#### CHAIRMAN from page 39

The average member wants sometime green "out there" and wants to be able to tell his friends how nice his course looks. He doesn't care, really, if the green stuff is *Poa*, crabgrass, clover, bermudagrass or ryegrass. Actually, he likes winter rules more than summer rules and regards the chairman as a sadist when the course is played at rated distance.

#### THE GREEN COMMITTEE

The green committee members can be used effectively in many ways: for special assignments; for information gathering and for public relations to the membership. They can also serve as a sounding board for the chairman's ideas. The committee is run by the chairman not vice versa. Yes, he listens to comments and criticism with an open mind. If they are constructive, he takes prudent action.

Eventually all chairman go stale and must be replaced, perferably by the man being groomed for the job. The top man of the group, through sustained interest, will generally surface for grooming as the next chairman. However the system is set up, a chairman should always have his replacement standing in the wings ready for action.

#### CONCLUSION

I realize in this article that I have raised more questions about effective green chairmanship than I have answered. But the time has come when answers must be searched out. Hopefully, future articles will present solutions to problems in golf club management for the non-professional and in that way a forum will be opened. For above all, the job of green chairman entails service to the club by truly dedicated people.

ALLAN E. GROGAN is an active golfer with a six handicap. He started working on the green committee at Baltusrol GC, Springfield, N.J., in 1964 and became chairman of the green committee in 1968. He is a graduate of Stevens Institute of Technology with M.E. and M.S. degrees in management and is president of Colonial Pontiac, Summit, N.J.



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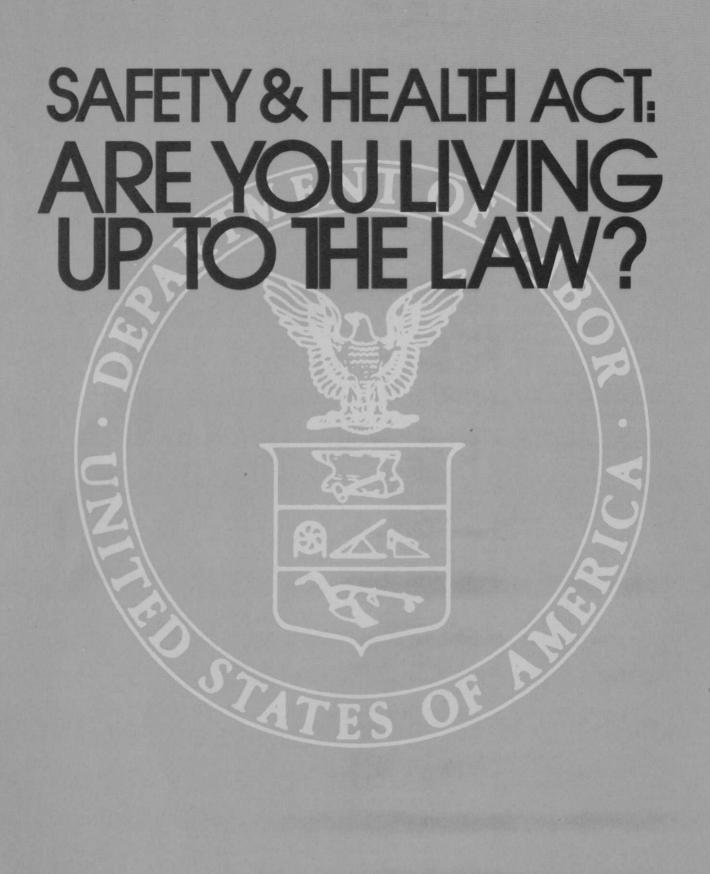
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Although not specifically cited, the golf course definitely is subject to the requirements of the law. Each course administrator, then, must acquire knowledge of those standards pertinent to his area of responsibility

#### by JACK JANETATOS and KEN EMERSON

The Occupational Safety and Health Act (OSHA) standards are designed to provide a safe working place for every man, woman and child in the United States. (See GOLFDOM, July, p. 24, which discusses the standards on a broad scope.) This is a high goal, and one that places a great burden on the employer.

Nowhere is this burden more obvious than on the golf course. Because golf courses are not mentioned specifically in the OSHA standards, it is imperative that the superintendent gain a thorough working knowledge of these standards, which, by extension, will apply to his particular work area.

Example: As noted in last month's article, an OSHA poster must be displayed at every workplace to which employees report. This means that if the golf course maintenance crew reports to the maintenance building, then the poster must be displayed there, even though it is already posted at the clubhouse.

More specifically, many standards covering a wide variety of equipment, and procedures will apply directly to the golf course as a user of that equipment. These range from possible air contaminants to portable electrical equipment, lawn mowers and drinking water. The list is long (the National Club Assn. has compiled a 250-page manual of those standards relating to social and recreational clubs), but every superintendent should be familiar with it. Unfortunately, the list is not completed. The OSHA administrator has until next year to add to, or change, existing standards. However, the following areas can be regarded as some of the more important. (The numbers identifying the standards are the Federal CFR indexes used by both the Government and in NCA's manual.)

LAWNMOWERS (1910.241; 1910.243). These must comply with two pages of standards, including specifications that require guard bars or grass catchers over all grass discharge points; safety coverings for all drive mechanisms; caution signs on operating controls; dead man controls on riding mowers, and various specifics covering blade angles and clearance of handgrips. The importance of the first of these standards is underlined by a recent accident at a midwestern golf course involving a new mower with controls dissimilar to the others on the course, an unprotected grass discharge opening and an operator who tried to clear the opening manually. The result, an accident.

PORTABLE POWER TOOLS (1910.241; 1910.242; 1910.243). These include safety guard specifications for grinders, saws, woodworking tools and drills. Dead man controls for all hand-held tools are now required. This means that those automatic hold-down devices that permit a tool to continue to run after the trigger has been released will have to be removed from all old power tools. (Note: Not all new equipment complies with OSHA standards. So check before you buy.)

ELECTRICAL GROUNDING (1910.314).

All portable electrical equipment operating at more than 90 volts must be grounded through the use of a separate ground wire and a polarized plug and receptical. This may cause problems both in old buildings and with employees who sometimes remove the grounding wires on tools to simplify their operation.

FIRE (1926.150). Within the maintenance buildings, strict regulations apply to the hazard of fire. Basically, each employer is responsible for developing a fire protection program. Portable, rated fire extinguishers must be maintained in properly inspected conditions in conspicuous locations. All automatic systems must meet the design requirements of the National Fire Protection Assn.'s standards. All electrical equipment for light, heat or power must meet the National Electrical Code. All internal combustion engine equipment must be located well away from combustible material. All flammable liquids must be properly marked and in appropriate containers and also located well away from any possible source of fire.

CLEANING SOLVENTS AND PAINT REMOVERS (1915.21). These must be used in a separate area and the user must be protected from possible skin contact and from eye injury by goggles or a face shield.

PERSONAL PROTECTIVE EQUIPMENT. Eyes (1915.81). All protective eye equipment must meet the specifications of the American Standard Safety Code for Head, Eye and Respiratory Protection, Z2.1, (One business was cited for "unsanitary goggles.")

Respiratory (1926.55; 1915.81). Exposure of employees to inhalation or ingestion of materials at a concentration above those specified in the "Threshold Limit Values of Airborne Contaminants for 1970"

#### **OSHA** continued

shall be avoided. All respiratory equipment must meet the specifications prescribed by the U.S. Bureau of Mines.

Footwear (1910.136). Safety-toe footwear for employees shall meet the requirements and specifications in the American National Standard for Men's Safety-toe Footwear.

Clothing (1926.55). Exposure to skin absorption or contact with any harmful material must be avoided. Proper equipment and clothing must be worn to comply with this standard.

SANITATION. Most sanitation and housekeeping standards come under what might be called "judgement" guidelines. There are some important specifics, however.

Water supply (1910.141). An adequate supply of potable water must be maintained within 200 feet of any location at which employees are regularly engaged in work. The common drinking cup is prohibited. Where water is cooled by ice, the ice cannot come in direct contact with the water. (Jacketed coolers become a must.) Where single service cups are used, a sanitary container for clean cups must be supplied and a receptacle for used cups must be provided.

Toilet facilities (1910.141). Every place of employment must be provided with adequate and separate toilet facilities for each sex. The sewerage disposal system must comply with the requirements of local authorities. A minimum of one facility for up to 10 persons, two for 10 to 24 persons and three for 26 to 74 persons must be supplied. Other regulations deal with the construction and plumbing in such toilet facilities.

FIRST AID (1910.151). In the absence of an infirmary, clinic or hospital near the workplace, a person or persons must be adequately trained to render first aid. First-aid supplies, approved by the consulting physician, must also be available. Where the eyes or body of any person is exposed to injurious materials (poisons, pesticides) suitable, emergency facilities for quick drenching or flushing of the eyes or body must be provided within the work area.

NOISE (50-204.10). Protection against the effects of noise are provided when the sound within a building or a workplace exceeds a certain specified degree.

MOTOR VEHICLES (1926.601). All motor vehicles operating on an offhighway job site are covered by this regulation. They include the usual highway safety standards, such as two headlights and taillights; service, emergency and parking and breaking systems and an audible warning system. All equipment, including windows and windshields, must be in good and unbroken (or uncracked) condition, and must have adequate heating and de-fogging equipment where freezing conditions exist. Seatbelts are a requirement.

(1910.176; 1910.144; SIGNS 1926.200). Wherever low overheads or clearance problems exist, every employer must post appropriate signs. All danger areas and potential hazards must be clearly marked. Additionally, a considerable body of regulations covers the color coding for marking physical hazards, accident prevention signs and tags and directional signs. These identifications are as follows: red for fire equipment and exit signs, fire sprinkler piping and hose locations; "danger" signs for flammable liquids and for barricades; all stop signs and electrical switches, all emergency "off" switches on electrical equipment. Orange is the basic color for designating dangerous parts of machines or energized equipment. Yellow is

the color designating caution and for marking physical hazards that may cause bumping against, stumbling, falling or tripping. Green indicates safety and is used to mark the location of first-aid kits and equipment other than fire fighting. Blue designates caution and is limited to warnings against starting or using equipment under repair. Black, white or combinations of white and black designate traffic or housekeeping markings. The regulations also go into detail on the size requirements and color combinations for danger signs, directional signs and other safety signs.

LADDERS AND STAIRWAYS. About 15 pages of the regulations deal with the use and the construction of ladders and stairways. They cover such things as the type of materials that may be used in ladders, prohibitions against the use of unsafe ladders, the dimensions, number and materials used in railings, safety treads, angle of erection and warning tags for unsafe or dangerous ladders and stairwells.

STORAGE. Where mechanical handling equipment is used, sufficient safe clearances shall be allowed for aisles, at loading docks or through doorways. Storage of materials cannot create a hazard. Bags stored in tiers must be stacked, blocked, interlocked and limited in height, so that they are stable and secure against sliding or collapsing. Clearance signs must be used.

Two hundred additional regulations provide standards for charging batteries, the use of compressed air, construction standards, electrical standards, environmental controls and the use of machinery and earthmoving equipment. They are too extensive to develop in full in a single article in a single edition of this magazine. Future articles will include these regulations bearing more directly on the clubhouse itself. enlist the help of USS Vertagreen Weed & Feed with Balan.

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Poor drainage or overwatering can cause loss of perennial grasses leaving the way open for a Poa invasion.

I have been associated with turf now for more years than I care to remember, and it seems to me that superintendents have always been talking about *Poa annua*—whether to live with it or eliminate it.

Annual bluegrass, Latin name *Poa annua*, is distributed widely throughout North America, from Florida through Canada to Alaska, from Massachusetts to Oregon. It is easily identified by its characteristic bluegrass leaf—folded bud and boat shape tip, yellow to dark green in color and its absence of rootstocks or stolons. A past president of the Golf Course Superintendents Assn. of America offers his observations on the nature and control of *Poa annua* 

#### by sherwood A. Moore

During its flowering and seeding stage it is whitish in appearance. During the summer, if it does not receive enough water or if temperatures get too high, it appears brown.

Annual bluegrass has some ad-

vantages, and, although superintendents generally curse its presence, there are times when they are glad to have it around. When properly maintained it is a pleasing green color. It grows vigorously. It can be cut closely. A closely-cut Poa annua turf, when not seeding, produces excellent putting qualities and good lies in fairways. Because of its quick germination and rapid growth during the active growing season, divot scars and other injuries heal in a relatively short time. Poa has the ability also to grow in compacted soil, though the continued

#### POA continued

root growth is somewhat superficial, and gives a grass cover to an otherwise barren soil. Contrary to the popular belief that *Poa annua* is a shallow-rooted plant, H.B. Sprague and C.W. Burton in their study published in 1937, entitled, "Annual Bluegrass and its Requirements for Growth," showed that annual bluegrass develops a substantial root system. Lastly, *Poa* is a grass on which superintendents can blame a lot of their management problems.

The disadvantages of *Poa annua*, however, outweigh its advantages. Its vigorous growth and abundant seed production allow it to invade areas where perennial grasses are established. The pollen from *Poa annua* causes an allergic reaction in many people, golfers included, who suffer from hay fever and other allergies.

Annual bluegrass is very susceptible to many of the major turf diseases—the leafspots, dollarspot, large brownpatch and snow mold—and requires continual spraying to maintain it. It is also very susceptible to winter injury. During the winters of ice cover and dessication, *Poa* suffers first.

The major disadvantage of Poa is its intolerance to high temperatures; it is very unpredictable during the summer months. This factor alone is enough to discourage the proponents of annual bluegrass. Still, there is much controversy concerning annual bluegrass. There always will be superintendents who say, "Poa is a friend, I will live with it." Others regard it as an enemy that must be eliminated. I think that if a superintendent had his choice he would prefer the perennial grasses over Poa.

The reasons *Poa annua* can dominate golf course turf includes:

□ Compacted soil caused by traffic, machinery or poor drainage. Perennial turfgrasses cannot survive under these conditions so they make way for *Poa* and weeds;

□ Disease and insects;

□ Turf injury caused by players or maintenance equipment abuse, both of which result in the loss of perennial grasses;

Chemical injury to perennial

grasses caused by misapplications of fertilizers, fungicides, insecticides, herbicides or other protective chemicals;

□ Poor drainage;

□ Improper turf management over - watering, over - fertilization, and excessive phosphorus in soil.

#### MANAGEMENT CONTROLS

The superintendent can control the degree of Poa he wants by his management practices and by chemicals. Unfortunately, many superintendents' turf maintenance programs, which support the desirable blue or bentgrasses, also encourage Poa. By knowing the characteristics and growing habits of Poa, superintendents can encourage, maintain, control or eliminate it. Jack Martin, superintendent at Suburban CC, Union, N.J., says, "If you have a majority of Poa and you do not want to inconvenience your membership by burning it off the fairways or thinning it, you can maintain Poa during the summer months with precise water scheduling, disease prevention and proper fertilization." Light, frequent water applications are necessary during the summer to maintain Poa.

Thirty-five years ago it was noticed that artificial watering systems favored the invasion of Poa. Fairways that were over-watered were heavily infested with annual bluegrass. Sprague and Burton found that soils kept at 30 per cent of their water-holding capacity produced very little growth of annual bluegrass. Those kept at 40 per cent supported fair growth and those kept at 50 to 60 per cent permitted maximum growth. To discourage Poa and encourage permanent grasses, soils must be kept on the dry side. Water less frequently, but thoroughly. During the drought years of the mid-1960s, superintendents in Westchester County, N.Y., were curtailed from using any water on the fairways. Surprisingly, the fairways did not fall apart; they actually improved!

Mowing practices also go a long way toward determining the amount of *Poa* in turf. Superintendents cannot always mow grass at the height that they would like to or at the height the grass would like to be cut. But, they can change the direction of the mowings, straddle wheel marks of previous mowings, regulate the speed of mowings, change the time of mowing during the summer months to early morning and late afternoon, instead of during the hot periods of the day. Superintendents should also raise slightly the height of cut during periods of extreme stress and keep the mowers sharp and properly adjusted. Both large and small equipment should be turned at different places instead of concentrating turns in the same areas.

Fertilization plays an important role in the Poa content of turf, although there is less research and more controversy along this line concerning Poa. To maintain Poa during the summer months do not apply heavy applications of nitrogen, because this will produce more clippings, make the turf more succulent, produce a poor root to top ratio and result in the more rapid loss of Poa during periods of stress. Sprague and Burton claimed that the use of organic fertilizers only produced thin turf and permitted incroachment of annual bluegrass, but then I have known golf courses that have been using organics for years and they have some of the most beautiful perennial turfgrass I have seen. Some say the practice of fertilizing turfgrasses during their dormant stage favors annual bluegrass because this is when the Poa is growing best over the perennial grasses. But other opinions favor dormant feeding.

Heavy fertilization will have the same effect on perennial grasses with the resultant thinning and weakening of the desirable grasses. I have been harping for years that superintendents do more damage to turf by over-fertilization than by under-feeding. In the Northeast, two pounds of nitrogen per 1,000 square feet of established fairway turf is more than ample. It is also well known that annual bluegrass favors a liberal supply of available phosphate in the soil. If soil tests show an adequate supply of phosphorus, eliminate this nutrient from the fertilizer mix.

Temperatures are an important factor in *Poa annua* survival. There continued on page 51

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