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Q: What do you recommend for rehabilitation of campground sites and playground areas where heavy use causes deterioration and continual destruction of turf? St. Louis, MO

A: The symptom of the problem is poor turf cover and the causes may be:
1) Compacted rootzones.
2) Excessive mechanical damage to the turf.
3) Inadequate surface and subsurface drainage.
4) Improper turf varieties.
5) Improper maintenance practices.
6) Inadequate maintenance budget.

All of these are complicated by the fact that St. Louis is infamous for its adverse heat/humidity effects on turf. However, improvement in turf quality may be gained by isolating each deliterious factor and solving them individually as time and money permit.

The soil compaction problem is obviously reduced by aeration and in this case the greater the frequency the better. As a minimum, I would suggest at least twice in the fall; once soon after Labor Day and another just prior to the ground freezing. With the early aeration the plugs may be removed if they are unsightly or if rain would turn them to mud. If your budget and manpower permit, remove the plugs from those most trafficked areas and topdress heavily with sand. With the late aerification just try to get the holes as big and deep as possible so they become reservoirs for water that may aid the freezing, thawing, and heaving processes of winter. This natural process does much to relieve compacted areas and should be encouraged. Sand topdressings at any period when the turf is actively growing is recommended.

Surface and subsurface drainage may be important because you have little control over when people use the park or campgrounds, and their use when soils are too wet may contribute to the compacted rootzones. Consult with your local soil conservation service representative for the best spacing and depth of tile for your given soils.

The mechanical damage to the turf is difficult to control but may be reduced by keeping wheel traffic to an absolute minimum, provide paths or walkways in congested areas, and mowing turf...
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Q: My husband and I have been doing landscaping for five years and now he would like to go back to school and get his degree in Landscape Architecture. Is there a list of schools offering programs in Landscape Architecture? M.W., Austin, TX
A: Because many universities are constantly modifying or diversifying educational programs, lists of offerings change quickly and hence no list may be comprehensive. However, recently the American Society of Landscape Architects published a list called "1978-1979 List of Accredited Programs in Landscape Architecture" and is available by writing to A.S.L.A., 1900 "M" Street N.W., Suite 750, Washington D.C. 20036, Attention — Director of Education and Research. Although this lists approximately forty institutions with full programs, there are many other schools that offer individual courses related to L.A. but no degree. So check with colleges and universities in your area for specific offerings.
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Question: I would like to hear an expert's true opinion on the use of tree spikes (gaffs) for climbing and its effects on the tree.

Answer: We do not recommend the use of gaffs or any other practice that unnecessarily disrupts the protective bark layer.

Recent evidence has shown that trees respond chemically and structurally to a wound and compartmentalize or "wall off" the area around the wound. Some species are highly effective at containing invading microorganisms that lead to internal decay, while others display a weak wound response.

I would suggest that you contact Dr. Alex Shigo for more detailed information on wound research. His address is: USDA Forest Service, Northeastern Forest Experiment Station, Durham, New Hampshire 03824.

Question: Will two inches of topsoil and a layer of sod cause any serious damage to a pure stand of Norway pine (Pinus resinosa)?

Answer: I do not have any specific information for Pinus resinosa, but we have records of as little as one inch of fill soil causing the decline of other species.

Of course, some species will tolerate fill over the root system better than others, but, in most cases, the roots of established trees will be injured by any change in grade.

Trees which have had fill placed over the root system should be watched carefully for at least ten years. Thinning and fertilization will help reestablish the equilibrium between the roots and shoot (stem and foliage) of affected trees.

Question: What can be done to control verticilliurn in maple trees? My maples are dying.

Answer: Several researchers are testing materials for chemical control or suppression of verticilliurn wilt. Dr. Peter Rice of The Royal Botanic Garden in Ontario has had encouraging results with Lignasan BLP. However, the treatments with Lignasan and with the other chemicals currently being tested are still experimental and are not recommended for commercial use.

The standard recommendation is good cultural practices to minimize the severity of the verticilliurn infection.
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