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# Some answers on certification of pesticide applicators

Certification of applicators who use pesticides designated for "restricted" use is required by the Federal Insecticide, Fungicide, and Rodenticide Act of 1947 (FIFRA) as amended by Congress in 1972. The Act requires that the entire program be fully operative by October 1976.

Many States are now developing certification programs following standards proposed by the U.S. Environmental Protection Agency (EPA).

The following questions and answers give a brief overview of the certification program. For details, consult the amended FIFRA and official regulations.

**What is the purpose of certifying pesticide applicators?**

Certification programs are designed to ensure that users have the competence to handle restricted-use pesticides without causing danger to themselves, the public, or the environment. The certification programs will also allow continued use of certain products that might otherwise have to be withdrawn from the market because of potential danger to people - or the environment - if these chemicals were to be used by the general public. Will everyone who uses any pesticide have to be certified?

No. Pesticides will be classified for "general" or "restricted" use. Those classified for "general" use may be applied by the general public without further restrictions other than those specified on the label. Persons using these products do not need the special competence required for the use of restricted pesticides.

**What are restricted-use pesticides?**

Pesticide products classified for restricted use will be those that require controls in addition to label instructions, because they may have unreasonable adverse effects on the environment or cause injury to the applicator, even when applied in accordance with directions for use, warnings and cautions or when used in accordance with a widespread or commonly recognized practice. These compounds will generally be available only to certified applicators.

**How can a person become a certified applicator?**

States will certify applicators using tests based on Federal standards to determine that the applicator is competent to apply the materials without endangering the environment, himself, or the public. State standards must conform and be at least equal to those set by EPA. Details of the standards and tests will vary depending on the use involved. However, there will be two types of certified applicators.

**What are the two types?**

One is a private applicator (a farmer, rancher, etc.) who applies or supervises the application of restricted pesticides for the production of agricultural commodities on property he or his employer owns or rents, or, as an exchange of services, on another private applicator's property.

The other type is the commercial applicator who applies or supervises the application of restricted pesticides for any purpose or on any property

Continued on Page 6

# Anselme Bourassa, golf course owner in Canada, talks about Baron Kentucky Bluegrass . . .

U.S. Plant Patent #3186 Dwarf Variety

"We used Baron on all our tees and fairways when we built our front nine holes. And Baron performed so well that we're using it for the back nine too!"



"In our cold climate and short growing season, it's important to get a grass that'll come up fast. We planted a Baron Kentucky Bluegrass mixture on all our tees and fairways and only a month after seeding, I saw green everywhere."

"Baron comes up fast. We seeded the course in late August 1973. The fairways were ready for play by May 1974. We could have opened the course then except the greens weren't ready until mid-June."

"And Baron stays green until the first snowfall. Last winter was bad . . . lots of rain and thick ice. But as soon as the ice and snow were gone, Baron came up green and beautiful. We didn't have any winter kill. I told my neighbors they should have overseeded with Baron this fall."

"We usually cut to 1-1/4 inches and Baron stays green all year. We found this to be true even when we cut to 3/4 inch. We didn't have any problems with diseases, not a single one."



## And here's what Jean Pierre Masse landscape contractor and turf consultant for the golf course has to say about Baron

"There's no question that Baron can adapt itself to any growing conditions. All this land was woods before we cleared it through with a bulldozer. See this sand? That's what's under the top layer of soil in the fairways. This soil is extremely sandy, very acidic and obviously very porous. But regardless, Baron did a fine job."

There's not much more we can add except that Baron is available from Pedigreed Seed Company or any authorized distributor is nearby wherever you grow quality turf.

Anselme Bourassa is the owner of Les Vieilles Forges Club, 1000 St. Jean, Trois-Rivières, Quebec, Canada. Jean Pierre Masse is a turf consultant and landscape contractor for Masse & Fils Co., Cap de la Madeleine, Quebec, Canada.



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## Pesticide Certification Cont.

other than as provided by the definition of "private applicator." Each commercial applicator will be certified in one or more use categories and then may use pesticides for any purpose allowed by the label within the category or categories for which he is certified.

What are the categories for commercial applicators?

The regulations establish ten categories based on occupation:

- (1) agricultural pest control;
- (2) forest pest control;
- (3) ornamental and turf pest control;
- (4) seed treatment;
- (5) aquatic pest control;
- (6) right-of-way pest control;
- (7) industrial, institutional, structural, and health-related pest control;
- (8) public health pest control;
- (9) regulatory pest control; and
- (10) demonstration and research.

Can states have other categories or subcategories?

Yes, a State may designate such subcategories as it deems necessary within the ten major categories. With the EPA Administrator's approval, States may establish additional major categories to meet their needs. A State may also delete any category that is not needed in that State.

How will the certification program be administered?

Applicator certification is primarily a State responsibility. State authorities will develop plans based on Federal standards, and those plans must then be approved by EPA. Insofar as possible, EPA will assist States in organizing their certification plans, but the Agency does not plan to develop a Federal certification program.

Will certification be required for everyone who applies a restricted pesticide?

No. Non-certified persons who are competent may apply restricted pesti-

Continued on Next Page



## N. Michigan Turf Managers Association News

The July issue of A Patch of Green will not have reached you in time to announce the July 10th meeting of the Northern Michigan Turf Managers As-

### Pesticide Certification Cont.

cides under the direct supervision of certified commercial or private applicators. Certified applicators supervising non-certified personnel must demonstrate knowledge of Federal and State supervisory requirements. When will certification requirements become effective?

State certification programs are now being formulated. States that plan to certify applicators must have approved programs in effect by October, 1976. Where can a person get additional information on certification?

There are several sources. Contact your State or local pesticide regulatory officials for more details. They may be located in the State Department of Agriculture, State Department of Natural Resources, State Environmental Office, or similar agencies. Also, you may contact any of EPA's ten Regional Offices across the country, or write to the Environmental Protection Agency, Washington, D.C. 20460

sociation. We hope most of you were able to attend the meeting at Valley View Golf Club in Shepard, Michigan where David Moore is Superintendent, and do your share in supporting GCSAA turf student scholarships.

The next meeting of the NMTMA will be held at Burning Oak Golf Club on August 21st, and will be hosted by Leon Powell.

Wednesday, September 10th, Ferris State College will be the location of our meeting. Fred Powell, one of our fine Directors is the host Superintendent. Wednesday, October 8th, Michawye Hills, Gaylord, with G.C.S.A.A. member Fred Miller as host Superintendent. Mark both of these dates on your calendar and further details will be forthcoming in later announcements.

### New OSHA Regulations

According to a recent announcement from OSHA, any tractor over 20 HP used for agricultural purposes built after October 25, 1976 will *require* a roll bar and seat belts. Apparently there are no retroactive provisions in the new regulations.

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# GRASS CLIPPINGS



It seems every year around this time, everyone's saying "that sure was a strange spring we had this year." The fact is, I don't think I've ever really seen a "normal" Spring.

At any rate, the leaf spot damage was relatively minor in the early part of the growing season, save for a few isolated cases. At this writing there are signs of Dollar Spot creeping into the southern area of the state.

Again this year, back by popular demand, the *poa annua* went to seed the last few weeks in May. The seeding did seem extremely heavy this year however and a few courses reported they thought they saw Don Lafond snowmobiling down their fairways by the light of the moon.

Detroit Golf Club played host to the Michigan Medal Play Tournament toward the end of May and Orchard Lake Country Club was the site of the U.S. Open Qualifier during the first week in June. Both these golf courses were in excellent playing condition and from the remarks of the players, both Clem and Jim owe themselves a

pat on the back.

When this issue goes to press, I'm not sure what the situation will be, but at the present time the trout are biting like crazy at Knollwood Country Club. Craig says to give him a call if you'd like to "wet a line."

It's true the South course at Oakland Hills is one of the finest layouts in the country. It's true too, that an outstanding golf course cannot draw a major championship on its merit alone. The course has to be in excellent shape all the time and when the pressure is on and tournament time draws near, it has to be even better. Ted Woehrle is the golf course superintendent at Oakland Hills and he is one of the main reasons for the U.S.G.A. wanting to hold the PGA Championship there. Congratulations Ted for your consistently flawless efforts.

If there's something in this column you didn't like or if there is something you would like to see in it, drop me a line. Send your suggestions to: Frank Green, Box 111, Birmingham, Michigan 48012.

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# THE GROWING LINE FOR FINE TURF



# How to cure the causes of Soil Compaction

by TOM MASCARO, West Point Products Corporation

Soil supports plant life. To support healthy plants, it must be of good "tilth," containing the correct mixture of sand, silt, and clay particles, plus the correct arrangement of these particles for good structure. Soils of good type and structure must be maintained in top condition by proper feeding, and an adequate supply of water and air are needed.

Grass plants must be supported by deep, well-developed root systems to remain healthy and resist wear, and these develop only in soils of good structure. But soils deteriorate and become poor and compacted through use and misuse. When compaction occurs, air and water movement is restricted, fertilizers cannot penetrate into the soil, and roots struggle for survival at the soil's surface. The top-growth gradually weakens; the plant becomes subject to disease. It is unable to survive periods of drought or excessive heat. It cannot stand the constant pounding of human feet and the wear and tear of maintenance machinery. Maintaining any kind of

grass cover under these conditions becomes difficult and expensive.

What is soil compaction? Soil of good structure is comprised of a variety of particle sizes, with many spaces between these particles. These are called "pore spaces." The existence of these pore spaces is a key factor, roots do not grow in the soil, they grow in these "pore spaces" between the soil particles. Water, air and food travel through the soil by way of these spaces. When soil particles are pressed together into plate-like particles, the number and size of the pore spaces is reduced, and the "passage-ways" are sealed to the movement of vital materials. Then the soil is "compacted."

Compaction indicates its presence in many ways - shallow root systems, the presence of knotwood and clover, the development of algae and black scum, puddles, dry spots, and just plain hard soil. If any, or all, of these visual symptoms are present, a profile sample of the soil should be taken.

Continued on Page 13



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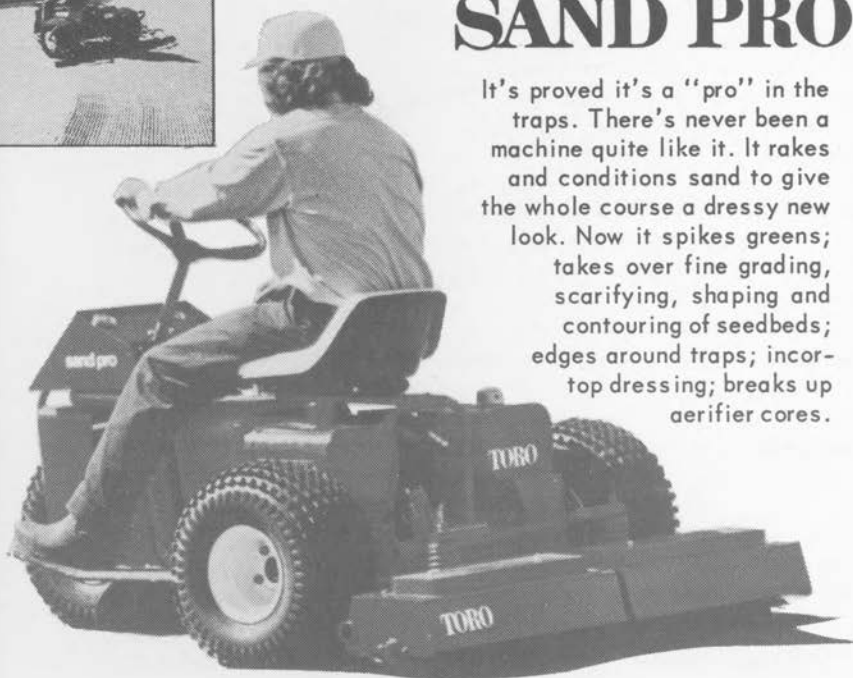
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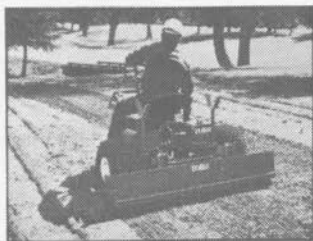
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*Or you may contact the next golf course supplier who calls on you and give him the information needed for application.*

### Soil Compaction Cont.

In the soil sample look for these indications of poor soil structure - the presence of one type of soil, such as clay; or pockets of improperly mixed materials, or parallel layers of different materials.

Any of these indications of poor structure are directly related to the presence of compaction. If any of them exist, root penetration, in addition to the movement of water, is stunted. When this happens, soil particles are easily pressed together, pore space and size is reduced, and the soil compacts.

Compaction may result from ordinary use of the area by golfers, or maintenance men. Other contributing causes of compaction may not be so readily discernible. Poor drainage is high on the list. When soil is saturated for long periods of time, air movement is retarded because it cannot pass through water. Without water, plants

die, despite a plentiful supply of water. Also, water is the lubricant that assists the compacting forces.

Poor drainage will also show up in the soil sample. Look for a blue or mottled color. The blue color is caused by the chemical change in the iron content of the soil. Without oxygen, the ferrous form of the iron is changed to the ferric form, and blue color results.

If excess water is present, look for these probable causes:

- poor sub.
- poor sub-surface drainage
- seepage
- poor surface drainage

Sub-surface drainage is an important element that should be considered when construction is planned. To rectify errors after building the course is an expensive proposition.

Seepage is a compaction problem frequently overlooked. It occurs when

Continued on Next Page

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### Soil Compaction Cont.

water pressure from higher levels raises the water table above normal in lower areas. If surface soils remain wet for long periods of time, seepage should be a "suspect." Usually it cannot be identified by casual observation, as water may be held below the surface. To determine if seepage exists, dig holes two or three feet deep with a posthole digger. If the holes fill with water, seepage is undoubtedly occurring. Better drainage of the entire area is the logical solution. If limited funds are available, intercepting the lines directly above the use area will adequately protect limited areas, otherwise it's a good idea to tile the entire area.

Lack of adequate provision for surface drainage may account for excess water in the soil. Greens, tees, and fairways should be constructed in such a manner as to drain surface water as rapidly as possible into

non-use areas. If proper drainage of these areas is not accomplished during construction, it may mean ripping them up and rebuilding later.

One method of detecting excessive standing water is to check the leaf surface of areas having a brownish cast. When such areas are mowed the tractor and mowers squeeze muddy water over the grass blades. When this water dries, it leaves a film of soil on the grass blades causing the brownish cast. Poor surface drainage is a serious problem particularly during periods of excessive heat - the grass will turn blue, then brown, and finally black. Turf is lost very quickly under these conditions.

Poor soils, poor soil structure, and poor drainage are problems that can be corrected for the most part. Once corrected, maintenance of turf is made easier but the problem of compaction is never eliminated. It is a continuing

Continued on Page 16

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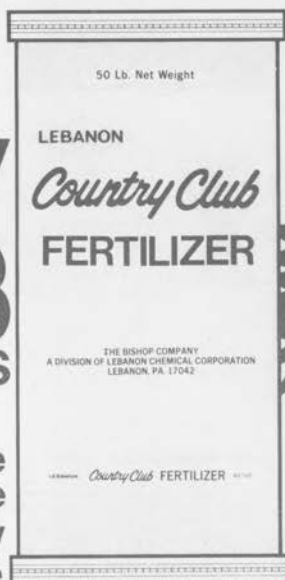
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## Soil Compaction Cont.

occurrence and cannot be ignored. This is particularly true on today's golf courses. They are subjected to heavy and constant play - and the human foot, as well as golf cars and carts, are among the most common compacting agents. They are aided by the weight of heavy maintenance equipment - mowers, tractors, etc.

These compacting agents will be with us - as long as grass is used for recreation. Compaction will occur and re-occur. Because it affects the medium that supports plant life, it must be given first consideration in any turfgrass maintenance program. The process of alleviating compaction must be a continuing one. Grass has the same basic requirements as any crop or garden. Like them, it requires cultivation, especially in the spring and the fall. It cannot be plowed or disced, but it can be aerified with special machines that have been developed to perform the cultivating

task without disturbing the grass itself. Aerification is basic to healthy grass growth and it ranks as one of the most important - if not the most important - cultivation techniques on any golf course.

Aerification is achieved by the mechanical manipulation of the soil. A core or plug of soil is physically removed by the machine and deposited on the surface of the turfgrass area. This leaves a hole in the sod. These holes eventually become filled from the soil surrounding the holes, and pore spaces develop once again. A hole of one-half inch diameter in the soil can relieve compaction in an area of about two inches around itself.

The immediate and direct effect of eliminating soil compaction on the golf course is the production of healthier grass. Other direct or unseen benefits include soil and water conservation. Mother Nature has provided for a natural soil rebuilding process - dead

Continued on Next Page

### **Soil Compaction Cont.**

and decaying plant life which gives the soil a continual supply of organic fertilization. If we make certain that grass can produce deep, abundant root systems, they not only give life and sustenance to the living plant, but as they die, they decay and produce needed organic material. Good soil is thus conserved.

Water can only be conserved when every effort is made to make fullest use of natural and applied water. Tests have proved that as much as 80 per cent of available water is lost through run-off when soils are too compacted to receive it. Remember, too, that good soils store water against the time when it is scarce; deep roots search it out and grasses stand a better chance of survival during drought periods.

Finally, there is the question of cost. Turf is expensive to maintain, and maintenance costs are directly affected by the quality of the soil. It takes more of everything, including time and money, to keep grass growing on poor soils. Economy of maintenance can only be accomplished when the quality of the soil is the first consideration.

(Author Tom Mascaro has spent 35 years researching and developing machinery for turfgrass care. In the process, he has taken over 20,000 color slides of various soil conditions. He is the President of West Point Products Corporation.)

Sincerely,  
E. J. Sylvester

### **CGCS Eligibility Period Changed**

The waiting period for CGSAA Class "A" members to become eligible for certification has been changed to two (2) years. Previously, a GCSAA member must have held a Class "A" classification for three (3) years before becoming eligible.

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## Members Offered Free PGA Entrance

Members Invited to PGA Championship  
Officials of the Professional Golfers Association announced recently that all voting members of GCSAA and their wives will be permitted free entrance to the PGA Championship, scheduled for the Firestone Country Club, Akron, Ohio, August 7-10.

Members possessing the gold identification card must stop at the PGA Northern trailer on the Firestone grounds to obtain an entrance pass to the tournament.

## Survey Results Being Printed

Tabulated results of the GCSAA Membership Profile survey are now being printed and will be distributed to all Class AA, A and B members very shortly.

The booklet will contain several pages of descriptive and explanatory material concerning the survey followed by breakdowns of the results by 1971 - 1974 national comparisons.

This publication is being distributed only to those members who were included in the survey and because of the background information needed to fully understand the results, it will not be widely circulated although highlights of the information will be published at a later date.

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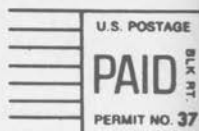
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