# CREDIT ABUSE, PROFIT LOSS

*Credit abuses can eat away profits, unless records and procedures, governing everybody, are strictly enforced* **By Ernest W. Fair**

Over half of the business being conducted today is transacted on credit. The percentage grows every year and soon it may be close to universal. As it expands, so do the hazards. The life of any golfing business may well depend on how adequately it is protected against credit abuse.

The improper and haphazard operation of credit procedures has accounted for as high as 65 per cent of small business failures in the past. Although such losses were blamed on lax procedures in granting credit, this problem has decreased due to better education on procedure and greater availability of checking agencies. But recent surveys have pointed up an alarming increase in loss through abuse of credit. The pro shop operation has been no exception to this unfortunate trend.

The following paragraphs describe the top-ranking credit abuses, which were responsible for 90 per cent of these losses. Accompanying each are procedural steps to help pro shops avoid these abuses.

☐ Changes in credit status were ignored. Yesterday's well-rated customer can, through all kinds of circumstances, become a dangerous risk tomorrow. Failure to watch over the continuing credit status of major customers is always a hazardous procedure.

*Preventive:* Periodically, survey the account status of all customers. Watch carefully any account which has become slower and slower in making payments over any past three-month period.

☐ "Softness" in collection procedure. One is always tempted to grant the good credit account some extra concessions. Too often this leads to a major loss.

*Preventive:* Strict adherence to conventional credit terms at all times is a must. Extension of such terms in cases of genuine emergency are justified only on a short-term basis.

☐ Mistake or errors in bookkeeping. Failure to charge to the proper account and errors in transcriptions of sales tickets to account ledgers are the two most common mistakes in this area.

*Preventive:* A well-developed system for handling the paper work for all charges and a continual check of people involved to see that this is being followed does the job. Doing away with hurry and rush in handling the paper work is another good step.

☐ Laxity in follow-up on every delinquent account. There should be no exceptions regardless of how good a customer may be involved. Carelessness in handling delinquent accounts can lead to greater customer delinquency.

*Preventive:* Establish a definite procedure to follow and use on every account without exception. Never wait more than 30 days to put it into use.

☐ Chronically slow accounts deteriorate into bad ones. Many a good credit customer has been permitted to down-grade into an undesirable one because of the failure of the pro shop management to insist on payment according to agreed terms.

*Preventive:* (a) Reduce the amount of credit allowed; (b) keep in a separate file for closer attention, and (c) institute a 1 per cent per month service charge for failure to pay on the due date.

☐ Carelessness in handling credit cards. More and more use of bank-type credit cards is a certainty for the future. Carelessness in handling the charge slips means sure loss.

*Preventive:* Making certain every

*continued on page 83*

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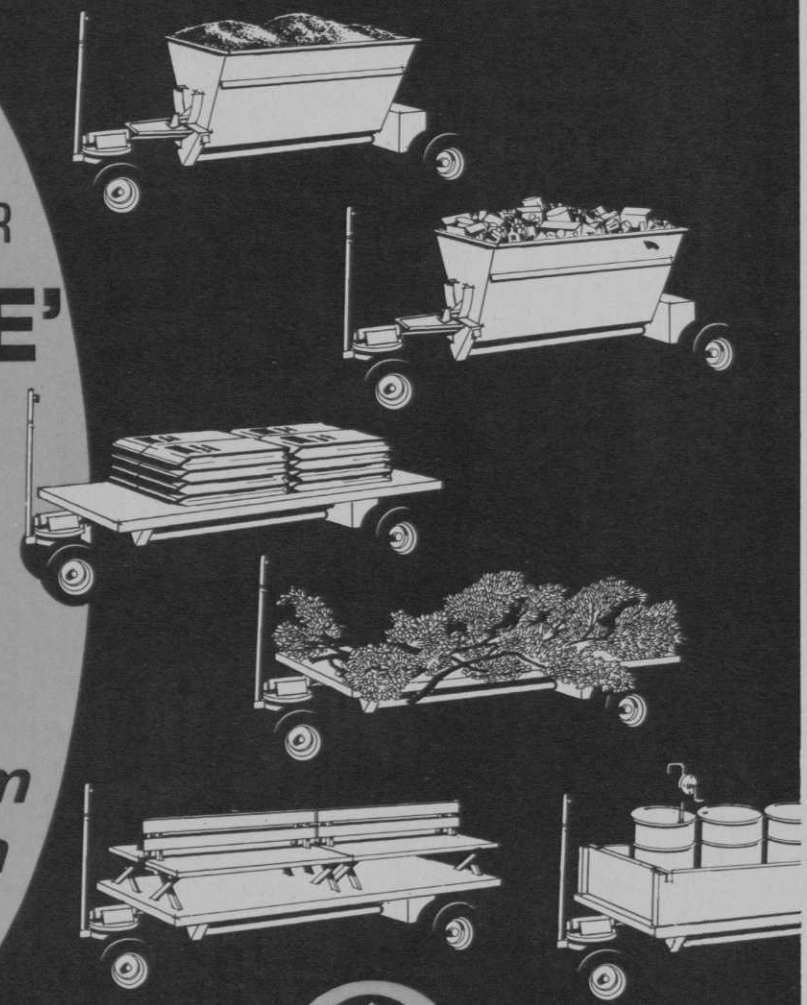

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POLLUTION

# SUPERINTENDENTS: ARE YOU MAKING WASTEFUL PURCHASES?

**By Dr. James B. Beard**

*Injury caused by air pollution to turfgrasses can be misdiagnosed by superintendents as a disease or as an insect or nematode invasion. Knowing what the symptoms are of pollution damage to turfgrasses can stop a costly and ineffective prevention program before it begins*

Direct toxic injury to turfgrasses by atmospheric pollutants is a new factor affecting the growth and look of turfgrasses. Although the complete loss of a turf from these toxic atmospheric gases or aerosols has rarely been observed to date, the injurious effects, however, a) reduce drastically the visual quality of turfgrass, b) lowers carbohydrate reserve because of injury to plant chlorophyll and c) weakens turfgrass plants, making them prone to damage from diseases, insects, nematodes and traffic.

These atmospheric pollutant injury symptoms can easily be misinterpreted as resulting from disease, nematode or insect activity. It is important, therefore, to make the correct identification of the cause. Otherwise an expensive program of fungicide, nematicide or insecticide applications may be initiated that will not be effective and will waste time and money. Thus, it is extremely important to properly document and identify the specific cause.

Up to now the injury problems to the turfgrass leaf tissue have been primarily chronic. Higher, acute injury, causing extensive damage to the turf, may result if higher concentrations of these toxic atmospheric pollutants occur in the future. Hopefully, the latter condition can be avoided if the pollution sources can be eliminated or controlled. The most common phytotoxic atmospheric pollutants of concern in the turfgrass culture are (a) sulfur dioxide ($SO_2$), b) fluoride, (c) peroxy acetyl nitrate (PAN) and d) ozone. The latter two are commonly called smog.

### Injury symptoms

Visual symptoms of injury from atmospheric pollutants generally occur to the leaf tissues, which are intimately exposed to the toxic atmospheric pollutants. Specific leaf injury symptoms are associated with each of the four pollutants (Table 1). These symptoms can be used to identify the pollutant involved.

The location where the injury occurred should also be considered. As a general rule, ozone injury is more common along the Atlantic coast of North America whereas PAN is more common along the Pacific coast. Sulfur dioxide injury is generally associated with urban or industrial areas where sulfur containing fuels, such as coal and oil, are used or where sulfide ores are smelted.

Fluoride injury is not as common as the other three and is restricted to more isolated, localized areas ad-

*continued*

# POLLUTION

**WASTEFUL** *continued*
jacent to industries which release fluoride gases into the atmosphere.

### Factors affecting injury

Actual inhibition of shoot growth can occur before visual injury symptoms appear. The toxic gases are absorbed into the leaf through the stomatal openings. This is particularly true of ozone and PAN. Injury most commonly occurs to young, actively growing tissues where the stomata have formed and are functional. Old, senescing leaves and the very youngest leaves are usually less sensitive to ozone and PAN. Growth inhibition is generally the result of chlorophyll destruction, which inhibits the photosynthetic process.

The environmental conditions can also affect the relative susceptibility of turfgrasses to injury, particularly from sulfur dioxide. The same environmental factors that ensure maximum opening of the stomata will also increase susceptibility to injury from atmospheric pollutants, particularly ozone and PAN.

Certain cultural practices also influence the relative susceptibility to injury from atmospheric pollutants. It is important to avoid nutrient deficiencies, which weakens the plant. A plant nitrogen deficiency, in particular, increases injury. Similarly it is important to utilize the proper mowing height and frequency to ensure optimum turfgrass health, carbohydrate reserve and recuperative potential. Avoiding practices such as excessively close mowing, removal of excessive quantities of leaf tissue in any one mowing or excessively high nitrogen levels are particularly important in order to maintain a high carbohydrate reserve. Generally the effects of atmospheric pollutants are of short duration in which chronic injury symptoms develop.

*continued on page 49*

**Table 1.** Turfgrass injury symptoms associated with the four most common atmospheric pollutants.*

| Type of chemical pollutant | Turfgrass injury symptoms | |
|---|---|---|
| | Acute | Chronic |
| Fluoride | Dull, water-soaked appearance in the interveinal tissue at the leaf tip, plus transverse banding across the lower portion of the leaf | Gray-green, water-soaked appearance at the leaf tip; subsequently, light-tan to reddish-brown lesions appear and extend down the blade in a fairly uniform front |
| Ozone | Initially, light brown lesions appear; necrosis and bleaching of the leaf tips follow; red fescue has minute, dark-brown stipples; ryegrass has a glossy dark-brown necrosis of the entire leaf | Same |
| PAN | Initially, the lower leaf surface appears oily; followed by a metallic silver or bronze sheen or glazed appearance over the upper portion of the leaf; annual bluegrass has a tan transverse banding; ryegrass has a purple transverse banding; eventually chlorosis develops and extends down the leaf | Same |
| Sulfur dioxide | Dull, water-soaked appearance on the margins and interveinal tissue of leaf tip; subsequently the leaf dries and bleaches to an ivory color | Gradual yellowing of the leaf interveinal area progressing to a bleached appearance; the leaf tissue does not collapse |

*Based on the available information which will probably be refined through additional research.

**Table 2.** The relative susceptibility of the commonly used turfgrasses to injury by four atmospheric pollutants.

| Type of chemical pollutant | Relative susceptibility | | |
|---|---|---|---|
| | Low | Medium | High |
| Fluoride | Redtop | Kentucky bluegrass | Annual bluegrass<br>Perennial ryegrass<br>Red fescue |
| Ozone | Zoysiagrass<br>Bermudagrass<br>Chewings fescue | Kentucky bluegrass<br>Perennial ryegrass<br>Red fescue | Creeping bentgrass<br>Annual bluegrass |
| PAN | Kentucky bluegrass<br>Bermudagrass<br>Zoysiagrass | Italian ryegrass<br>Perennial ryegrass | Annual bluegrass |
| Sulfur dioxide | Bermudagrass<br>Zoysiagrass<br>Redtop | Annual bluegrass<br>Kentucky bluegrass<br>Perennial ryegrass | Chewings fescue<br>Red fescue<br>Creeping bentgrass |

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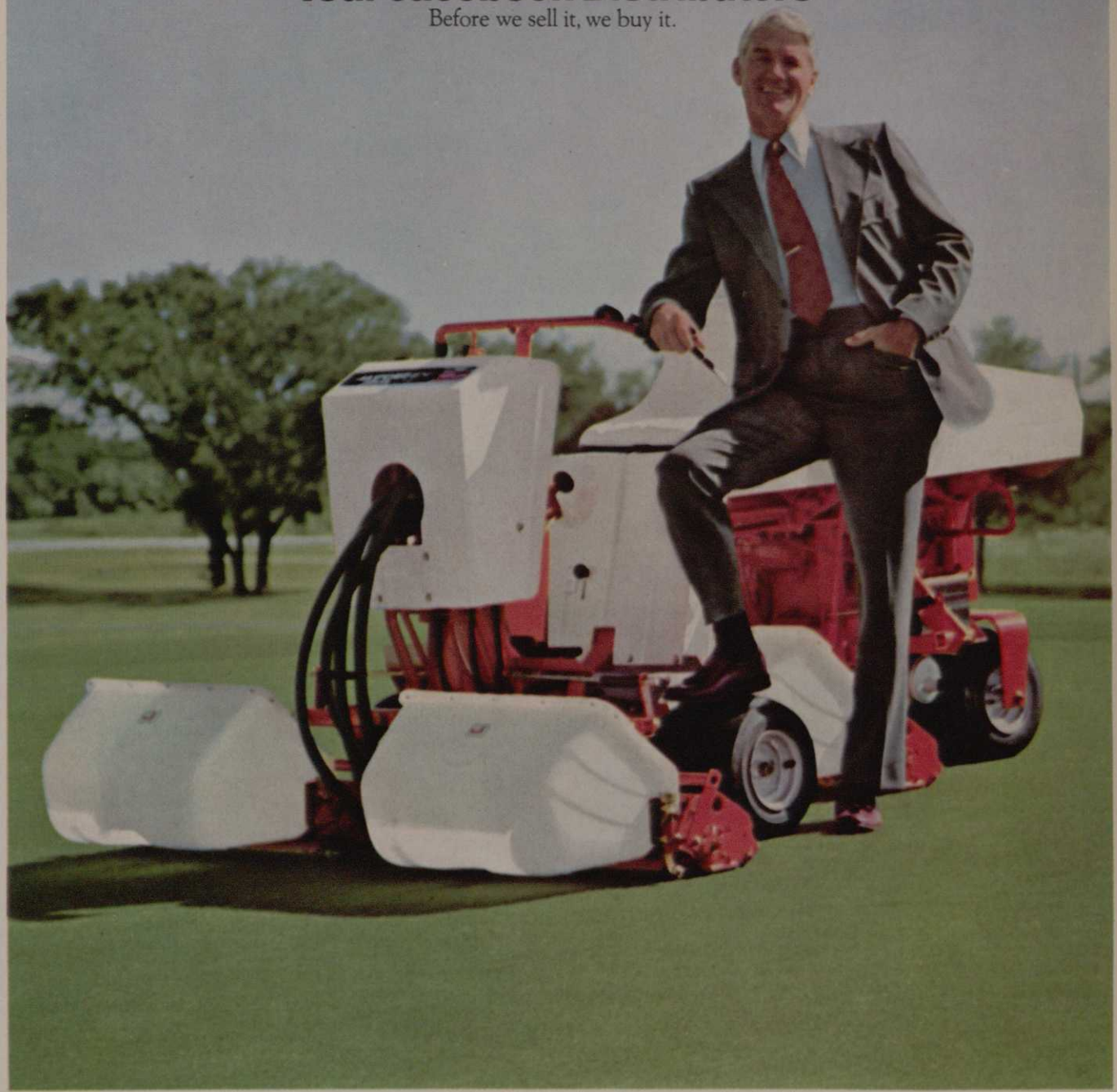

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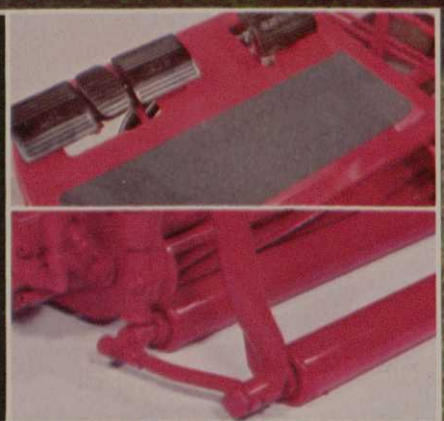

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**WASTEFUL** *from page 44*

New leaf growth will generally replace the injured tissues within a short time unless phytotoxic concentrations persist in the atmosphere. Thus, it is important to maintain a high carbohydrate reserve so that an adequate level of carbohydrates is available for new shoot growth during those recuperative periods following leaf injury and the associated loss of chlorophyll. The degree of injury is also associated with the concentration of the atmospheric pollutant and the duration of exposure.

**Species, cultivar susceptibility**

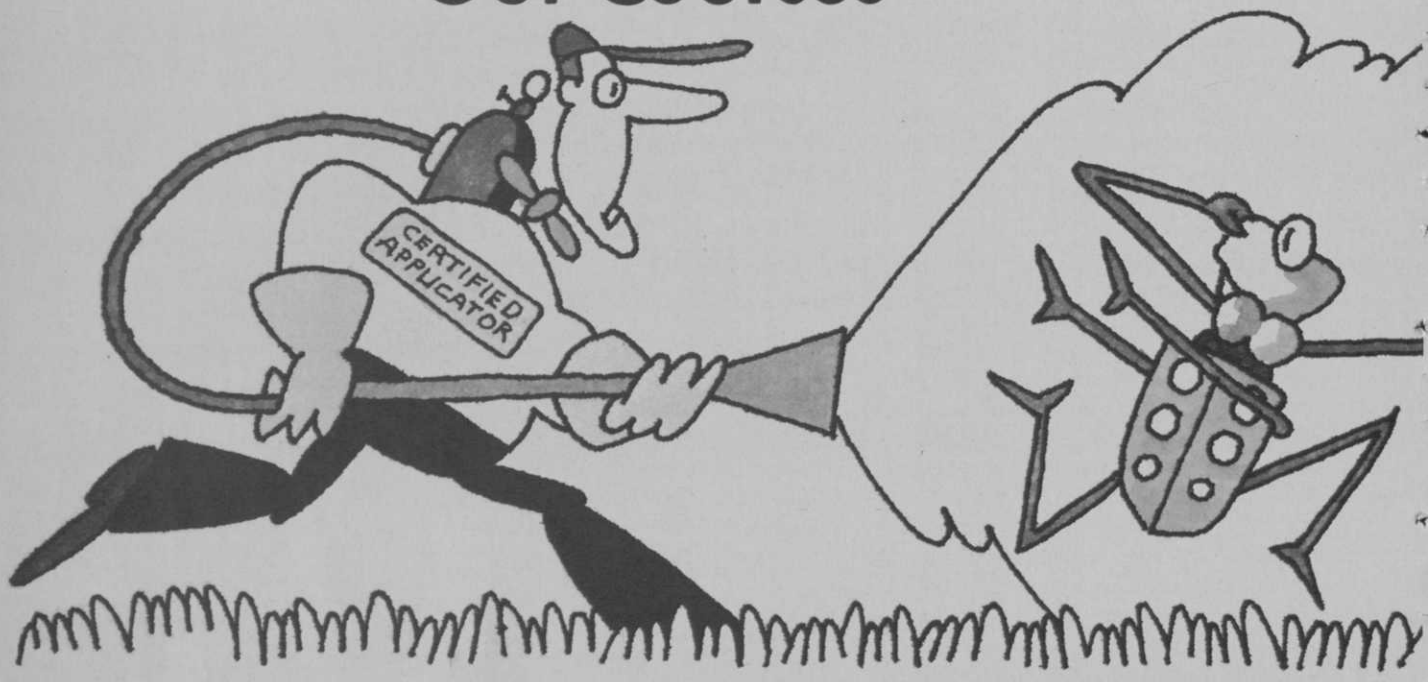
Turfgrass species vary in their susceptibility to the four atmospheric pollutants (Table 2). Also, the relative susceptibility is not necessarily the same for all four pollutants. As a group, the warm season turfgrass species are more tolerant of atmospheric pollutants than the cool season species. Kentucky bluegrass generally ranks intermediate whereas the creeping bentgrasses and annual bluegrass are very susceptible to injury. Annual bluegrass is very prone to injury from ozone and PAN. This is quite significant because creeping bentgrass and annual bluegrass are widely used on golf course greens, tees and fairways.

There is also considerable variability in the relative susceptibility to pollutants among the varieties within a given turfgrass species. For example, Santa Ana bermudagrass was selected for its superior resistance to ozone and PAN as compared to Tifgreen. Among the bentgrasses, Kingston velvet bentgrass and Highland colonial bentgrass are the least sensitive to ozone; Penncross creeping bentgrass is intermediate; Astoria colonial bentgrass and Seaside and Cohansey creeping bentgrass are the most sensitive to ozone injury. Among the Kentucky bluegrasses, Merion and Kenblue are less susceptible to ozone injury than Belturf. Delta is even less sensitive than Merion.

To date no specific cultural practices or techniques have been developed or studied sufficiently so that they can be used to reduce the severity of atmospheric pollutant injury to any significant extent. The best solution now is to use the more tolerant turfgrass varieties and species. □

# Chemical Regulations:

# How They Will Change Our Courses




*The American standard of golf, like the standard of living, is the world's highest. An impending Federal law regulating pesticide use could drop that standard back to the weed-cluttered, disease-ridden level of 1930 golf courses, according to pessimists. Optimists say it will merely spur American ingenuity to find better ways of keeping American courses green, lush and carpetlike*

**By C.W. Griffin**

Today's golfers seldom demand more than perfection in the condition of their courses, but few will accept anything less. Like the American farm, the modern American golf course is a scientific and technological marvel, unrecognizably different from its prototypes. On nineteenth-century Scottish golf courses, grazing sheep "mowed" the fairways. To clear the putting line on the greens, golfers had to brush away what were euphemistically called "impediments." Until World War II, watered fairways were a sybaritic luxury, restricted largely to ultra-exclusive millionaires' clubs. Seasonal changes from lush green to toasted brown fairways were accepted as part of the game. To cope with baked, concrete-surfaced greens, the chip-and-run-shot was a vital part of every golfer's repetoire. During a summer drought, one didn't dare fly a nine-iron shot to the green; one played the contours for the inevitable bounce and roll.

But times have changed. Club members, proud of the soggy length of Gnarled Oaks' championship course, don't want it shortened into a drive-and-pitch layout by a summer drought. The maintenance of perpetually good playing conditions has become a financial necessity for Southern public courses competing for the patronage of winter vacationers. The same golfer whose front lawn looks like the morning after the Day of the Locusts demands a smoothly textured carpet of verdant turfgrass yielding a perfect lie anywhere on 50 acres of fairway. He wants putting greens true as a billiard table, yet soft enough to stop a half-skulled two-iron shot. Says Sam Cifelli, veteran golf course superintendent at Rockaway River CC in Denville, N.J.: "I die a thousand deaths a year. Every day is a different headache."

Tough as it now is, however, the superintendent's job may become even tougher when Congress finally enacts Federal legislation establishing new nationwide pesticide controls. Pesticides are only one weapon in a potent arsenal that has enabled golf superintendents to produce their minor miracles over the past quarter century. But they have proved indispensable in combatting the worst pests. If their use is drastically curtailed, golf clubs would face the unpleasant alternatives of either a) raising the $90,000 annual maintenance cost required to keep an 18-hole course in