

Renovation of a Sand Based Field

Bill Harding

With the use that some of our best maintained fields are getting these days, it makes it increasingly difficult for the turf manager to produce results that users expect, and deserve. It is quite common for a field to be used for football, soccer, track, rigger and special events with changes occurring within a few days. How do we get a sand based field that has been completely destroyed by one season's use, back into play and in good condition by early June, or even earlier?

The first thing that comes to mind is to relevel the area and sod the entire bare area. This gives good results in a soil based field but sod on sand will create a layering effect in the soil strata and could ruin your soil structure and cause many problems, including a perched water table. If we could find a sod that's grown on the identical sand that the field was constructed this could possibly be an alternative. It appears that the only practical way to renovate the sand based field would be with seed.

An experiment was tried at North York's Esther Shiner Stadium in 1988-89. The field was constructed on a sand based mixture with small amounts of peat mixed into the top inches of the mix to help germination of the seed. Drainage tiles and irrigation were installed. The field drains very well, so water is not a problem. The only real problem with the field is overuse.

The last game on the field was November 19. 60% of the field was completely bare of any turf cover. Below is a breakdown of the dates of jobs that were done to get the field in play.

- Nov. 14 — Field aerated two ways with Ryan greensaire 2, cores matted into holes.
- Nov. 15 — Low areas filled with sand to level.
- Nov. 17 — Preparation for final football game of the season.
- Nov. 18 — Final game.
- Nov. 19 — 7:30 a.m. field was frozen, had to wait to overseed. 9:00 a.m. overseeded field with Jacobsen seed 3 ways (mixture Blazer, Fiesta II)
- Nov. 22 — Broadcast seed and topdressed entire field with sand.
- Nov. 23 — Put down green cover to protect field through winter months.
- April 18 — Tested irrigation system.
- April 19 — Began watering field with cover still in place (note: very cool spring).
- May 1 — Noticed first signs of germination. (Still quite cool). Took cover off and spot seeded and topdressed sparse areas ½ lb. N fertilizer 25-5-10. Had to mow the grass that was under cover, it was approx. 4" long.
- May 23 — ½ lb. N Fertilizer 32-4-8.
- June 4 — North York Rocks play the first game on the field. Turf cover about 95%.

The winter of 1988-89 was, in the Toronto area, quite mild, there was some concern that the seed under the cover might germinate in January due to warm temperatures and bright sunlight. The spring was very cold, germination of the ryegrass did not occur until May 1, there was concern that we would have to cancel the first game. If not for the cover holding the seed in place and keeping the soil temperatures up we would have not had our field in shape for opening day.

When the cover was lifted the turf under was very succulent and soft so it would appear that timing of the lifting of a cover is very critical to health of the new plants.

The experiment has proven to be a success with less than ideal conditions. The field was opened 2 weeks earlier in 1989 than 1988. The use of the greencover has given us some protection from mother nature and seem to have given us a jump on seed germination. The experience of last winter has prompted the purchase of another cover so the entire field can be covered, not just the centre bare areas.

Third Annual Athletic Field Day

About 110 people attended the S.T.A. Field Day held on June 15, 1989 at River Oaks Recreation Centre in Oakville. The rain held off in the afternoon so the equipment demonstrations went ahead as planned. It's good to see that so many suppliers came out to show us some of the new products available to make our jobs easier.

The morning sessions consisted of two presentations from Dr. Paul Ricke of Michigan State University. His talks were informative and valid for the southern Ontario area because of the similar climate we share with northern Michigan.

We also had a panel discussion presented by Dave Dick, Bob Kennedy, Leo Ostner and Dr. Riche, the discussion touched on some very practical ideas and gave all in attendance some food for thought.

The members of the S.T.A. would like to thank all involved and specially the town of Oakville for their hospitality.

See you next year in Kitchener.

New Budget Taxes Pesticides, Herbicides and Fertilizer

Business operators in the landscaping industry now have to pay eight percent sales tax on pesticides, herbicides and fertilizer. This year's provincial budget removed the sales tax exemption as of June 1 for everyone except farmers.

There was no consultation with industry by the provincial government. Because the budget has already been tabled, nothing can be done at this point to reverse the decision.

Kent Groves, chairman of Landscape Ontario's Lawn Care Commodity Group says that something could have been done to lobby on behalf of the industry if word of the move had reached him in time. He blames financial restrictions for preventing the thorough monitoring of government activities by the Commodity Group.

Cornell Publishes Athletic Field Guide

Three turf specialists at Cornell University have teamed up to publish a comprehensive guide to athletic field care titled "Athletic Field Maintenance: A Guide for Sports Turf Managers." Norman Hummell, Jr., Joseph Neal, and Martin Petrovic each contributed to the publication which is intended primarily for grounds managers at schools and parks.

The guide covers a wide range of topics from establishing and maintaining durable natural turf fields to care of skinned areas. Among the subjects included are field drainage, thatch control, fertilization, turfgrass selection, mowing, irrigation, seeding and control of weeds insects and diseases. The focus of the booklet is cultural management of newly seeded, overseeded and established turfgrass areas.

Copies of the guide can be purchased for \$3 each by writing: Cornell University Distribution, 7 Research Park, Ithaca, NY 14850.

OALA Names New Executive Director

The Ontario Association of Landscape Architects (OALA) has a new executive director. Dr. Arthur Timms took over the position on May 15.

Timms brings with him 14 years of experience as a professional non-profit association manager. He is currently president-elect of the Canadian Society of Association Executives' Toronto Chapter, and he serves on their national board.

A native of Ontario, Timms education includes an honours bachelor of science from McMaster University, graduate studies at Texas A&M University, and a PhD in environmental zoology.

Timms joined the Conservation Council in 1973 and became their executive director four years later. He has been executive director of the Canadian Cerebral Palsy Association since 1984.

Timms' past also includes volunteer work with the Sierra Club of Ontario Three Trilliums Community Place, an organization that provides independent living apartments for disabled adults, and on the Board of Great Lakes Tomorrow.

New Turfgrass Variety Cost Executive Director

Arden Jacklin, Jacklin Seed Co.

Most people, including myself at times, have no conception of what it costs to develop turfgrass. My figures here are mostly based on Kentucky bluegrass, as this is the kind with which I am most familiar.

Let's start with a new selection or a new hybrid which has passed the first screening and is ready for more extensive testing. That first screening costs about \$500 for each entry. Of all entries, about 10% pass the first screening. So, we start with a \$5,000. cost on each entry which does not include the cost for getting it.

Two-Thirds Fail

Preliminary testing for turf quality and seed producing ability in our plots runs about \$4,000 per accession. A fair appraisal shows about two-thirds of the accessions fail in this test. So the investment in this test is \$12,000.

The next step is advanced turf and disease resistance in both western and eastern US. Eastern testing is necessary because in the West we don't have all the diseases that affect turf in the largest (eastern) consumption area. These tests will cost about \$5,000 per entry. Assuming an average of two-thirds will fail to show promise, we come up with \$15,000 per successful accession.

National Testing Important

So far, it's only our word that it's a good or superior variety. Therefore, it's necessary to give it wider and more open public testing in the National Variety Testing trials which involve some 30 testing sites. The charge is \$1,800 for a 3-year test. In our experience about one-third will fail, generating a cost of \$2,700 per accession. At this point, still an experimental number yet to be registered as a named variety, we have a total investment of \$34,700 in it.

It is now time to produce breeder seed from which foundation will be produced. Breeder seed fields or plots are small, requiring much work at high cost. An arbitrary cost well above what the seed can be resold for or charged out is about \$4,000.

Plant Variety Protection

Next it is advisable, if not entirely necessary, to "insure" ownership by protecting rights to and registering of the variety. This is done through the PVP (Plant Variety Protection) process which for bluegrass costs \$2,000 per entry. Gathering information for submission on a PVP application costs an estimated \$3,000. The same data for PVP can be used to register the variety with the American Society of Agronomy and provide data to the various state certifying agencies for their certification standards.

The variety must be advertised and promoted to get potential customers and promote themselves in their markets. We have good cost figures here. We average \$30,000