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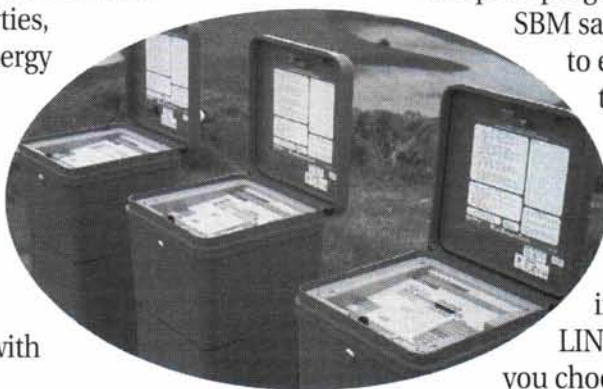
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FEATURES

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Your new 1997 Board!

Standing l-r: Fred Behnke, Jim McNair and Brian Bossert

Sitting l-r: Greg Thalmann, Luke Strojny, Don Cross, Kevin Czerkies, Ed Braunsky, Robert Maibusch, George Minnis, Donald Ferreri and Fred Opperman

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The Midwest Association of Golf Course Superintendents (MAGCS) is a professional organization founded in 1927 whose goals include preservation and dissemination of scientific and practical knowledge pertaining to golf turf maintenance.

We endeavor to increase efficiency and economic performance while improving and enhancing the individual and collective prestige of the members.

The MAGCS member is also an environmental steward. We strive to uphold and enhance our surroundings by promoting flora and fauna in every facet in a manner that is beneficial to the general public now and in the future.



Happy New Year! The hardest part about being the president of the MAGCS has to be the monthly President's Messages. Here I sit on December 1 wishing everyone a Happy New Year. I sincerely hope all of you have had a safe and enjoyable holiday season. Due to the fact that these messages need to be one month ahead of time, I did not get a chance to talk about our annual meeting held in November at the beautiful Butterfield C.C.

First of all, a big THANK YOU to all of the staff at Butterfield. From all reports we have heard, the day was a success. That's the good news. Here's the bad. Again we had a very poor turnout as far as the annual meeting goes. The majority of the Midwest membership must think that the recent and present Board of Directors are doing a great job (which they are, by the way) for only 32 members took the time to vote at the annual meeting. What a shame! I look forward to a complaint-free year.

Several bylaws were approved at the annual meeting which helped us to complete the affiliation process through the GCSAA. Recently, I received the certificate acknowledging that fact. Only twenty or so chapters throughout the country have completed this process. Hey! That's a little less than the members who took the time to vote at our annual meeting. Remember, no complaints, folks.

Don Ferreri suggested that committee chairman keep their old committees. Well, when Don speaks, I listen. The decision to keep this "continuity" will help keep several committees running smoothly. By the way, Don's suggestion helped to earn him the title of co-golf committee chairman. Thanks again, Don! Our new board member, Fred Behnke, will take over the Membership Committee. Pete "ITF DISTINGUISHED SERVICE AWARD WINNER" Leuzinger has become our new past presidents committee chairman. Pete, may I suggest a golf/business meeting at the beautiful Ivanhoe Club?

Thanks to all who serve the Midwest on the many committees we have. Maybe you would like to serve the Midwest on a commit....nah, only 32 members cared to vote at our annual meeting. REMEMBER, NO COMPLAINTS!

Finally, the question What do you do all winter? I am sure comes up around a hundred times or so. My stock answer is "I catch up on my soap operas." Did Luke and Laura make it out of that alligator-infested bunker

at the Port Charles C.C.? These and other probing questions need to be answered. Seriously, several educational programs have already taken place with a lot more to come. Take advantage of all this area has to offer. The frozen months of winter are the time to "warm up" your mind and pick up some helpful tips to get you through the "dog days." Where's my *TV Guide*. I need to know when "All My Children" comes on.

All the best to all in 1997!

Ed Braunsky, CGCS
President, MAGCS

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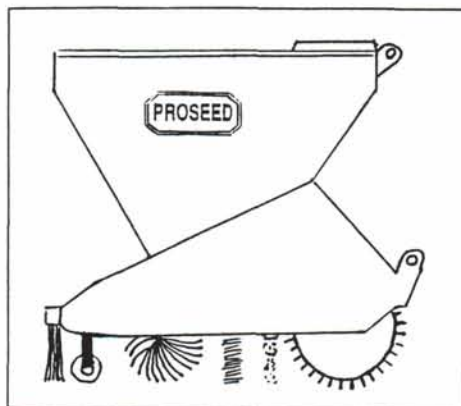
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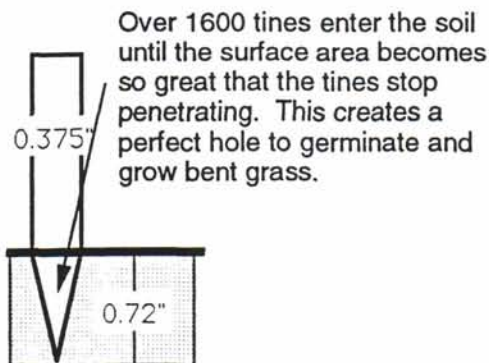
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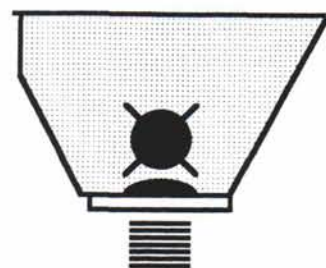
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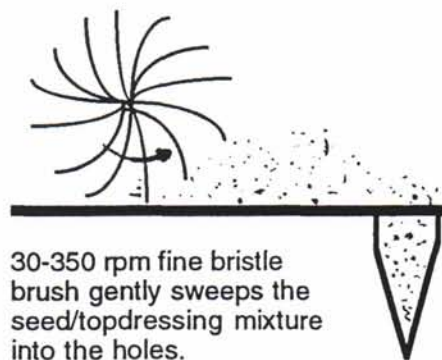
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*Bob Maibusch, CGCS, MGC
Hinsdale G.C.*

I Can't Get No...

Satisfaction. How many of us are ever truly satisfied with the results of our efforts in our professional endeavors? If you're like me, the answer is probably not very often.

I can normally count on one hand the number of times in a year when I am satisfied with the overall presentation of the golf course. Certainly, I am more often satisfied with particular areas of the facility. Some days the greens look and roll great, but the fairways aren't quite "there." Other times the landscape beds look wonderful, but the tees are lacking.

Some of these frustrations are a function of budget restraints or limitations particular to the specific facility (soil types, poor water supply, etc.). It is one of the aspects of this job which both frustrates and inspires me. The only greater challenge than achieving the condition we desire is to be able to sustain these conditions once they are attained. It tends to make us our own worst critics while simultaneously being our staff's biggest supporters.

Some of us tend to bristle at criticism (at least that tends to be

the initial reaction) probably because nobody can be more critical of our work than ourselves. However, we all require occasional constructive criticism. I'm not referring to the chronic complainer but instead to that person who has the unique ability to point out an area that could be improved without denigrating the entire operation or, even better, while praising another segment of the facility. I think of constructive criticism as a kind of medicine. It's often hard to swallow; but in retrospect, we know that it can make us better. In fact, criticism, approached with the right attitude, can be turned into opportunity.

Now that we are into the winter months and have settled into more routine (40- to 50-hour work week) schedules, it is a good time to reflect on every facet of our operation and accurately

assess what we can do to make it better next year. This should be more than just the course and grounds that we care for; we should include every area that we have responsibility for. Have we been effective managers of our staffs? Have we shown a commitment to a dedicated staff by aggressively arguing their worth to our superiors? Are we taking every advantage to improve ourselves and them professionally through continuing education? If not, what can we do now to lay the groundwork for a better performance in the future?

Satisfaction may be an unattainable goal. It shouldn't be confused with happiness. I think it's easier to be happy about our performance than it is to be satisfied. The key, if we can't be satisfied, is to at least be content in knowing that we have given it our best effort. ■

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Pesticides: Shelf Life and Storage Requirements

*Fredric Miller, Ph.D.
University of Illinois
Cooperative Extension*

One of the most frequent questions I am asked is how long is a pesticide good for or how long should I keep a pesticide? Pesticides used in the landscape are manufactured, formulated and packaged to specific standards. However, when stored improperly, they can break down in storage, especially under conditions of high temperature and humidity. Some pesticides can lose their active ingredients through chemical decomposition or volatilization. Dry formulations (i.e., wettable powder) can become caked and compacted; emulsifiable concentrates can lose their ability to form emulsions. Some pesticides become more toxic, flammable, or explosive as they break down.

Pesticide Shelf Life

Pesticide formulations that contain low concentrations of active ingredients generally lose effectiveness faster than more concentrated forms. Sometimes a liquid pesticide develops gas as it deteriorates, making opening and handling containers quite hazardous. In time, the gas pressure may cause the container to rupture or explode.

Certain pesticides have a characteristic odor. A strong odor in the storage area may indicate a leak, spill, or improperly sealed container. It may also be a clue that the pesticide is deteriorating because the smell of some chemicals intensifies as they break down. If none of these problems are found, chemical odors can be reduced by installing an exhaust

fan or lowering the temperature of the storage area.

Pesticide product characteristics that affect shelf life:

- The formulation (liquid concentrate, wettable powder, granules)
- The types of stabilizers and emulsifiers used
- The chemical nature and stability of the material
- The type of container and its closure

Pesticide Containers

Pesticide containers (including fiber and metal drums, pails, cans, bottles, bags, boxes, overpacks, and liner) have an important effect on storage and shelf life. If stored for long periods, these containers may eventually corrode, crack, break, tear, or fail to seal properly. Also, the label may become illegible.

If a damaged container is found, transfer its contents to a similar sturdy container that can be sealed. Be sure to transfer the label to the new container. Never put a pesticide in a food or drink container!!!

Pesticide Storage Area

Pesticides can have an extended shelf life if the storage area is cool, dry, and out of direct sunlight. Protection from temperature extremes is important because heat or cold can shorten pesticide shelf life.

At temperatures below freezing, some liquid formulations sep-

arate into their various components and lose their effectiveness. High temperatures cause many pesticides to volatilize or break down more rapidly. Extreme heat may also cause glass bottles to break or explode.

Small amounts of pesticides should be stored in a locked cupboard or storage cabinet out of the reach of children. Pesticide exposure is still a major cause of poisoning in your children. Larger amounts of pesticides should be secured in a locked room or shed that is well lighted and ventilated, constructed of fire-resistant materials, contain a sprinkler system, and have firefighting equipment on hand. A lot of stored chemicals should be filed with the local fire department.

The storage area should be in an area where flooding is not likely and is downwind and downhill from sensitive areas such as homes, play areas, and ponds. Site runoff and drainage should be considered as well so that surface or underground water supplies are not contaminated. Keep storage facilities away from human or livestock habitation to avoid contamination in the event of fire. Weatherproof signs stating **Danger Pesticide Keep Out!** should be attached to the door and/or windows.

Pesticides that are packaged in paper or cardboard containers should be stored on shelves to keep them away from water or dampness on the floor. To prevent cross contamination, separate volatile herbicides and other pesticides. Keep all corrosive chemicals

(continued on page 10)

PESTICIDES**HERBICIDES*****Bensulide (Betasan, Bensumec)***

Granules are stable. Emulsifiable liquids may crystalize below 42°F, but crystals redissolve if stored or warmed at high temperatures.

DCPA (Dacthal)

Store in a dry place. Wettable powders are stable for at least two years under proper storage conditions.

Dichlobenil (Casoron, Barrier, Dyclomec)

Granules are stable for at least two years if tightly sealed and stored in a cool, dry place.

Glyphosate (Roundup)

Store above 10°F to keep from freezing, which results in crystals that settle to the bottom of the container. Do not store, mix, or apply in galvanized steel or unlined steel containers.

Simazine (Princep)

Wettable powders and granules are stable for at least two years under normal conditions. It is nonflammable.

Trifluralin (Treflan, Preem)

If stored for long periods below 40°F, emulsifiable concentrate formulations may give poor weed control. Its flash point is 119°F, so do not store near a heat source. It is stable for at least two years with cool, dry storage.

INSECTICIDES***Carbaryl (Sevin)***

Repeated freezing/thawing cycles may decrease effectiveness of flowable formulations. Wettable powders are quite stable under normal storage conditions.

Diazinon

Use 4E within six months of opening the container. Do not store near a heat source. Keep lids tightly closed; keep granular materials and dusts dry.

Dimethoate (Cygon, De-Fend)

Liquid formulations should be stored above freezing temperatures. It is flammable, so keep away from heat and open flame. Its flash point range is 73°F to 100°F.

Malathion (Cythion)

Wettable powders are stable for at least two years when stored properly. Do not store liquid formulations below 0°F. Keep away from heat sources.

MITICIDES***Dicofol (Kelthane)***

Wettable powders are stable under normal storage conditions.

FUNGICIDES***Captan***

It is stable for at least two years under normal storage conditions. Protect it from extreme heat.

FUMIGANTS***Metam-sodium (Vapam)***

Do not store below 0°F. It crystalizes at lower temperatures. Warm or store at higher temperatures and mix to redissolve crystals and assure uniformity before use.

Pesticides...

(continued from page 8)

in their proper containers to prevent leaks. Even the simple step of tightly closing lids and bungs on a container can help extend the shelf life of pesticides.

You should build a drainage system to collect any runoff water contaminated with pesticides. Pesticides that may be present in tank rinsing, spills, seepage from storage, and heavy runoff from firefighting or floods must be controlled. Dikes, collecting pools, and washing slabs with sumps provide a proper drainage system. All the collected runoff water should be treated as a surplus pesticide and disposed of properly or reused in pesticide application.

An adequate supply of detergent or soap, hand cleanser, and water is essential in the storage area. Water also serves as quick first aid in a poisoning emergency. A shower should be available as

first aid for pesticide spilled on the skin. An emergency shower that will release a large amount of water at once is preferred so that any pesticide is immediately flushed off the body in case of an accident. An eyewash station should be nearby as well.

Absorptive clay, activated charcoal, vermiculite, pet litter, sawdust, or specialized pesticide-absorbent material should be readily available at the storage site to soak up spills and leaks. Hydrated lime and sodium hypochlorite (Clorox or other bleach) should also be on hand, as they may be used to neutralize many pesticides in an emergency. Other essential items include a shovel, broom, dustpan, leakproof container to hold spilled pesticide, and the proper type of fire extinguisher.

Table 1 contains a list of some of the more common pesticides and their specific storage and stability requirements.

Buying Suggestions

One way to minimize loss, cost, and disposal problems associated with pesticide costs is to avoid mixing more pesticides than you will use in a reasonable period of time. Be sure to date the container and keep a current inventory of supplies. Avoid stockpiling; buy what you need, but not to excess.

Even with careful planning, it is sometimes necessary to carry pesticide stocks over from one year to the next. Check dates of purchase at the beginning of each season and use the older materials first. To keep the label on a container intact and legible, cover it with transparent tape or lacquer.

Given proper storage, some pesticides may remain active for a number of years. By following the above guidelines, you can maximize their shelf life and your investment. ■

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