Tall Fescues (Festuca arundinacea) Version 1.1

Old tall fescues are coarse and unpalatable, but don't pug on wet soils, so can be useful for wet-weather grazing and using as sacrifice paddocks. Modern (since the 1980's) fescues with animal-safe endophyte have a higher ratio of leaf to stem so are much more palatable, but have to be grazed carefully because they are less heat, cold and drought tolerant than the old ones and cattle love them when not too long, so will graze them shorter which modern fesues won't like if done too often. Then when they disappear they can be accused of "not surviving."

As with all pastures, mineral deficiencies can lower feed values, and in some cases, palatability.

Varieties

There are many new varieties of fescues, but very few farmers get the best out of them because they have to be managed differently to ryegrass. Before sowing any, check with locals to ensure that you sow the best one for your conditions.

Tall fescues like to be sown in warm soils, so not late in autumn. In its second autumn it produces short rhizomes (underground stems) which grow in the soil and come up 1 to 4 cm from the original plant, to form a new tiller and later, a sub-plant. Autumn is when tall fescue produces most of its new tillers which give stronger growth in early spring, so must not be grazed shorter than 7 cm (3 inches).

Fescues are deep-rooted so tolerate heat and drought better than some grasses. Fescues can cope with acid, alkaline and saline soils and poor drainage, not that these are recommended. They have benefits over perennial ryegrass in drier areas, but prefer fertile soils and ample nitrogen, so need strong clovers which must be treated to thrive (adequate lime, boron and all necessary elements).

Fescues are not compatible with ryegrasses because they establishes more slowly, so can be suppressed by the faster growing ryegrasses.

Grazing should be frequent during spring to prevent running to seed and a slowing of leaf growth.

Fescues are aggressive so can have less clover than some grasses, so may need nitrogen. Effluent and poultry manure increase soil fertility which fescues like.

Old (high endophyte) Tall Fescue

USA has about 30 million acres (12 million hectares) of the old high-endophyte tall fescue which has advantages in the poor soil conditions and for stock piling in late autumn and winter grazing. Fescues cope with both high selenium and sodium levels. In normal soils fescues contain 0.26 mg/kg of Se and 0.6% Na. See the Pasture Analysis spreadsheet in Free Items.

However, its Neotyphodium coenophialum high endophyte can be responsible for cattle and horse abortions, delayed and difficult births, gangrene in extreme conditions, slower animal growth, hormone imbalances, shortened lactations, reduced milk production, retained placentas and infections causing lower conception rates. See Animal Health > Endophyte. Apparently the costs to the USA livestock industry for these is about \$1 billion per annum. Low selenium in some areas accentuates some of these problems. See Elements > Selenium.

Stock piling for winter should start once there is a surplus of pasture. If no surplus develops, but will be needed in winter, animal numbers should be reduced, or feed bought.

In USA fescue can give 6,000 kg of dry matter per hectare (5,400 lb per acre) from mid December to early March, however, its quality is not high enough to produce much milk.

Nitrogen improves fescue feed quality and animal production, as does feeding or adding legumes, but legumes don't survive severe freezing conditions, so need to be oversown annually with those most suited to your conditions.

Fescue feed value decreases as winter progresses. If not grazed short to remove the long patches before stockpiling, the quality will be lower.

Heavy snow can upset grazing and this is more likely now that global cooling is occurring. Leaving baled hay, or windrowed hay in colder drier areas, in the paddocks which will be grazed last, can help solve this. The hay can be down the sides of paddocks protected by electric fencing which can be let down when required.

When eating hay in freezing conditions, ensure snow or water consumption are adequate for all animals. Those not coping may have to moved to where there is heated water.

Forage quality losses after frost are lower than most forages due to fescue's heavy, waxy cuticle that protects the leaf from weather-related losses.

In southern Ohio type climate, old tall fescue will stay green and may even grow a little during warm winter days.

Old Tall fescue forms a strong sod that survives trampling, which is common on wet pasture soils. Slight trampling encourages clovers.

Old fescue hay is usually of low-quality, mostly because it is made when over mature, i.e., starting to seed.

Severe old fescue toxicity decreases intake, reduces animal growth, causes rough hair, excessive salivation and urination, increased body temperature and respiration, decreased milk production, and impaired reproductive performance (Stuedemann and Hoveland, 1988).

Hot temperatures in summer accentuate these symptoms, and cattle will generally spend more time standing in ponds and shade, resulting in less time grazing. Sometimes foot rot may be confused with fescue foot (Kilgore et al., 1980) because, in the early stages, both have heat and swelling in the lower limbs. However, foot rot normally has swelling and inflammation between the toes.

Endophyte is transmitted only through the seed, and storing seed for 18 to 24 months, especially in warm temperatures will kill the endophyte, and reduce germination and seedling vigour. Endophyte in plants can't be removed.

Getting Rid of Old Tall Fescue

Some recommend spraying, but I try to avoid sprays for obvious reasons. I, and many in know, have been badly affected by glyphosates. However, I, the manufactures and a toxin specialist know of no one adversely affected by Grazon, provided an adjuvant such as Codacide is mixed with it at equal rates.

Bees have been adversely affected by even soapy water, so avoid spraying flowers that bees go to with anything. Google for Surf and Adjuvant

A far better way is to take the opportunity to chisel plough deeply and bring up subsoil to invigorate the topsoil that may have been farmed for a hundred years, so been mined of elements we don't even know about. See Soils > Cultivation for the benefits of deep chisel ploughing.

Be Kind to Bees

Bees' input is worth billions of dollars to the world.

It has been well known that some sprays on flowers can kill bees.

Some French bee keepers suspect that Gaucho® dressed sunflower seed adversely affected bees, and some Italian bee keepers believe that there is a link between their bee losses and the use of Gaucho® seed dressing on corn seed. There is a new one out called Poncho® that I have not heard of affecting bees. Please tell me if you know of it affecting bees.

Many bee hives in some countries have died, so it is important to try to avoid this.

OrganicPest Control Products

http://www.nor.com.au/community/organic/library/pestmgmt/orgcontl.htm

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