PARKLAND PROBLEMS

By Martin Jones, head greenkeeper at Saffron Walden Golf Club, Essex

IN Britain today, there are more parkland golf courses than links, heath and moorland put together. Nearly all new courses will, of necessity, be termed parkland.

But, in 1898, one Garden G. Smith wrote: 'It is quite certain that, had the ground on which ordinary inland golf is played today been the only available ground for the purpose, the game would never have been invented at all.'

I'm grateful to Garden G. Smith for providing me with an ideal introduction and to F.W. Hawtree for including this quotation in his excellent book *The Golf Course.*

'Golf was born on the links of Scotland, and this is the true game, the Royal game, the Ancient game. Around the turn of the century one or two far sighted men saw possibilities in open heathland and began the trend toward inland golf. True parkland courses followed a little later, and between the wars there was an inland golfing boom which has continued to this day.'

There were a few very early parkland courses, e.g. Royal Blackheath in the 17th century. Such places were largely unrecognised as golf courses – overgrown, lush, worm-infested and only playable for a few months a year.

I make no apologies if these words sound familiar – they have been used repeatedly to describe courses in the 1980s. These very early courses were cursed with the same parkland problems we find today. Fortunately, we have, or should have, the knowledge and technology to solve them.

The key to successful golf-course management lies in the imitation of nature. This applies to architecture and greenkeeping or, if you like, terrain and turf.

The terrain – or land – of the original Scottish courses was gently undulating linksland. Many heathland sites had similar terrain and were fashioned into excellent courses. But parkland varies from the mountainous to the billiard table flat. It is the skill of the architect that extracts the best from these usually non-ideal sites.

Recently, at a place called Loxahatchee, Jack Nicklaus has built an undulating links-like course on a piece of totally flat Florida land. Over one million cubic yards of soil were moved in the process. This is obviously an extreme case. In practical terms, the aim should be to provide interest and variety with the minimum of earth moving. This applies particularly to changes made to established courses. It often rests with the greenkeeper to keep everyone's feet, literally, on the ground.

One obvious feature of parkland courses, virtually absent on their links ancestors, are trees. Early architects immediately saw the possibilities of trees and with only a little opposition, perhaps too little, they were quickly incorporated into the framework of golf.

Trees perform three functions on a golf course – strategy, penalty and aesthetics. Discussion on the relative merits of strategic and penal architecture I'll leave to the architects and the 'Spike Bar Experts'.

It is in aesthetics, the quest for beauty, that the course manager must be most careful. At no stage can he afford to lose sight of the fact that he is employed to provide a turf surface upon which to play golf.

Trees cast shadows and restrict the flow of air over turf. Damp, thin, diseased fairways are too high a price to pay for a few autumnal weeks of attractive foliage. In addition to the direct effects of trees on turf, there is an indirect one. The management of trees is labour intensive. Leaf sweeping, debris collecting, pruning and, ultimately, felling are all time-consuming tasks, time that could be better spent tending the turf on which the game is played.

For new planting, indigenous species are obviously best, but they should be restricted, bearing in mind the needs of the turf.

Also, unwanted seedling trees must be controlled. At Saffron

Not a pretty picture – unsightly scrub.

Poa Annua devastated by Basal Rot – the 2nd at Saffron Walden.

Walden, heavy rough areas are high mown once or twice a year to prevent them turning to scrub and, ultimately, woodland. Isolated, self-sown specimens are marked for protection, but they are well-spaced and remain solely for aesthetic reasons.

Originally, parkland was for looking at and possibly the grazing of deer. The large estates had sufficient money and cheap labour to maintian their trees. Today, those parks are golf courses and with many clubs already lacking the resources to maintian their turf to the highest standard, we can ill-afford unnecessary trees.

I'm not suggesting that all trees should be felled, merely that they be put in perspective. Some trees contribute directly to the way the game is played, either strategically or penally. Some trees enhance the appearance of the course. But overplanting, or lack of seedling control, detracts from the open aspect of a golf course, which is fundamental to the production of quality golfing turf.

On the subject of turf, the greenkeeper's job is to manage a surface on which to play golf. A sound management plan is essential for any enterprise. Many basic management textbooks include the following:

Objectives – these are the aims of the organisation. In the case of golf-course management, these would be the ultimate standards desired, given the constrictions of site, climate and resources.

Policy – management actions to achieve the objectives.

Feedback – problems met in the implementation of policy, which may suggest changes to policy, but not to objectives.

Setting objectives in the business world is the province of top management of a golf club is not qualified to establish objectives for the course, so the not qualified to establish objectives for the course, so the greenkeeper/course manager should offer help and advice. The objectives can be as brief or extensive as you like and this can be best illustrated by an extract from the long-term objectives at Saffron Walden:

'The surface of the tees should be dry, firm and, above all, level. The total teeing area at each hole should be sufficient for year-round use. The sward should be composed of mainly Agrostis and Festuca grass species and as free as possible from Poa Annua, weeds, coarse grasses and moss.'

Once the course manager knows what is required of him, his job becomes much easier. But it must be made clear that objectives do not change with the committee chairman.

Now it is known what is required, policy can be set. This is best done with the guidance of an agronomist – obviously, an advisor sympathetic to the objectives should be selected. Policy is essentially a basic management programme to achieve the objectives.

Referring again to my course, the policy is one of maximum aeration of all areas, with minimum use of fertilisers and water. It is set out to achieve the long-term objectives and will produce a certain kind of course. The top management of the club must be prepared for the type of turf you are striving for. Without such a system, nobody knows whether you are winning or losing.

So, objectives and policy have been set and agreed. The resources have been made available and the implementation of policy can begin. This is where we meet the parkland problems and we find ourselves back with those very early courses – overgrown, lush, worm-infested and only playable for a few months a year.

The inherent fertility of parkland soils – especially when compared to links and heaths – produces a huge 'crop' of grass annually. The inland spread of golf was only made possible by the development of the mower. Virtually every square yard of a parkland course requires some form of mowing. Modern machines enable us to carry out the job fairly quickly, but the operation is enormously expensive in terms of men and equipment.

However, it is not necessary to carry out wall-to-wall close gang mowing – usually proposed in the name of 'speeding up play' or 'keeping the place tidy.' An attractive and, in summer, penal grassland can be maintained by infrequent mowing. Even then, the mowing operation merely controls seedling trees and woody weeds. On some sites, occasional weedkilling may be necessary in isolated areas. Clovers can be particularly troublesome in the rough. Here, expenditure, and especially labour, must be minimised to enable the main playing areas to receive the most attention.

Steep banks should be avoided wherever possible, for they look unnatural and are difficult to mow. Where such banks are present, or unavoidable, growth retardants are becoming more popular. There are three types available, each having advantages and disadvantages. If bank mowing is a problem, these chemicals are certainly worth trying.

Routine mowing occupies most of the summer months and a parkland course manager is well aware of the need for efficient, well-maintained mowers, replaced to a planned schedule. Without mowing, a parkland

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Contrasting healthy Agrostis and sick Poa Annua – the 3rd at Saffron Walden.

course would be unplayable by the end of May.

The long-term solution to this particular parkland problem lies with the grass breeders. Cultivars that grow only to a specific height will soon be available. If machinery and labour costs continue to rise at the present rate, it may prove economical to spray off grass in the rough and re-sow with 'non growing' cultivars but, for now, that is just science fiction.

Parkland courses were, and still are, built on a wide variety of soil types, but at least two problems – earthworms and less than ideal drainage – are usually found.

Casting worms spoil the turf surface and should not be tolerated, even if the soil naturally favours worms or their presence is a result of previous faulty management. Fortunately for the time being, we have a most-effective wormkiller in Chlordane. This gives long-lasting worm control, but its other effects are unknown. It certainly controls insect pests, deters moles and birds and, if a suitable warning sign is posted, keeps a few golfers off the course.

Control of worms reduces weed problems, but on a fertile parkland soil, the course manager needs to be ever-prepared to deal with heavy infestations. Plantains and daisies are particularly undesirable in any great number.

Drainage, however, is a subject in itself and one I'll leave to the experts. One thing is certain – aeration helps. My motto is: 'If you are stuck for a job, go out and put a few holes in some turf.' There is a wide range of machines available for this work. Hollow, solid or slit tines all have their applications. With aeration machinery getting quicker and wider, hand-forking is often the only way to treat small inaccessible areas, e.g. narrow paths between bunkers.

The old parkland courses were only playable for a few months – many present-day parkland courses are only fit for play for a few months. In over two hundred years, all we have managed to do is to persuade golfers to play under poor conditions. The reasons for this are well-known – Poa Annua, excessive thatch and a lack of aeration. While these are not unique to parkland courses, they are real or, at best, potential problems on all parkland sites. They are found on all areas of the course, but it is the greens that illustrate them best.

My objectives for putting greens (a much better phrase, with the emphasis on *putting*) are that they be in use for as much of the year as possible, firm, fast and true and composed of Agrostis and Festuca grass species as much as possible. No mention is made of turf density, colour or holding properties.

All management practices are geared towards achieving these aims. That the policy of maximum aeration, minimum water and fertiliser will ultimately achieve these ends is not in doubt, but there are problems in doing so. Many many think they are insurmountable, but this has not been the case at many courses up and down the country.

The first problem is the psychological barrier of assessing quality. The first converts must be the greenstaff. You can have the very best intentions, but if you judge a green by its appearance from fifty yards, then disappointment is inevitable. Colour is irrelevant and as long as the ball rolls fairly smoothly, then some bare patches are nothing to worry about. After all, bare ground is a potential site for the desirable grasses to colonise. I'm often being told by members, usually the older members who play every day of the year, that the greens look awful... But putt really well.

It is a good 'political' move to use temporary greens as little as possible – the harder turf will stand it better anyway. This gives the members one of the benefits of Festuca/Agrostis turf, before they really have it. Besides, play in frosty weather appears to damage Poa Annua most.

There are many difficulties in presenting thin Poa Annua dominated turf for play. You cannot reasonably expect it to be easy if you are trying to kill it. But Poa Annua in turf, like any plant community, will try hard to survive. With lush, rapid growth and seedhead production, it rises like a phoenix from the ashes. Frequent verti-cutting, mowers fitted with combs and always boxing off cuttings, all help to remove as many seeds to the dump as possible. It can also present an acceptable putting surface.

I have had some early success using Aqua Gro wetting agent to suppress seedhead formation. Two half-rate applications made around the time of seeding appear to prevent the flowers developing fully. Whether these seeds are still viable, I do not know – they certainly are less obstrusive – and it gives a short-lived improvement in putting quality.

But this is merely an annual hiccup – for most of the year, you must maintain a turf composed partly of vigorous Agrostis areas and partly of thin, weak Poa Annua. This is most striking in early spring, when the bents start growth a couple of weeks earlier, while the Poa is still yellowish and semi-dormant.

With the one advantage of Poa Annua – the ability to quickly recover from wear and damage –

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were always fairly meagre, putting strict limits on the amount of cash we could spend on course upkeep. It was not until the 1960s with an increasing interest in the game created by the media and TV, that we found more money becoming available to allow a greater investment in staff, machinery and equipment.

Higher subscriptions, increased membership, more golf society play and one-armed-bandits all contributed to the growing affluence of many clubs and they found more money to spend on the course than before.

Coinciding with all this, we began to see the introduction of expensive, highly sophisticated labour-saving machinery. Those who for years had been accustomed to running courses on a shoestring, suddenly found themselves being swept along by the relentless tide of automation. Clubs were beginning to realise they had to spend on plant and machinery to maintain their courses at a higher standard and also to cope with all the problems created by the ever-increasing amount of play.

Looking back on my early career in greenkeeping, it was accepted that most of the work required a certain amount of sweat and toil. Manual labour was more plentiful and jobs were filled by convenience without particular regard for qualifications beyond the need for physical stamina.

Our knowledge was acquired by observation, asking questions, listening and gleaning what information we could from older and more experienced men. Job improvement evolved largely through ingenuity and the need for less laborious methods – there was little opportunity for educational improvement.

I am pleased that modern sophisticated machinery has taken so much of the drudgery and backache out of the work and has helped us to accomplish many jobs more efficiently and economically. The future is bright for young men now coming into the business. The job is more challenging and the rewards commensurate with the responsibility of running a first-class golf course. ●

PARKLAND PROBLEMS CONTINUED...

gone, greater care is necessary in all everyday greenkeeping tasks. Machinery must be maintained to high standards. Oil or petrol leaks can be disastrous on slow-growing, at times, near dormant, turf.

Cutting cylinders should be razor sharp for use on tender turf. Regular backlapping, even weekly on greens mowers, is most important. This is all made much easier if the equipment is maintained and replaced on a planned basis.

Obviously, low-density turf cannot absorb vast quantities of sandy top-dressing at one time. Several light dressings, spread through the season, are necessary. This treatment, with adequate staffing and mechanisation, can be achieved with little disturbance to play and further helps to smooth the putting surface. For example, this year I plan to give five or six dressings at half a tonne per green throughout the summer and a final double-rate dressing in the autumn.

The frequency of aeration usually recommended on our heavier inland soils, between weekly and fortnightly, presents some problems. On a thin turf, with inevitably some bare areas, frequent slitting will cause some surface disruption. But, with care, patience and well set up machinery it can be minimised. Disturbance decreases as time goes on.

Commonsense would suggest that weak Poa Annua should be more disease-prone than healthy Poa Annua. In fact, it is less likely to suffer severe attacks of Fusarium patch. Fungicide use drops dramatically with lower applications of water and fertiliser. The money saved could be spent on top-dressing – quickly, before the club treasurer notices!

On the other hand, starved turf is susceptible to Basal Rot, caused by the fungus Colletotrichum graminicola. It attacks Poa Annua mainly, so chemical treatment is not required – even if it were possible. It starts innocuously enough with a slight yellowing of the leaves but, combined with starvation, it can devastate a Poa Annua dominated area.

The policy stated minimum use of fertiliser and water. But how much is minimum? Commonly recommended fertiliser mixtures are zero phosphate, zero potash, a little nitrogen, plus iron. The aim is to kill the Poa Annua over a number of years – not all in the first year. You cannot continue to supply the nutrients essential for healthy growth of Poa Annua.

The same applies to irrigation. I try to keep Agrostis thriving, while Poa Annua is continually under stress. Just how far you can push it depends on how well you have done your public relations, how committed the green chairman is and how thick skinned you are.

Golfer education is a good idea – try to get as many members on your side as you can. A folder of appropriate articles left in the clubhouse certainly helps. In the height of summer, I keep the greens dry and keep out of the bar! In the autumn, I reappear to remind the moaners that the greens are good in winter because they were dried out in summer.

These are some of the problems commonly found in the management of a parkland couse. Some, such as excessive growth, can be solved with money and manpower. Weeds and worms can be treated with accurate and intelligent use of chemical technology. Lastly, the problem of the turf quality has to be tackled with guts, determination and not a little diplomacy.

To the golfing purist, parkland courses can never be ideal. But they are the most numerous and are usually conveniently sited. It is the course manager and his staff who allow golf to be played at all. The greater their skill and professionalism, the better the golf.

In conclusion, I believe that we should have good golf courses that happen to be on parkland and not parks where golf is sometimes played.

It is the golf that matters – not the park.

● *The above text formed an acclaimed paper delivered by Martin Jones at the recent EIGGA conference.*