

## Straight talking from JIM ARTHUR

Probably, no, *indisputably*, the worst problem that can face anyone in charge of any established golf course is how to improve dominantly annual meadow grass greens (*Poa annua*) and survive to tell the tale, let alone produce results.

All too often the failure of such a programme, with the resultant trauma all round and loss of reputation if not job, has led some who have tried and failed to claim that the task is impossible and "we have to learn to live with annual meadow grass". The experience of others belies this.

In theory, since we know that the natural grass cover of any ecological system is determined by its management as much as by its environment, all one has to do is identify the cause of *Poa annua* dominance, reverse the management practices that changed the grass for the worse, and 'hey presto' – more desirable, hard wearing, fine textured species will replace that ubiquitous weed grass, dominance of which is the source of 90% of our greenkeeping problems but which like the poor (pardon the pun!) will always be with us!

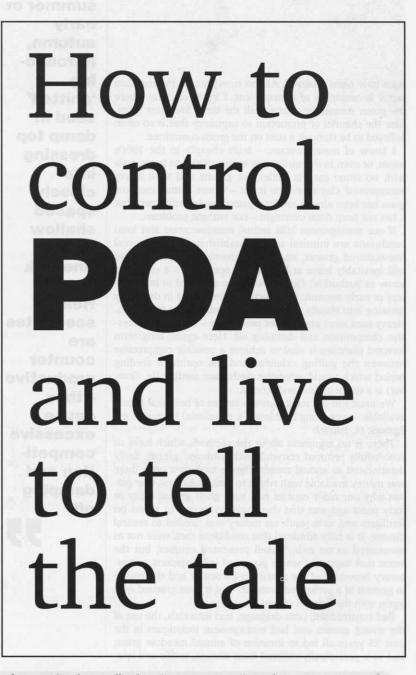
Since we know that *Poa annua* responds to high fertiliser treatment and specifically to high phosphates; over-watering and under aeration, more austere management with low levels of nitrogen-only fertilisers; controlled and limited irrigation and deep frequent aeration should bring about the desired result. That's the theory. Practice is something else!

Only where there has been a relatively short period of bad or misguided management and there has been a past history of dominance by either bent (*Agrostis tenuis*) or fine fescue (*Festica rubra*), or a mix of both, is this programme likely to restore the original more desirable grasses. But all too often the abuses have been perpetrated with gay abandon for many many years, whether this has been a famous links or the local course.

If in such cases we then institute a maintenance programme specifically designed to discourage Poa annua, what happens? The weed grass goes - its speed of departure depending on the enthusiasm with which austere (ie. traditional) greenkeeping is implemented - but without the positive steps all we get is bare ground. Then, as is natural, there is disillusionment at all levels and a return to the bad old systems - especially as all too often this is what today's new golfers want - 'nice and green' holding greens and plenty of grass under the ball on fairways - the latter effectively ensuring that no-one can stay on firm greens, which in turn results in demands for more feed and more water. It is hard to credit, but I have had several personal reports of courses where the greens have responded to management and become faster and firmer and of Club captains and their like demanding that a collar be created round the green "mown at 1" in height to stop balls rolling off the putting surface". Words fail me! They might with equal logic demand low chicken wire fences on the perimeter of the putting surface. Balls trapped hard up and against either 'wall' are naturally unplayable - doubtless leading to demands for a free lift and drop!

Since some programmes have been successful in changing the grass type on the greens, what is the secret?

The first and most important thing is education of the members, through the normal channels. Explanations as to the benefits which will derive from tolerance of a relatively short if traumatic interim period may induce tolerance if not understanding, especially if the events are not as bad as their forecast paints! To achieve this understanding we *must* have continuity of management as well as enthusiastic acceptance of the desired aims. Sadly today, this is probably the hardest aim to achieve, involving as it does replacement



of conventional annually changing green committees by a *permanent* and properly structured management body working to a defined course management policy document.

Few things have cost head greenkeepers (particularly younger and/or less cautious ones), more loss of sleep, of reputation and even of jobs, than a campaign against annual meadow grass dominance impatiently implemented without prior warning and agreement. If for no other reason, consultation, explanation and consideration for the golfing calendar will avoid all three problems. Historic research and investigation is needed: If the root zone is impeded or there has been a past history of gross overfeeding over many years, it may be easier to accept that we have to continue to live with this wretched weed grass, producing tolerable conditions for only half the year at best. Nevertheless, backed by a convincing Club management, understanding members, and with greenkeeping skills akin to riding a bicycle over Niagara on a tight wire, superb and permanent transitions have been achieved. Almost in every case the common factor is *continuity of management*. I know of none where the green committee changes all the time. We must eliminate the channel of promotion to captaincy that is so often believed to be through a stint on the green committee.

I know of many courses, – built cheaply in the 1960s boom, or even in the earlier one of the 1920s, on heavy soils with no stone carpets under the greens and with heavy 'unimproved' clay root-zone levels – where annual meadow grass has been almost totally replaced by *Agrostis tenuis*, but it has not been done overnight – nor without problems.

If our management kills annual meadow grass and local conditions are inimical to the establishment of perennial fine-textured grasses, an austere greenkeeping programme will inevitably leave at best a thin open turf – a condition know as 'Arthuritis'. One answer is to overseed in late summer or early autumn, introducing 'chitted' seed in damp top dressing into closely spaced shallow hollow tine fork holes. Heavy seed rates are counter productive – they cause excessive competition and damping off. Here again, long term forward planning is vital to achieve a sensible compromise between the golfing calendar and the optimum seeding period which would otherwise clash. Late seeding (ie. October) is a waste of time and money.

We must use the most *vigorous* strains of bent and fescue available – even using Highland (*A. castellana*) instead of eg. Egmont (*A. tenuis*).

There is no argument about the methods which have so successfully restored erstwhile old fashioned greens, sadly deteriorated as annual meadow grass took over once there was money available with which to make mistakes. One reason why our older courses had such good greens thirty or forty years ago was that there was no money to spend on fertilisers and as a result no money was needed to control disease. It is fully admitted that conditions then were not as manicured as on today's well presented courses, but the worst that happened was a plague of leatherjackets or *temporary* browning of the greens in particular and the course in general in a prolonged drought – but it soon greened over again with the first fall of rain.

Bad construction, poor drainage, bad materials, the use of the wrong grasses and bad management techniques in the past 25 years all led to invasion of annual meadow grass; and as it periodically suffered from disease, traffic and win-

answer is to overseed in late summer or early autumn, introducing 'chitted' seed in damp top dressing into closely spaced shallow hollow tine fork holes. Heavy seed rates are counter productive - they cause excessive competition and damping off.

ter wear, remedial measures which were unwise or based on panic reactions ensured its rapid dominance.

Incidentally, I was depressed to hear a comment the other day that perhaps the Penncross and allied bents have not been given a fair trial. They were first misguidedly used in Britain over 20 years ago, following the enthusiastic recommendation of those who played on superb bent putting surfaces in summer on American courses that were closed all winter – or indeed where there was no winter at all. Very little if any survived the first year or so, with annual meadow grass eagerly filling the gap. How much longer do we need to give house room to these alien grasses, excellent where there is either no winter or no winter golf, but useless where we play under winter conditions as well as demanding high budgets and high manpower to keep the species in trim?

I do not accept observations or criticism from those whose experience relates only to the States or where their courses are under snow for months on end. All I ask is that we learn from the expensively acquired experience of others who have trod the same path before us and that we do not repeat the same old costly mistakes. These same mistakes with Penncross etc. have been made in New Zealand and in the States as well as in Europe (outside the Mediterranean area), with well documented evidence to prove it.

What then is the message? Simply to plan ahead – even a year ahead – and spend the time between plan and execution in educating the members of the advantages to them in terms of better winter playing conditions, if they will only tolerate some inconvenience and less than perfect playing surfaces for fairly limited short periods over a span of two to three years. A successful programme hinges on everyone concerned (well, almost everyone, as this is a far from perfect world) being in agreement about the aims and understanding the repercussions of the methods.

Bull at a gate methods, with vociferous and uninformed members baying for the greenkeepers blood, will always end in tears. Your first task – and the hardest – must be to bring the members with you – enlisting the aid of agronomists or Golfing Union officials with evening discussions and constant reminders. This may take more than one year, but be patient – and if there is clearly no support, move on.

Why? Because there is no future for greenkeepers without recognition by their Club management of their professional status.

