sports turf and other playing surfaces. If you have ever been involved in the process known in our system as Examinations for Discovery, you will be aware that this is an opportunity for the Plaintiff's solicitor to aggressively pursue all aspects of the system that you have established for the operation of your Parks and Recreation Department. In a sportstuf liability case, this Examination process will include a complete Examination of the original design and construction of your turf and, if a Plaintiff's counsel is astute, he will also inquire into the irrigation and compaction qualities of the surface upon which the injury occurred, as well as innumerable other factors that you are aware of which are involved in the proper preparation of a playing surface for use. The Examination for Discovery process can be a rewarding experience, both from an educational standpoint to yourself and from the standpoint of defending the Plaintiff's lawsuit. However, on the other hand, it can also be a devastating process if the loss prevention suggestions that I have made are not implemented and followed.

In conclusion, there are two words which probably best summarize both the legal situation that you find yourselves in and your response to that situation: *Reasonable Responsiblity*. Parks and Recreation Departments in the operation of their playing field facilities are responsible to peform acts which a reasonably prudent individual would have or should have determined were necessary to protect the users of those facilities. If you fail to do that, you will be responsible. However, another aspect of responsibility in a loss prevention sense is to ensure that you have put in place systems which generate the evidence and the documentation which not only will result in a properly and reasonably maintained playing surface but will permit a successful defence of the Plaintiff's action arising from injuries sustained on that surface.

Upcoming Events

Sports Turf Assoc./CGSA Conference **Dec. 10-13/89**
Metro Convention Centre, Toronto

Sports Turf Managers Association Conference **Jan. 19-21/90**
Wyndamgreens Point Hotel, Houston, Texas

ASTM SYMPOSIUM

We hope in future issues to bring you some of the papers presented at the ASTM Symposium in Phoenix, Arizona. These relate to sports equipment, facilities and playing surfaces. As of this writing we do not have written consent to do so.

The titles will include: "Safety Concerns in the Design of Sports Fields" by A. Mittelstadt of the American Safety Institute; "Standards for the Playing Quality of Natural Turf for Associaton Football" by P.M. Canaway of the Sport Turf Research Institute, Bingley, England; and "Injury Frequency on Artificial Turf and Natural Grass for American Football & Soccer" by Benno Nigg, University of Calgary.

PROTECTIVE WINTER COVERS FOR TURF

For the past few years the use of synthetic covers has gained popularity in providing some protection of turf areas such as golf greens and athletic fields from winter stresses, in particular, desiccation.

Several benefits of winter covers have been observed:

- reduces adverse effects of wind. Generally beneficial in areas where there is a lack of snow cover and injury from desiccation is often a problem.
- traps solar heat, therefore can influence air and soil temperature and therefore improved turf growth under marginal conditions.
- Earlier spring greenup (1 - 3 weeks)
- Extended growth in the fall (1 - 3 weeks). This may be beneficial when late fall seeding is done to improve rate of germination (30 - 50%) and promote a slightly longer period of growth in the fall for establishment and improved winter survival. May also be beneficial in the spring to help encourage more favourable conditions for overseeding areas where air and soil temperatures are still very cold.
- Increased top growth and root growth.

A number of synthetic materials have been used as protective covers. A suitable covering material should allow pereability to air, light and water. The objective is to create a "sweater versus raincoat" type of environment underneath the cover. The density of the material can also affect growth conditions under the cover. If the material is too light it may not provide much protection from desiccation. If the material is too dense, it may adversely effect the turf growth. Expense, durability and handling the material may also be a factor in material selection.

Winter covers are another tool turf managers can use to manipulate the environment to produce more favourable conditions for turfgrass growth. However, it is also important to understand the limitations of winter covers:

- covers will increase daytime and night temperatures on sunny days but little effect is observed on cloudy days.
- winter covers may reduce turf damage due to desiccation but will not provide any protection from ice injury.
- turf under a cover requires the same "winterizing" as turf without a cover. It is very important not to promote lush growth in late fall, there the same rules are in effect for fertility (timing and amount applied) whether the turf is covered or not. If growth is too soft under cover, then turf injury can still occur. Disease control becomes a very important consideration, especially in late fall and early spring, as temperature and moisture conditions under cover may be produced that favour disease development i.e. Fusarium patch.
- If covers are removed too early in the spring the benefits of covers may be negated and may also make turf more vulnerable to freezing temperatures and drying winds. Generally, covers should remain in place for up to three weeks after snowmelt or until variable weather conditions have ended.