Vice President Gerald A. Ford, while on a Christmas skiing vacation in Colorado, made a statement to the press that clearly expresses the feelings of most Americans about recreation and the gasoline shortage. In reply to a question about the possible effects of the energy crisis on American recreation, Ford said, "Recreation should not be restrained," adding that he hoped "there won't be any restrictions because recreation is a much needed American activity."

This article is concerned with an important segment of recreation; one that directly affects golf course superintendents and their livelihoods: golf courses.

It's easy these days to be pessimistic; one has only to scan the newspaper headlines or listen to nightly newscasts. In this article, we will explore ways by which the golf course superintendent can cope with the shortage of energy, beginning with golf course maintenance.

A LITTLE MORE LIKE ST. ANDREWS
A minor cutback of around 10 per cent or so of the monthly gas allotment to the golf course storage tanks should not hamper daily maintenance and grooming operations on the course or landscape acreage. If the superintendent needs to make up the difference, he can do so by filling the tank of the maintenance truck at his local service station (some city- and suburban-owned police cars, trucks and buses are doing this,) and requesting the station to bill the club or asking the superintendent to issue him a credit card.

However, if the Government rations gasoline or if available supplies of that fuel decrease substantially, then all who are involved in the running of the golf course will have to face the cold fact that this year will be a difficult one, beset with problems every step of the way.

Meetings with the chairman and green committee should be scheduled immediately and discussions held about decreasing the amount of manuring and maintenance requiring expenditures of fuel. Priority, of course, must be given to maintaining greens, fairways and tees, but the superintendent can point out to the committee that other areas of the course, those that receive less play, can get by without excessive maintenance.

If the superintendent and the committee decide upon an emergency maintenance cutback program, the membership must be kept continually informed to avoid any misunderstanding. Members are fully aware of the energy crisis and will no doubt be tolerant of changes if they are kept up-to-date.

Less fuel for maintenance equipment will mean longer hours, hairy bunkers and long grass bordering around trees and shrubs. Surprisingly enough, and the superintendent might tell his members this, these "natural" elements will result in a better-playing course—the way the sport used to be, and is, played in its native country.

For too many years, American superintendents have groomed golf courses to an excessive and expensive degree. The American golfer has become spoiled by around-the-clock grooming; he expects a good lie no matter where his ball lands.

Maybe a severe gas shortage will remedy this picture-book perfection. Courses will again become interesting and challenging. A little harder, certainly, but a little more like St. Andrews.

LABOR
There should be an ample supply of labor this year due to the many layoffs in industry. Prospects are also good that college and high-school students will be available for summer or part-time work. The superintendent, for the first time in many years, can be discriminating in his choices of both the adult and student labor reserves.

More important than the excess labor pool this year, will be transportation of members of crews. Golf courses that had the foresight many years ago to build employee housing will be in the driver's seat, especially if gas rationing goes into effect. Those clubs without quarters for seasonal employees and those clubs located far out in the country are going to experience more difficulties. The superintendents at the latter courses might help implement car pools or persuade the club to rent mini-buses. Both these possible approaches will work only if employees come from a neighboring area. Clubs in the second group may be forced to provide temporary living quarters for workers, especially for night personnel or key employees.

Higher gas prices will also affect the superintendent's financial outlay for transportation. In that case, the club may have to implement a gas allowance for him and his key assistants or increase their hourly wages.

The present, popular move toward transporting crews by vehicles will no doubt revert to the old method of walking, or possibly one vehicle could pick up all the men out on the course.

Training, discipline and supervision of crew members is more important than ever. For example, make sure a workman takes all the tools he needs to complete a particular job. Returning frequently to the maintenance building for a forgotten tool wastes valuable time. Idling engines and coffee breaks also will become taboo.

New construction, too, should be postponed until the energy crisis subsides.

Superintendents in their programs must adhere strictly to a more consistent and economical maintenance of the golf course.
had problems with slow deliveries of parts and replacement equipment. Because of that, golf course mechanics are carefully pre-inspecting equipment before tearing down. They know that if parts are unavailable, they'll be stuck with the impractical task of putting everything back together. This precaution saves time and money for the club.

Such foresight by mechanics and superintendents is justified by facts. Dealers in many cases say they are getting only 50 per cent of their normal part orders from manufacturers. Apparently, many small, family-type operation part manufacturers have gone out of business because of the high cost of upgrading their facilities to meet OSHA clean air standards and because of the high cost of labor.

To a great degree, labor also has slowed down the production of new equipment. One dealer told me that, although pre-season orders are far ahead of previous years, delivery of raw material and component parts for engines, bearings, rods and castings is slow, which means that the superintendent must order machinery parts much earlier than he has been used to.

Parts that are available will have to be ordered more frequently by mail, through catalogs, parcel post and other types of paid transportation, just to keep up with normal wear of machinery. New crew members must be diligently trained to handle machinery properly, so they won't cause irrepairable breakdowns. Equipment currently in use on the course must be kept in the best possible condition until parts are available again. Good mechanics will never be more appreciated than at this time.

We all know that the prices of new equipment have been increasing steadily and the old policy of companies placing an order with a guaranteed price at delivery time is rapidly changing. The policy now, sorry to say, has become one of vacillating prices several times a year, with no time afterward, with the possibility of saving one or two price increases.

Another way superintendents can conserve gasoline during the energy shortage is to replace gasoline-powered equipment with diesel-powered, enhancing both fuel economy and engine maintenance. One superintendent whose large course equipment is all diesel-powered, states that there is about 50 per cent less fuel consumption with diesel equipment.

CHEMICALS

The herbicide 2,4-D will be the most affected by the fuel shortage because it has a petroleum base. This product this year will cost more. There already have been two price increases in the last six months because of the increased price of raw materials. The major chemical companies claim they have no control over these price increases and, like other companies, say they are caught in the same economic bind and must pass on increased costs. They say also that there will be a shortage only if demand exceeds supply.

One major manufacturer reports that they anticipate no restriction of major users of this chemical. If there is a restriction because of scarcity, they recommend that the superintendent supplement 2,4-D with Banvel, an excellent broadleaf killer. This combination with another chemical could alleviate shortages of this very important herbicide. Banvel costs more, but its price is not too far out of line, considering its increased performance. Bear in mind that the ester form of 2,4-D (rarely used by golf courses because it is volatile) has a petroleum solvent formulation and the popular 2,4-D amine form is formulated with water. In the long run, though, the raw materials of the various components of petroleum will become more scarce, thus increasing costs.

The situation with 2,4,5-TP (Silvex), another good weed killer, is about the same as that of 2,4-D.

Fungicides in which benzene is the basic petroleum make-up, also are at the mercy of the energy crisis. These fungicides will probably increase in price as they become more scarce. The superintendent can help himself in his effort to fight disease-fungus attack by using precautionary techniques, such as spraying less (cuts down on water costs and loss of nitrogen by leaching), mowing in the evening, keeping grass a little longer and praying. If there's a long, hot, humid spell and a lot of rain, nothing but prayers will help. Here again, the superintendent who communicates in advance with his committee and membership will be ahead of the game, even though the grass might turn brown because of possible shortages of fungicides, but I doubt that.

Many superintendents purchased fertilizer early this winter, because they anticipated shortages and price increases. There are strong rumors now that nitrogen will become scarce. Although for many years, fertilizer has been exported in great quantities, the recent lifting of farmland bans will put more land into farm production. This will result in a greater demand for basic soil fertilizer elements. So, even if the fertilizer production remains constant, the increased demand will produce shortages, although one major chemical firm anticipates no scarcity of its nitrogen product, because it makes its own nitrogen. It cannot guarantee, however, that its prices will remain stable. This particular product increased in price by 25 per cent last year. Other companies that have to buy their basic nitrogen from other manufacturers will no doubt increase prices due to higher costs of labor, ingredients and transportation.

One company that makes a product containing a natural, organic source of nitrogen phosphorous and trace elements increased its prices only slightly, about 4 per cent this year, and anticipates no shortages.

Superintendents will have to increase their fertilizer budgets, but the smart ones will save both money and worry by proper management techniques.