



## Late winter considerations for managing pastures

### Grazing For Profit Conference, Roane State Community College

In general, the pastures in much of TN were damaged significantly during the drought conditions of 2016 and livestock farmers are now facing decisions on how to best manage those pastures to meet the forage needs during 2017. While the lack of moisture definitely reduced the production of growing crops and vegetation, the management of the grazing animal contributed significantly to the demise of many pastures. One has to look no further than the lawns and roadsides of the state to see that not all grasses died as a result of the drought. Of course the production and growth rates of the forage plants were reduced significantly, but many pastures, lawns and roadsides remain covered with live vegetation.

1. Walk pastures soon and determine what is living and growing there now. See Figures 1&2 to get an idea of the type of vegetation in many pastures and form some ideas on what is best to do with each pasture. Some will need weed control; some will just need fertilizer or litter and no grazing for a few weeks. Some will need replanting, but determine what to plant based on overall farm acreages of cool and warm season grasses. As a general rule of thumb, it is good to have 25-50% of the acreage in warm season grasses and the remainder in fescue, orchardgrass, bluegrass, and rescuegrass
2. Make sure that the fertility status of the soil is sufficient to grow a crop of forage. Without Nitrogen (from fertilizer or legumes) there will be little growth, even if the moisture level returns to normal. Sample the soils for nutrients immediately so that you can make wise decisions on how to spend fertilizer dollars. Generally one lb N gives about 15-25 lbs of dry forage; at \$.38/lb of N this is about \$.018 / lb of dry forage.
3. Keep the animals off of most of the pastures until the existing or newly planted plants reach a satisfactory "start grazing" height. To continue to let animals run over short grazed pastures this winter-early spring is to further damage vegetation and reduce the yield potential for 2017. This can perhaps reduce yields by 50% or more for the year. See Figure 3.
4. Feeding hay or alternative feeds through April may be essential to the survival and production of cool season grasses like fescue, orchardgrass, and bluegrass. If most of the pastures on the farm is bermuda, dallisgrass and summer annuals such as crabgrass, then feeding hay will need to continue through much or all of May.
5. Merits of late winter-early spring plantings. See Tables 1 & 2 for the potential cost of planting crops like oats or ryegrass into thin pastures to gain some late spring grazing. Based on the yield potential and cost of planting it seems that it will be most economical to feed hay or alternative feeds through April while letting surviving pastures recover to 6-inches before grazing.
6. Planting summer annuals such as sorghum, sudangrass, and millet or sorghum-sudangrass hybrids as early as possible will provide the best chance to get the most production by early July. If oats or ryegrass is planted it will delay the planting dates of summer annuals by several weeks, which minimizes their potential for high summer production. Planting summer annuals in early April is likely a better option than late winter planting of oats/ryegrass which will not yield much and will certainly delay planting of the summer annuals.
7. If one plans to plant hybrid bermudagrass this year, the odds of getting good stands are best when the dormant sprigs are put into the ground before any green-up of the bermuda occurs; any amount of green up prior to digging means the sprig is in a weaker condition than prior to green up. Planting cuttings cannot take place until the nodes are formed on the stems, which is sometime in June.

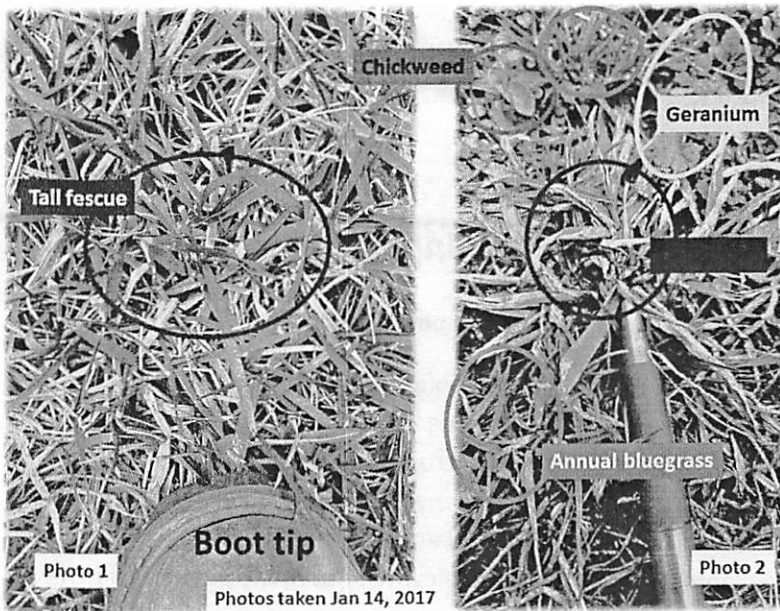


Figure 1. Photo 1 shows live tall fescue that can be productive starting in March, if the fertility is satisfactory and the growth is allowed to reach at least 6-8 inches before grazing and is not grazed below 3 inches this spring. Photo 2 is showing some dallisgrass that will provide some grazing starting in late May or June; the annual bluegrass will provide some soil cover, but less than 300-400 lbs of forage per acre during the March-April period

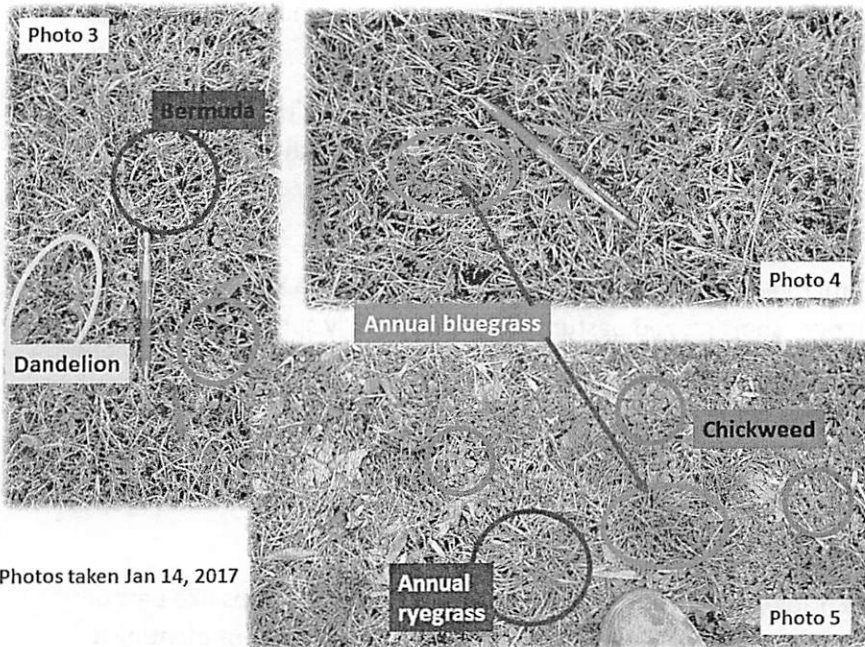
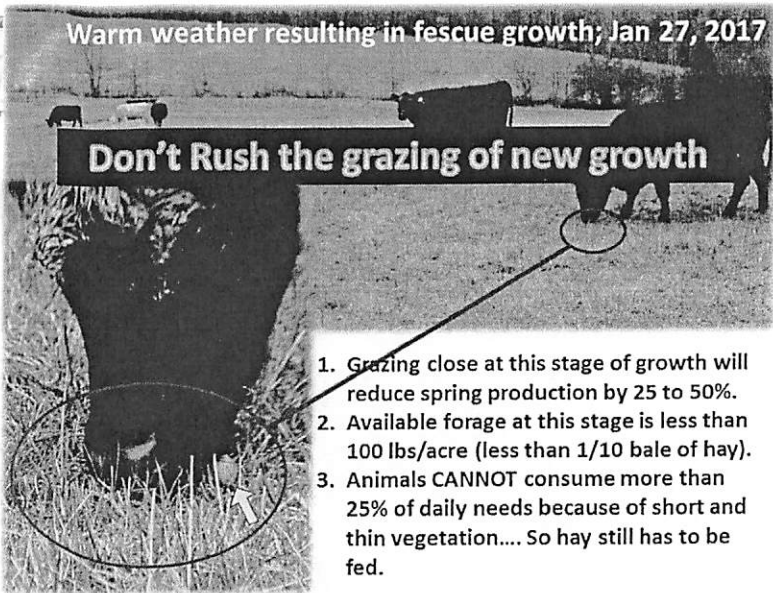


Figure 2. Photos taken Jan 14 showing mainly winter annual undesirable species. Photo 3 is mainly bermuda that will provide no grazing until May or later, depending on soil fertility. Pastures with cover similar to photo 4 may provide some early grazing but since the green vegetation is mainly annual bluegrass the production will likely be less than 400 lbs per acre through April. (the bermuda will begin growth in late April). Photo 5 shows very little bermuda but lots of annual bluegrass and a few annual ryegrass plants. This pasture will be dominated by crabgrass and foxtails starting in May and may produce reasonable summer production if fertilized and grazed appropriately.



1. Grazing close at this stage of growth will reduce spring production by 25 to 50%.
2. Available forage at this stage is less than 100 lbs/acre (less than 1/10 bale of hay).
3. Animals CANNOT consume more than 25% of daily needs because of short and thin vegetation.... So hay still has to be fed.

Figure 3. Warm January weather has resulted in the green up of cool season plants, but it is not wise to graze this new growth, especially following the stressful fall growing conditions. Continue to feed hay on a small acreage while protecting most of the cool season pasture acreage from grazing until height reaches 6+ inches of growth.

Item	Crop planting rate	
	Oats, 120 lbs/ac	Ryegrass, 40 lbs/ac
	\$ cost/acre	
300#/ac of 10-10-10	\$30	\$30
100#/ac 45-0-0	\$17	\$17
Fertilizer Application cost	\$7	\$7
Seeds	\$50	\$30
Drill rental	\$10	\$10
Fuel, Labor, other, minimum	\$10	\$10
Total cost, minimum	\$124	\$104
Total cost, Without fertilizer	\$77	\$57

Table 1 Estimated costs for planting oats or ryegrass in late Feb-March. (based on Jan prices of seeds and fertilizer). This expense does not guarantee any production, therefore, it is less risky to continue feeding hay which will allow early April planting of summer annuals.

Yield	70% consumed	Oats, 120 lbs/ac	Ryegrass, 40lbs/ac
		planting costs \$/acre	
		\$ 124	\$ 104
Tons/acre		\$/ton consumed	
0.5	0.35	\$ 354	\$ 297
1	0.70	\$ 177	\$ 149
1.5	1.05	\$ 118	\$ 99
2	1.40	\$ 89	\$ 74

Table 2. Estimated cost of forage from late winter planting of oats or ryegrass at various yield levels when 70% of what is grown actually goes down the throat of animals. Hay and other feeds may cost less per ton than late winter plantings of oats or ryegrass. These estimates indicate that the cost of late winter plantings is a risky alternative to continue hay feeding. Even if the cost of growing the crop were 50% of the actual estimate, the price of feed consumed will not likely be as economical as alternative feeds.

Below assumes no fertilizer purchased and 1 ton of growth.

1	0.70	\$ 110	\$ 81
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