailed deer, wild turkey, eastern cottontail, gray squirrel, black bear, ruffed grouse, indigo bunting, American goldfinch, northern cardinal, blue grosbeak, dickcissel, and several species of sparrows eat the seed through summer as long as it is available.

If you want wildlife to benefit from the wheat seedheads, **be sure to plant an awnless or “smooth” variety**. Awns are those long, stiff, hair-like structures present on seedheads of some wheat varieties, as well as cereal rye and triticale (Fig. 1). Awned (or “bearded”) seedheads are not eaten nearly as often as those of awnless varieties. Data collected by UTIA personnel in West Tennessee show this very clearly (Table 1).



Figure 1: Awned seedhead (left) amongst awnless seedheads. Also pictured are several stems of awnless varieties with missing seedheads, which were removed by foraging deer.

Table 1. Grain yield (bushels per acre) of 24 wheat varieties across 9 sites in West TN, 2015.

	Awned varieties	Awnless varieties
9-site average	75	73 ^a
Ames Plantation	55	11

^a Data for awnless varieties at Ames Plantation were not included in overall average because they would have biased overall average for those varieties.

Grain production of 24 wheat varieties were tested across 9 sites in West and Middle Tennessee. Five of the varieties were awnless. Deer were present and commonly foraged in the wheat fields at one site (Ames Plantation). Awned varieties (19) across the 9 sites averaged 75 bushels per acre, whereas awnless varieties (5) across 8 sites (data from Ames were excluded to avoid biasing yield data) averaged 73 bushels per acre. Thus, there was no meaningful difference in grain yield between the awned varieties when averaged together and awnless varieties when averaged together. However, as you can see in Fig. 2, deer clearly selected the awnless varieties for foraging at the Ames Plantation site. The wheat in the picture has not yet been combined. The darker strips are the awnless varieties where deer have selectively eaten the seedheads. Deer or any other wildlife species hardly ate any of the awned wheat seedheads.



Figure 2:Wheat variety test site at Ames Plantation. Deer have selectively eaten the seedheads from the awnless varieties (dark strips) and left the awned varieties untouched.

An additional benefit of an awnless wheat field is outstanding structure available for northern bobwhite and wild turkey broods, as well as ground-feeding songbirds and other species you might not think of, such as eastern box turtles. Vegetation cover approximately 2 feet tall with an open structure at ground level is very attractive for these birds, especially when various forbs, such as common ragweed, horseweed, and daisy fleabane, also occur in the plot. Of course, the size and arrangement of wheat food plots is highly influential with respect to use by various wildlife species. Nonetheless, with regard to ease of planting, management, and nutritional benefit for multiple wildlife species, it is difficult to beat a simple planting of winter wheat, especially if you plant an awnless variety.