31 - soil conditions also favour the desirable bent and fescue grasses. By maintaining the correct degree of soil acidity we can therefore kill two birds with one stone as far as this is concerned.

Modifying soil acidity levels is indeed one of the most hopeful lines of approach as far as limiting future worm populations is concerned. In future situations where casting is causing problems and where effective chemicals are prohibited, there remains the possibility that we can discourage worms to an acceptable degree by enhancing soil acidity. Of course this process can be carried too far - if we reduced the soil pH to 3.0, for example, then there would be virtually no natural earthworm activity.

Unfortunately, even the fine turfgrasses would then tend to suffer from such a heavy degree of acidity and the resultant turf would be weak, prone to moss invasion and witness the appearance of bare patches. A compromise could be reached, however, where sufficient acidity was present to have a markedly discouraging effect on the worm whilst at the same time allowing sufficient grass growth. At the present time one tends to see more worm activity on parkland fairways than elsewhere and it should certainly be possible

'Effective chemicals may well be banned but we may be able to keep worm populations down to acceptable levels'

with acidic materials without detriment to the playing quality indeed it is perfectly possible that playing quality could he enhanced by such treatments. The chemical which most readily springs to mind in

to treat such fairways

the context of soil acidity is sulphate of iron and this chemical is already playing a not insignificant role in reducing earthworm populations on golf greens. In the future, if chemical toxins are banned, sulphate of iron may be increasingly used for worm discouragement purposes, even on fairways. A rather more drastic treatment of a similar kind would be to use sulphur itself and such treatment is already occasionally carried out where fairway soils are too alkaline. It should however be stressed that sulphur requires careful handling: a trial plot involving applications of several rates per square metre must be laid down on an individual fairway and the effects assessed over a 12 month period before definite recommendations can be made on a more widescale use of the chemical.

In summary, earthworm control is more difficult now than in the past, due to the increasingly responsible attitude taken by public opinion towards environmental matters. Effective chemicals may well be banned but there is every possibility that we may be able to keep worm populations down to acceptable levels by other means which are not ecologically unacceptable.

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Part 6

A major requirement for a chairman of green is detailed knowledge of the machinery and tools owned by the Club and subsequently used on the course. Having discussed this matter with other green chairmen, it seems that it is handled in several different wavs

Some have little knowledge of machinery and rely entirely on the greenkeeper. Most others realise that the knowledge must be shared. Whilst the greenkeeper and chairman of green have a direct responsibility for each item the secretary also requires detailed cost information to arrange for effective and adequate insurance cover.

A proven method of bringing all relevant information together is to produce a two part register. Part One for plant and equipment and Part Two for tools. When complete the register can become an integral part of the Club records and an essential for annual stocktaking.

Plant and equipment

First an individual form is required for each item. To record the relevant details, columns will need to include type of machine, manufacturer, model, serial number, year of purchase, cost when new, replacement value, condition, purpose of use, date and originator. Whilst some details may be taken from the manufacturers supplied data the original cost may require a visit to the office archives. Replacement values may also be a little more difficult to obtain and will almost certainly require help from a local supplier who is aware of current prices.

Selected information for each item can be progressed to a second or master list which will allow the value columns to be totalled. This second list can best be prepared by sorting individual forms according to type of machine, eg: tractor, PTO driven, tractor mounted, ride-on, pedestrian, carried and ridein.

Tools

For tools a single alphabetical list is sufficient and should include column headings for quantity, type of tool and replacement value.

A greenkeeper directly involved in the project will have an excellent opportunity to discuss the merits of each item as it is recorded, an example being at my own Club when we found one machine that was almost medieval, another without safety guards and several tools - including a ladder - which were dangerous and needed replacing.

A usual response to the completed project is

one of surprise at the amount of capital invested, the age of some machines and particularly the replacement value. It can prove to be an ideal aid for those required to make recommendations for machine replacement.

Soon after completing the register we suffered a break-in. Together with several hand tools we lost a pedestrian scarifying machine.

The investigating officer was most impressed when we produced our register enabling us to supply details of the machine. However his eves glazed over when we tried to describe the machine to him, especially as he was concerned that during investigations he may see the machine but not recognise it from our description. At that moment we realised that our register was incomplete and a photograph would have saved a thousand words.

As a result of our loss and acting upon the recommendations of the investigating officer we received a later visit from the crime prevention officer. He warned that if we were thought of as being a 'soft touch' thieves would likely return with a shopping list. He went on to advise that our machines were highly desirable and would be easily disposed of by crooks. He suggested that we:

· Paint the name of the Club on each machine.

· Mark the handle of each tool with the same paint.

· Fit security grills to all windows.

· Install a floodlight with infra-red sensor to illuminate the area in case thieves made a repeat visit.

Extend the clubhouse burglar alarm to include the workshops and vehicle storage sheds

· Ensure that workshops are locked when unattended.

Display notices to would-be thieves that every item was colour-coded and that all buildings were protected with sophisticated burglar alarms.

Our experience has served to remind us that we cannot scrimp on security and that the opportunity for both impulsive and premeditated theft must be reduced to a minimum. If this means the installation of expensive security systems, then so be it. Unfortunately it will most likely result in an increased membership subscription and/or reduction in the annual machinery replacement fund.

Readers may care to know that whilst a computer package cannot yet physically paint tools and equipment in the manner described, the TRIMS programme, specifically designed for greenkeepers, is available to record all the essential data outlined above.

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