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BEETLE BATTLE TURNED INTO TURF WAR

Sod seeded with tall fescue offers answer to problematic lawn invaders

Finally, there is hope on the horizon for the thousands of homeowners in Metro Vancouver battling European chafer beetles.



ARLEN REDEKOP Rob and Sharon Valero show off the new tall fescue lawn they installed in Burnaby.

Countless lawns throughout the Lower Mainland have been destroyed over the past few years by raccoons, skunks and crows foraging for the invasive chafer grubs. Lawns have been ripped up and clods of grass tossed aside leaving the ground looking as if it had just been rototilled.

Totally resistant to pesticides, chafers have tended to favour poorly maintained lawns as nesting sites. Until now, the only options available to unhappy homeowners have been either to re-seed or re-turf damaged lawns, use microscopic bacteria called nematodes to destroy chafer grubs in late summer, or replace ruined lawns completely.

Tests have shown that chafer beetles don't like to lay their eggs in tall fescue grass or microclover.

Macky Banns, owner of Highland Redi-Green Turf Farm in Pitt Meadows, has seeded more than 40 acres with tall fescue and is already harvesting lush sod that can be used to replace damaged lawns.

"If this works out, it is going to be great for the environment," says Banns. "So far, it looks as if this switch to tall fescue grass will stop the chafer."

One other advantage of this type of grass is that it tends to be more drought-tolerant which makes it more durable during prolonged hot spells in summer.

"Some people get a little confused because it is called 'tall fescue' — they think it is a tall grass — but it is not a lot different to other grasses. It has a slight broader blade, somewhat similar to Kentucky blue grass."

Once the turf is installed, it should be left to grow for a while and then cut to 3.8 to 5 centimetres (1.5 to 2 inches) for healthy growth and sturdy root development.

Rob and Sharon Valero, of Just in Season Landscaping in Coquitlam, are among the first to switch over to a new seed mix containing a blend of tall fescue and micro-clover. They have also been installing new lawns using the tall fescue sod being grown by Highland Turf.

"This is the first year we are using this, but we are confident that what tests have shown is true, and this is a more chaferresistant grass," says Sharon.

"Chafers don't like laying their eggs in tightly rooted grass, which is why tall fescue works so well."

Owen Croy, Surrey's manager of parks, has been seeding boulevards and other areas with both micro-clover and tall fescue seed.

"The clover has performed nicely, but we have too many weeds for our liking. This likely was a result of uneven distribution of seed," he says.

Croy says this spring he intends to expand the seed experiment into new areas.

Chafer beetles are a bigger problem in North Surrey, he says, less of a problem in central Surrey, and virtually non-existent in South Surrey.

"Our playing fields are totally unaffected, mainly because they are intensely managed with extensive top dressing and reseeding," he says.

Watering of the sand-based fields is also crucial and is done with pinpoint precision based on detailed data gathering to ensure maximum success, Croy says.

Croy lives in New Westminster, the original epicentre of the first chafer outbreak in 2001. But he says the lawns in his neighbourhood are in great shape because the owners know how to maintain them by not cutting grass too short; routinely overseeding and aerating; and judiciously watering.

Last summer, many lawns were severely damaged by a prolonged dry spell when there was a complete watering ban. This also meant homeowners could not use nematodes — the

microscopic bacteria that swims through moist soil and attacks and destroys evolving chafer grubs.

David Wall, of Premier Pacific Seeds Ltd., says fine fescues are the most susceptible to chafer while tall fescue grass is the most resistant.

Experiments conducted at Michigan State University proved this: A mix of potted turf grasses were infested with chafer grubs to see which root systems suffered the most damage.

Cultivars of tall fescue (Festuca arundinacea) were found to be the "most tolerant of grub feeding, having the smallest reduction in root" over two years of testing.

By comparison, fine fescue, Kentucky bluegrass and cultivars of perennial rye — the traditional recommended seed for coastal gardens — were not as resistant.

"I reseeded my whole front lawn with tall fescue," says Wall.

"It worked out really well. I took out the existing grass and re-seeded with the new grass. It got established very quickly.

"Chafers don't like to lay their eggs in grass that is healthy. It doesn't feel comfortable.

"The other issue is that raccoons and skunks don't see that the grass is under stress because the roots of tall fescue are so deep and sturdy they are better able to cope with chafer grubs nibbling on them."

Wall's advice on how to avoid the chafer beetle problem is for homeowners to maintain their lawns using a balance fertilizer regime, watering appropriately, and not cutting grass too short.

Nematodes can be applied from the middle of July to the first week of August.

GardenWorks is advising homeowners to preorder because nematodes are livebacteria and garden centres need to gauge demand accurately. A package of 50 million nematodes costs \$79.99.

"Few sports field are infested with chafer for the simple reason that they are well maintained. In municipalities where they don't take care of their fields and let them go completely dry in summer, there are cases of chafer problems."

Garden centres are selling chafer-resistant grass seed mixes, some containing a blend of fescues as well as tall fescue.

Bags of grass seed to cover 1,000 square feet sell for about \$55, while a bag of microclover seed costs around \$40. GardenWorks is selling 2kg Chafer Beetle Resistant Blend (mix of tall fescue and microclover) or 2 kg bag of Essential (tall fescue) for covering 400 square feet for \$24.99.

Ready grown turf costs about 36 cents a square foot to pick up directly from the turf farm, or about 72 cents a square foot to have it installed by a professional landscaper.

A lawn covering 1,000 square feet would cost about \$1,400 to be professionally installed.

Microclover (Trifolium repens) is growing in popularity as a lawn substitute because it produces a lush, dark green colour lawn and has shown itself to be more disease and weed resistant.



Like tall fescue, microclover is also droughtresistant and offers the added bonus of pumping nitrogen back into the soil. Grass experts even recommend "spoon feeding" some microclover into lawns because of its nitrogen boosting qualities that can make grass healthier and greener.