

few years of seeding.

Due to the very fine nature of the leaf and the tendency to lay over or lodge, the fine fescues are difficult to mow unless maintained at a relatively low mowing height of 4.0 cm.

Cultural Practices

Good performance of fescues is obtained with medium levels of nitrogen. In fact the red fescues may decline in quality with high levels of nitrogen. Phosphorus and potassium requirements are similar to other turf species.

With the exception of the red fescues cutting at less than 5.0 cm will encourage the clumpy growth habit of the fescues.

While tolerant to adverse soil conditions best performance is obtained where good soil conditions of porosity, drainage, neutral pH and fertility are maintained.

Seed mixtures of tall fescue and perennial ryegrass should be (by weight) 50% ryegrass : 50% fescue. With bluegrass the mixture should be 20% bluegrass : 80% fescue.

NEW MEMBERS

Brian Campbell, St. George's School, Vancouver

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Sharpening Rotary Mower Blades

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Rotary mowers cut grass as the blade's cutting tip, moving at a high velocity, impacts the grass blades. For the quality cut, the cutting edges of the mower blade must be sharp.

Commercial cutters should install new or resharpened blades at least once a day. This is required for a professional quality cut.

A blade's cutting edge varies in length but is usually several inches long. The first inch does most of the cutting. Assume you are moving with a walk-behind mower with a blade at 3250 rpm. At this speed, the blade rotates at 54.17 revolutions per second. Also assume that the mower is going forward at 2 mph or 3 feet per second. With two cutting edges on the blade, the 54 rps equates to 108 cutting swaths per second. At 3 fps, each swath removed a 5/16th - inch strip of grass; therefore the interior portion of the cutting edge contributes little to the cutting process. Since the first inch does most of the cutting, it is important to get a good edge on this area.

With some of the popular mulching blades, the extended cutting edge recuts the clipping during suspension. It is also felt that the increased ground speed of riding

mowers makes it beneficial to increase the length of the cutting edge.

Once the mower blade has been removed for sharpening:

- Check the blade to assure that it is not bent and that it has the correct attitude in relation to the mower housing and the ground surface. (To check this, place the blade on a perfectly flat surface). The blade should be straight, with the cutting tips lower than the heel (centre portion) of the blade.
- Sharpen the blade by grinding the top surface only, maintaining the original cutting edge angle. Make sure all nicks are removed and that the cutting tips are smooth and sharp.
- Make sure the blade is balanced. Use a commercial balancer or place the blade on a pin clamped in a vise. If one end of the blade swings downward, material must be ground gradually from the heavy end until the suspended blade will remain in a fixed position.
- Properly reposition the blade on the mower. Tighten the retaining nut securely.

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EDITORIAL

Who Pays?

Traditionally agricultural research and extension has largely been funded by the Federal and Provincial governments. Turf research and extension has always been a beneficiary of that funding.

The policy was the result of a desire on the part of the Federal and Provincial authorities to promote a vibrant food producing capacity. In part the policy resulted from the initial development of the country. In part the policy developed from food shortages in Canada and in England during the two wars. In part the policy developed from the social aspect of maintaining low cost food. To a large degree, and with global markets, none of these reasons apply today.

Furthermore, none of these reasons justify turf being a part of the policy. Nevertheless turf contributes to the general well being of the nation, through recreational activities, aesthetics of the environment, even pollution abatement. Strong arguments can be made for sport which involves turf as a means

of crime prevention by providing an alternative activity to burn off excess energy.

While industry has contributed significant funds for projects of current interest to industry in product development, the infrastructure - the expensive part of the system - has largely been established through tax payers money. A notable exception is funding of the Frost Building at the Guelph Turfgrass Institute.

In the past few years, however, budget restraints have drastically curtailed the funding available for turf research and extension. To continue the research and extension programs in turf alternative funding must be found; funding for projects which are not the focus of a particular turf supply company, but which are necessary for the turf industry as a whole.

One avenue which should be explored to generate the necessary funding is "user pay". Should a charge not be levied for all extension calls which truly reflects the cost of that service - a cost equivalent to what a private consultant would bill? Should a research project at the GTI not be charged the full cost of maintaining the facility - a percentage of the station capital cost, the operational cost etc.? Should new services be generated by GTI to service the needs of the industry on a cost recovery basis?