

Odor Aversion—

(Continued from Page 30)

anxiety and avoidance (Shusterman *et al.*, 1988; Bolla-Wilson *et al.*, 1988) (Tables 1 and 2).

Because of the crucial role that odor perception plays in producing symptoms in these patients, it seems clear that the olfactory system and how it works deserve more than our passing attention (Hirsch, 1990; Gibbons, 1986). The olfactory nerves have a more intimate or direct connection to the brain than any of the other senses, specifically with the hippocampus, amygdalus and other components of the limbic system. It is because of these connections that associations are formed between odor and other events, including their emotional context, and are subsequently retrievable. It is normal for odors to evoke, frighten and arouse us.

TABLE 1

Case 1: Odor Categories and Representative Noxious Smelling Substances Listed in Order of Presentation

Odor category	Representative Substances	
Hexane	Waste Oil	Hot asphalt
	Tar	Industrial solvents
Methyl ethyl ketone	Paint	Antifreeze
	Cleaning solutions	
Ethyl acetate	Fertilizers	Weed killers
	Pesticides	Insect repellent
Carbon disulfide	Hog barn	Cow barn
	Sulfur dioxide	Cut grass
Pyridine	Spoiled food	Dead fish
	Industrial Chemicals	
Diesel fuel	Engine exhaust	Gasoline vapor
Perfume	Shaving cream	Shaving lotion
	Cologne	Hair spray
	Air fresheners	Bathing soaps
Other aversive odors not represented during exposure	Welding smoke	Leather
	Gravel dust	Saw dust
	Burnt wood	

TABLE 2

Case 2: Hierarchy of Self-Reported Substance Odors and Symptom Descriptions

Subject's rating	Odors	Symptoms
Highly offensive	Contact cement Solvents/petroleum distillates Methyl ethyl ketons Alcohols Oil-based paints	"Confused, difficult to concentrate, stupid, forgetful, head pressure like my head is full of water, almost pressure behind the eyes, cannot read, intense anxiety lingers for days."
Moderately offensive	Vehicle exhaust Nail polish Latex Glues Paints Silicone caulking Roofing tar	Generally the same as above but with more facial tension and headaches than other symptoms. Intensity 15-20% less than above.
Least offensive	Cedar wood Mink oil Perfume Bleach Odor of floor cleaner in stores	Same symptoms but the intensity approximately 10% less than with moderately offensive odors.

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From Azaleas to Zoysia, Golf Course Supers are Experts

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If you're a golfer or live near a golf course, you already know this professional as the golf course superintendent. The superintendent is the person responsible for the physical management of the facility and is equipped with science, business and communication skills. An overwhelming majority of these professionals grew up around the game of golf, and therefore also understand how the game is meant to be played.

"Since the golf course superintendent deals with a variety of issues,

you typically find him or her involved in numerous community projects outside of normal job responsibilities," says Golf Course Superintendents Association of America (GCSAA) President Paul McGinnis.

"Many superintendents serve as consultants to schools and recreation departments in the maintenance of athletic playing fields. Others are regular guests on outdoor-type radio shows or provide a periodic column in a newspaper. Still some host field trips for civic and education groups at their local course. This professional is truly a community asset."

A recent *Golf Digest* survey revealed that the superintendent was the most important golf course employee.

"I believe the public looks to the superintendent for expertise and leader-

ship," McGinnis says. "We are entrusted by golfers to provide optimum playing conditions, while owners of the facilities are quite cognizant that the value of their investment rests in our abilities to maintain and improve conditions.

"But we are morally and ethically responsible for performing our work in the most environmentally sensitive manner possible. The golf course superintendent is an educated professional who is attuned to the environment. Anyone who spends time with a superintendent recognizes that golf courses are valuable sanctuaries for numerous animal and plant species."

If the superintendent is regarded as the most important person on the golf course, just imagine what he/she can do for your community. — *News USA*

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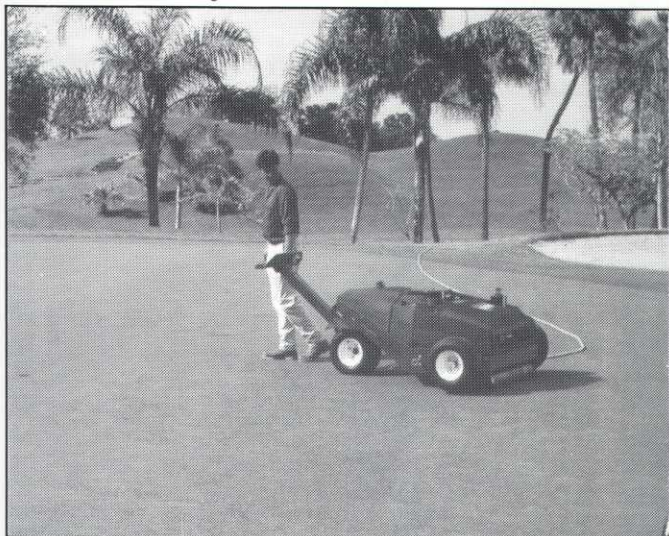
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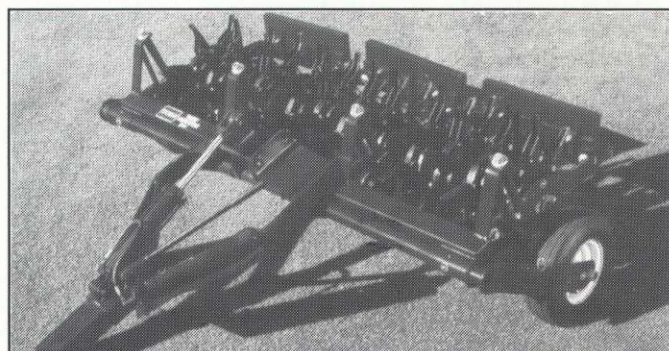
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EDITOR'S CORNER

By Rob Panuska
Waseca Lakeside Club



One of the largest events of the year is scheduled to be played at your course next Monday. Like most of these events, it was booked a year in advance. You and your crew have been working 15-hour days to prepare the course and then the rain started, just a little to help the rough get back in shape, you hope. Suddenly, just the right amount turns into a little too much. Then the weekend before the event you and your crew have parked the mowers and are scrambling for water pumps and waders. We have all been in this situation but not very many of us were expecting close to 200 of our own peers to show up on that Monday. Such as it went for Marty Terveer and his crew at Hidden Creek in Owatonna the weekend before the Scholarship Scramble on July 14. Marty and his staff deserved and received a great round of applause and thanks for hosting the event under very difficult conditions. Thanks again Marty. You and your staff really did a great job!!! Look for pictures and more about the scramble throughout this issue.

* * * *

A big thanks to John Queensland from Cedar River CC and the Scholarship Committee for their work on the scramble. If you were not able to make it to Owatonna on the 14th, you missed the first opportunity to buy our new MGCSA logo hat. You can order them for \$10.00 each from Scott at the MGCSA office. As with all of our merchandise the proceeds go to help fund scholarships.

* * * *

Congratulations to Jeff Anderson from Lester Park Golf Course in Duluth and his wife Jill on the birth of their son on June 20.

* * * *

Thanks go to Dale Wysocki for covering the Dayton's Challenge and writing the article and taking the pictures you see in this issue. Also, thanks to Scott Turtinen for the pictures and article related to the Scholarship Scramble.

* * * *

Our deepest sympathies go out to the friends and family of Dan Carpentier, long-time service manager at MTI Distributing Co., and Rick Lucken, assistant at Benson GC. Thanks, Fred, for your kind words in your president's message this month.

* * * *

In closing this month, with the stresses of the season at 150%, I would like to encourage you to go out to a quiet spot on your course at sun-

rise, by yourself. Put away all business thoughts for 15 minutes and think about what's really important in your life, ask yourself some hard questions and try to answer them. As my good friend Doug Hausman said in Golf Course Management last month, "It's only turf."

* * * *

Thanks so much for taking the time to read Hole Notes. I hope you find it educational as well as enjoyable. See you at Rush Creek on the 18th for the MGCSA Amateur Championship. Until next month.

— Rob Panuska
Editor



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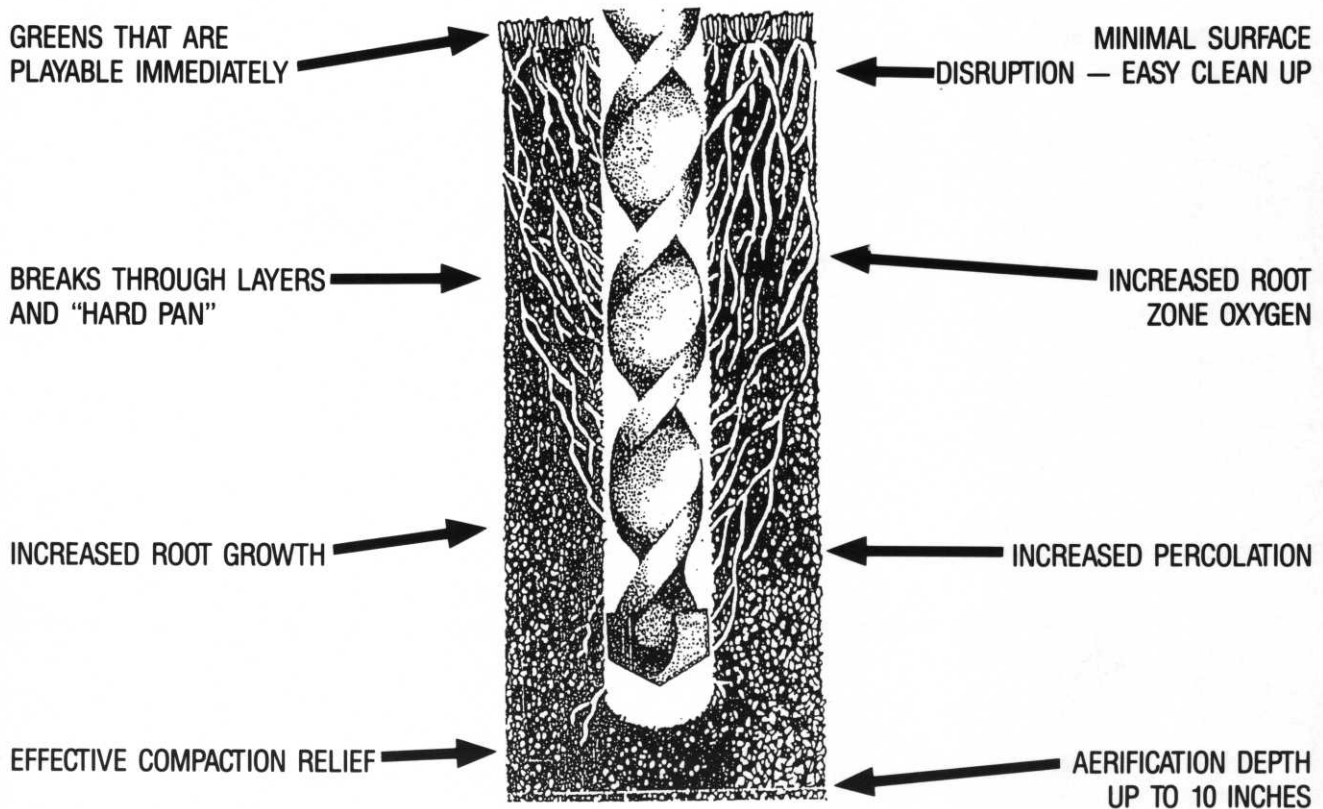
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Compaction severely restricts the manner in which soil naturally manages water. Both by holding water near the surface of the green — and by limiting the ability of plants

to take up water and nutrients from below. Water trapped under the compacted layer reduces plant development, especially during dry periods.

A compacted green means that the fertilizers, pesticides and herbicides you apply cannot be utilized efficiently. If they are not absorbed, they can be washed away easily. Even more serious, they can be trapped near the surface in a concentrated form resulting in turf damage. They can also be captured under the compaction zone, compounding the problem.

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