# The Do's & Don'ts of Renovation, Seeding, and Drainage

GORD DOL

ome of the problems we see are: 1) incorrect materials; haulage 2) incorrect equipment; location of material storage, and 3) dragmatting irrigation lines.

#### Aeration

- not enough weight on the aerator; more ballast needed
- not a high enough frequency; try to do the job 4-6 times per year
- obtain the right machine for the conditions and soils you are working with (the Verti-Drain is excellent, especially in the spring months)
- · know what you are trying to accomplish

#### Irrigation

- ensure correct installation; check that pipe depth and wire are sufficient
- also check valve boxes, the layout of the heads, and ease of servicing
- sometimes in schools trying to save money, the resident plumber puts in the system and does not understand the implications for safety, etc.

#### Drainage

We find people install 4" (10 cm) wide tile using a 2' (60 cm) wide backhoe, or they install a system in conflict with the irrigation lines; fittings are of poor quality and incorrect pipe schedules are supplied. Situations also arise where drainage tile slopes away from the mains (thus the grade is incorrect). Couplings on irrigation fittings not snapped together properly can run the risk of pulling apart underground.

We like to have the trench no more than 4" (10 cm) wide than the tile. This creates better support for the machines on your field. Lasers are probably the best invention for installing drainage and if your contractor is not using one, you may wish to ask why not. Lasers are virtually foolproof and easy to operate.

#### **Baseball Infields: Maintenance and Grooming**

Many infields are ruined from grooming and travelling too quickly. Much of the material gets pushed into the grass area at the diamond edge and creates a lip all the way around. It is highly dangerous if the ball hits this area. For maintenance of the edges, we recommend the use of a power sweeper about every six weeks. For grooming the edges, we use a sod cutter which makes clean crisp lines. We suggest you do not groom by eye, but use string lines.

Other problem areas can be the pitchers mound and batters' box repairs. In the construction stage, you can use clay brick which is a very good material. A fired clay brick very tightly compressed can be laid out in a pattern. Then another type of material can be placed on top of these bricks. There are many types of sports clay materials available. If you have holes to fill, make sure when you finish you compact them. Add some moisture, take your time, and use a plate tamper. Make sure the people that work on these diamonds have the correct tools. A level is useful, and both an aerator and a sod cutter are very handy.

#### Fertilization

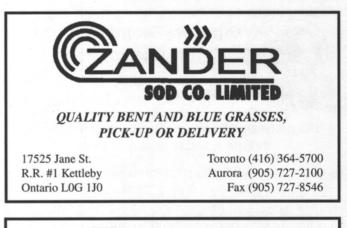
Clients spend a great deal of time and money going over fields doing soil tests, having an agronomist look at the tests, and developing a program of fertilization which calls for 4-5 applications per year, and then they apply only two. Fertilizer is not that expensive, so put on the blend that is prescribed and make sure you apply the correct amount.

Many municipalities no longer spray for weeds, although some do bring people in to spray. Individuals who do not know what was in the tank previously and spray Roundup on a perfectly good lawn or who use a sprayer that is not working properly with a plugged nozzle that releases too much spray, can do a great deal of damage.

### **Reconstructing Sports Fields or Building** Sports Fields

Probably one of the best publications I have seen on this topic is published by the Sports Turf Association of Ontario, *The Athletic Field Managers' Guide for Construction and Maintenance*. If you don't have a copy of this book, purchase one. It will teach you about sports field construction and maintenance.

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TURF CARE PRODUCTS CANADA 200 Pony Drive, Newmarket, Ontario L3Y 7B6 Phone: (905) 836-0988 Fax: (905) 836-6442 We have seen a great deal of problems, especially with regard to the resodding of sports fields. Of particular importance is the depth and type of cultivation used when preparing a seed bed for sod. One of the worst machines you can use is a rototiller. They are subject to pulling up and down, depending on the compaction of the area. We like to use a machine called a Meri-Crusher. It's like an asphalt crusher and can be set to the depth you require. With a rototiller, if you wish to go to a depth of 5" (12.5 cm), due to compaction, you may only go down 2" (5 cm) in some areas. Areas you work more deeply will tend to drop or subside more than others not tilled as deeply.

I would recommend a soil test and doing exactly what that test indicates. If you're working the field area to a 6-8" (15-20 cm) depth, you have the opportunity to apply and work into the root zone 1,000-1,200 lbs/acre (1,120-1,344 km/ha) of fertilizer or organic matter in the form of compost. This will bring up the organic matter content. Once you have done all that, you can go over the area again with the Meri-Crusher. You need to pull soil from the edges to build up the crown. Go over with the Meri-Crusher or rototiller once again. This will ensure you do not get an excess of loose material in the crown area and 2" (5 cm) or less on the sides. It is hard to achieve a 1% slope, for example, if the centre of the field sinks and the sides stay the same. If you are sodding, at least moisten to allow rooting to begin before play. If possible, 2-3 weeks for sod, 6 months for seed. As soon as the sod is knitted, we like to use a mechanical core aerator or walk behind machine if field is soft. Even walking, a field can be completed in about 3 hours.

This has been a brief overview of some of the issues we encounter in our daily contact with clients or in situations where we have been called in to troubleshoot a problem.



## Most Playground Injuries are Preventable, Groups Say

VIRGINIA GALT

M ore than 10,000 Canadian children go to hospital emergency wards with playground injuries each year—and most of the injuries are preventable, says the Canadian Parks/ Recreation Association.

Hard surfaces such as asphalt, bars spaced so closely that children get their heads caught, exposed concrete bases on playequipment structures, and cracks that catch jacket drawstrings all contribute to the accident toll, association president Neil Semenchuk said yesterday in launching a national safety program.

"On average, there has been one death a year since 1982," he said in an interview after his Ottawa-based association teamed with the Canadian Standards Association to announce the establishment of a Canadian Playground Safety Institute. The institute, drawing on new playground equipment standards developed by the CSA, will train people as "certified playground inspectors."

Course work at comprehensive, two-day workshops conducted by the new institute will include safe design and layout, proper surfacing, and the identification of hazards and risks.

"Asphalt obviously is not really the ideal surface," Mr. Semenchuk said. "It doesn't have a lot of give if you fall from the monkey bars."

Mr. Semanchuk said he hopes the course will appeal to senior administrators in parks and recreation departments, people involved in the education field, and urban planners. The association also hopes to draw private day-care operators.

Parents generally assume that playgrounds have been certified as safe when, in fact, a lot of playground equipment is outdated or poorly maintained, Mr. Semenchuk said.

The first session of the Canadian Playground Safety Institute was held in Penticton, B.C., in late April, with five more to be scheduled across Canada before the end of the year. The CSA requirements for playground equipment will be published in May.◆

### Seedbank Moves to Saskatoon

CANADIAN PRESS

he first half of Canada's seedbank arrived in Saskatoon Saturday—with a military escort.

"This is Canada's national food security—that's why we would enlist the help of national defence to move it," said Ken Richards of Agriculture Canada. The plant material arrived in a Canadian Forces Hercules aircraft. The seeds will be stored at Agriculture Canada's recently-expanded research centre at the University of Saskatchewan.

The other half of the seedbank will be shipped to the city later this month by truck.

The material was moved in two shipments because officials were fearful of losing the entire collection in an accident.

Richards said that while such an accident wouldn't plunge