Ronnie Bunting describes the work he has done at Kilmacolm Golf Club and gives some thoughts on environmental management

Over the span of 33 years in golf greenkeeping, 26 as Head Greenkeeper and Course Manager I have always attempted to be positively pro-active within the industry. The following topics are intended to kick start some constructive discussions. Like anyone who sticks his or her head over the parapet, that person becomes a target for praise or ridicule. Through such discussions, the outcome I believe can only be constructive.

The following is meant to be food for thought, and not, do as I do!



Above: Ronnie Bunting

Below: The picture taken below in early August 2001 shows the degree of Fusarium that recovered without any chemical being applied.

Like most Greenkeepers I have an active interest in environmental matters. To this end I have here at Kilmacolm been very successful in bringing attention to members and the general public that the term golf course does not always refer to an area of barren grassland, with wallto-wall cutting and grass that looks like a Celtic football strip. It can be an area of outstanding beauty not only for quality turf on which to play golf and the scenery but the wildlife that dwells in the out-of-play areas. These we can also manage for the social union of nature and mankind not only by protecting the existing habitat but also by creating new areas of mutual interest with great benefit

There are some golfers who do not appreciate the wonders of nature, as they are blind to all but their game. Only once this loveliness is pointed out to them do they appreciate the importance of their surroundings. I

have found this among many of my members.

In my Environmental portfolio I have addressed a number of topics intended to reduce the amount of toxic chemicals I apply and would like to share some of my thoughts with you. Are we being fair to assume that applications of cure-all's are the correct way to go about our business? What will be the effect in the decades and centuries to come? Remember the after effects of the chemicals used to de-foliate the jungles in Vietnam. An extreme example but it did happen and the results we see today are the evidence to justify that we consider alternatives!

I ask the question. Do we need to use the amount of fertiliser and chemicals we budget for annually? Should we apply preventative sprayings? Do we need to apply nitrogen in such amounts that by doing so creates a flush of growth that disposing of the cuttings creates environmental problems, or applying copulas amounts of nitrate at a rate the plant cannot expect to use and in doing so we contaminate our waterways.

Then comes the after effects, Thatch, Fusarium, Poa Annua, and the biggest threat of all peoples acceptance of the poorer playing standards we ourselves have created. I believe that by using top dressing as a source of nutrition coupled with a little nitrogen and plenty of aeration should be sufficient to retain a healthy and robust sward and produce a much easier kept playing surface.

Fusarium

We have all experienced this turf disease at some time on our greens, and if you received the same training as I did - blanket treatment must be done as soon as humanly possible. Or spray every six to eight weeks as a preventative. Both veins of thought very much the norm at some golf courses and both very expensive not only in financial terms and manhours but also in terms of lasting damage to the useful micro organisms and beneficial fungi in the soil. Is there an alterative? I believe there is. If the outbreak is only in certain areas of greens there may be good reasoning to spot treat. If the outbreak is serious during the end of the season going into autumn and justifies blan-ket treatment so be it. Or it may be that in leaving it alone it will recover without anything being done at all.

A strong healthy infertile bent dominated turf has great resolve. One other operation I feel helps when conditions are such that disease threatens is to scarify tees and greens aprons and verticutting greens, opening the base of the sward allowing air in and therefore keeping it drier I feel helps considerably. How often does it seem that attacks of Fusarium on the greens starts in the surrounds? I have never sprayed fungicide on tees or aprons.





Leather Jackets

My opinions on the damage done by these grubs may be probably singular but it is based on my observations over many years. Fact, I have never seen turf stress caused by this insect. The only damage I have seen is caused by birds in search of them. This I believe is a bit like the angler finding a beautiful loch

and knowing there should be fish in it but only after six or eight hours of fruitless fishing asks the question I wonder if there are any trout in here!

On the greens I don't see the bird damage as a major problem as greens are either cut or rolled or switched every day, dispersing any debris. A similar approach I adopt to tees and surrounds and fairways. The semi rough tends to show some lasting damage but it is caused again by the birds searching for the grubs and not by the larvae. Even this damage recovers very soon when the soil tempature allows some growth. To back up the above statements, during the spring of 1999 I noticed there was more bird activity than usual.

At the spring outing of the Scottish West Section I started a discussion based on the above scenario with some of my colleagues and was left in no doubt they felt I should have sprayed with insecticide on a preventative basis as they had done.

Please bare in mind at no time was the playing qualities of my course questioned. (Greenkeepers outings are one of the main sources of constructive education I know).

The following day I talked to my staff and told them of the conversa-

tions that took place. My assistant, John Hart, suggested we mark an area of one metre square on the 13th green surround (an area which usually gets some bird activity) and watch for turf stress during the season. Once the grubs were leaving the soil to metamorphoses into Daddy Long Legs we would take a daily basis count of the vacated sheaths within this area. This

we did and over a two week period within the marked area 229 vacated sheaths were counted.

At no time during the spring or summer was there any sign of stress this included a very dry August. I feel this begs the question. Do we wage chemical warfare unjustly on, leather jackets, soil organisms, other innocent insects, birds and their young, golfers, the general public, course staff, etc?

Soaking this part of my 13th green and covering it overnight with hessian sacking has highlighted the infestation of leatherjackets during the last week in March 2000. The amount visible would generally demand an application of pesticide. Fact! No insecticide was used and at no time during the season were any of my greens to show any effects of turf stress.

Weeds and worms

If you have cast forming worms you will almost inevitably have weeds; the worm cast is the ideal seedbed. Following the banning of chlordane it is my opinion that only cultural controls are left, because in the very near future even the remaining less effective but just as toxic worm killers have to be applied on a more regular basis will be banned. Therefore I think we had better prepare for the inevitable. Lowering the pH to a level creating a more acidic soil making it more uncomfortable for the poor worm, gently inviting them to go elsewhere. Anywhere other than turf earthworms are of a great benefit.

I now only spray rosette type weeds on fairways tees and semi rough, Daisy, Dandelion, Cats Ear, Hawk bit, White Clover patches and these only in certain circumstances by spot treatments where possible. In doing allows Viola, Spotted Moorland Orchids, Lousewort etc to flourish. Other weeds in my turf are Heath Bedstraw, Pearilwort, Woodrush etc these are kept in check by scarifying they co-exist quite well in the heathland turf.

The biggest weed problem at Kilmacolm was Bracken; we undertook to control this plant in the areas out-of-play to allow a greater diversi-ty of plant species. The results have been quite spectacular not only did we increase the type of plants but also the variety of bird life to feed on them. In total we controlled 27 acres these areas we map and treat any regeneration systematically keeping detailed records of its regeneration and treatments. It is still allowed to be part of the collage of colour that exists in the mixed flora and is still an important and valued part of the landscape, but it has to be monitored to ensure it never again dominates to the extent of creating a mono-culture.

Molinia caerrulea or Purple Moorgrass is a problem because it is slowly replacing the native Heather that has been weakened by heather beetle and the ageing process. Due to the shallow rock mechanical solutions are all but impossible. Following the visit of the judges for the BIGGA Environmental Competition we discussed introducing grazing of out-of-play areas to our management in doing so we would redress the conditions favouring the heather at the expense of the Molinia. The implications of such a move have still to be discussed at committee level. It seems a clear case of "do we want to keep our heather and if we do this is the only way we can do it".

Nettles There are a few different types, Whitedead Nettle, Reddead Nettle, Stinging Nettle etc. All of which has differing environmental, values dependent on the classification of being, Common, Frequent, Rare, and Very Rare. We have only one small patch of Stinging Nettle on the entire course therefore it is classed as Very Rare and as one would assume it is of high environmental value particularly to the Beautiful Peacock and Red Admiral species of butterfly both of which is on serious decline. The site of this patch is only

two meters off our 1st tee. The requests, even demands, to have it strimmed down or sprayed out, come on an annual basis. This is also the case of Spear and Marsh Thistles sited in various out of play areas. To see Gold Finches in healthy numbers feeding on the downy seed, picking off every individual piece of down before eating the seed is one of nature's wondrous sights.

My feelings towards the people who make the above request are two fold. Explaining the environmental benefits and my reasoning are accepted and they are impressed by my knowledge and caring attitude, or on the other hand some say we don't care just get rid of them. Such are the highs and lows of being a concerned individual. I must point out the latter being very much the minority.

If I were to estimate the savings on Chemicals, Time, Storage, Container disposal, etc I'm sure it would run into tens of thousands of pounds over the last five years. If it were possible to measure the feel good factor for achieving something which in the long run will benefit golfers and the general public's opinion of the Golf Industry, and also the earth born companions that we share our golf courses with. The rating would certainly be very high.

To conclude may I take this opportunity to promote the good intentions of the Scottish Golf Course Wildlife Group, and the "Committed to Green" Organisation, from whom we haven't heard much

of lately.

The most imaginative of all the reasons behind the creation of BIGGA, was the in-house education delivered by people who have training down to an art form. BIGGA administers ongoing selfdevelopment programmes to enable golf Greenkeepers to become more professional and get more respect, with the end result being better conditioned golf courses I personally have used the regional training courses to the full and I have reaped the benefit in many ways. I am astonished that over the past few years we have had these courses reduced and many cancelled not because of the lack of creativeness on the part of BIGGA or due to golf clubs not willing to pay, but due to lack of interest from Greenkeepers.