

Golf Course Management

Reducing Golf Course Maintenance Costs

Many golf clubs in New Zealand are struggling for financial survival. This is as a consequence of rapidly rising costs for course maintenance coupled with and at best static membership levels and hence revenue streams. Unfortunately, it is likely that income will reduce further given the difficult economic times we now face and the effect that that will have on the discretionary spending of consumers.

The economic “sustainability” of many golf clubs is clearly under severe threat. Under these circumstances, really serious attention needs to be turned to expenditure and what only two or three years ago would have been seen as extremely radical action may be required. The economic events of the last few months, in particular those affecting the US economy may signal a “See change” in how we live our lives.

Since the Second World War economic growth and lifestyle improvement have been constant in the western world because of things such as cheap and readily available energy (oil) and all manner of innovations perhaps the most important of which have been in the area of primary production. With the current financial crises in the US being described as the worst since 1929 it seems likely that how we live our lives and how our economies function will change permanently.

Radical actions may be required to ensure that golf clubs can survive and indeed continue to prosper. Elimination of some of the “excesses” of golf course construction and maintenance seem to be inevitable. It should be noted that during difficult times, there are some individuals and organisations (e.g. golf clubs) who are insulated from the problems because of their wealth. Most will not be so fortunate and they will need to be clever and innovative if they are to prosper.

Golf Course Maintenance Expenditure

The expenditure on golf course maintenance can be broken down into three major items, namely:

- ❑ Labour.
- ❑ Consumables (fuel, fertilisers, pesticides, etc).
- ❑ Capital expenditure (i.e. machinery replacement).

Labour

There are 18 hole golf courses in New Zealand that are presented in remarkably good condition using one only full time equipment labour unit. This is achieved by:

- ❑ Minimising growth rates so that the amount of mowing required is also minimised.
- ❑ Concentrating labour input to the key playing areas only – the course may look a little “rough around the edges” but the game can be played and enjoyed as it was intended.
- ❑ Consideration means that there is no obsession with maintaining a pristine and perfectly groomed environment.

Hence, what clubs need to do is slow the turf grass system production down so that much less growth control (i.e. mowing) is required. This will have nothing but benefits – reduced costs to grow the grass, reduced costs to mow the grass and improved playing conditions. However, many golf clubs have unwittingly been locked into these high cost hole production lower quality playing condition situations by poor decisions based on faulty advice (e.g. from sales reps). Clubs then need to focus on what is really important. In order of importance it is:

- | | |
|-------------------------------|-------------------------------------|
| ▪ Greens | ▪ Secondary rough/out of play areas |
| ▪ Green aprons and approaches | ▪ Bunkers/hazards |
| ▪ Fairways | ▪ Trees |
| ▪ Tees | ▪ Gardens |
| ▪ Primary rough | |

Focus on what is important and concentrate resources there

A consequence of reducing staff levels and hence maintenance inputs to certain areas, is that the presentation of the golf course will probably need to change. That is there will be consequences on how the golf course is presented when maintenance inputs to the areas are reduced. This should be communicated to the members and so that they understand why things will change. Concentrating on the key playing areas will ensure that the game itself can still be enjoyed as it always was. If there is a real passion for some of the niceties around the edges perhaps the thing to do would be to put that back on the members. That is if they really want such things they should do it themselves. In other words encourage voluntary labour to carry out nice-to-have but not essential maintenance.

Further to that in my opinion voluntary labour may be a way forward for many clubs. While this has fallen away in recent years, necessity may see an increase in its importance. In addition, other changes may influence this – for example, people are living longer and more healthily following retirement and in truth many of these people are looking for things to do with their time. It seems to me that this is a resource to be harnessed and utilised.

Consumables

Reducing inputs will in turn reduce growth rates and hence reduce mowing requirements. Essentially the requirement here is to clearly understand exactly how much growth is required to cope with the wear to which the golf course is subjected and reduce inputs to that level. While this sounds simple, it is often a painful process to go through. A good analogy would be an obese person. This so called obese epidemic is caused by too much input (i.e. too much food) and not enough outputs (exercise/activity).

Many of our golf courses are obese simply because they are feed and watered too much. We then need to “exercise them” by expending unnecessary energy on high frequencies of mowing and renovation. If we stopped feeding them so much and thinned them down they wouldn't need as much output.

While this sounds easy in theory it is not necessarily as easy as in practice and some pain may need to be encountered along the way. Key requirements will be accurately determining and being fully aware of the level of inputs required, communication with members and committed golf course maintenance staff. The aim must be to establish minimal inputs and then avoid the temptation to start ratcheting them up even though that may be affordable. You want to maintain the golf course in the long term in a “lean and mean” state rather succumb to temptation and start to consume too much.

Water requirements

In many parts of New Zealand, provided that the right grasses are present in the areas other than the greens, the only areas that really require irrigation are the greens themselves. In the other areas, if a healthy, deep rooted sward of the right perennial ryegrasses are present the lack of irrigation does not result in an unplayable golf course during the dry months. It might be very “sporty” (i.e. hard and bouncy), but the playing conditions can be better than adequate.

Obviously there needs to be some acceptance of the situation and in some very dry years, conditions may be far from ideal. However, in the overall scheme of things that is simply not too bad and just needs to be accepted. Hence the only areas that require significant irrigation are the greens and their immediate surrounds. Clearly this will minimise the amount of water that needs to be used. On golf courses where the greens are made out of soil and they perform well, any thoughts of incorporating sand into the greens must be dismissed because they will simply add cost with no significant benefit.

High quality management

Something that needs to be said is that a really careful, studied intuitive and knowledgeable standard of green keeping will reduce the cost of maintenance. This high standard of green keeping will avoid unnecessary excess and manage the turf in such a way that disease problems are minimised and hence the need to apply fungicides for disease control are minimised.

Give the turf a chance

Many turf quality problems such as high levels of disease activity are brought about by shading from trees. In this situation you can either spend money on fungicide to control the disease or you can remove the trees to remove the cause of the problem. Hence you need to do everything you can to optimise the growing environment for the desired grasses and in so doing minimise problems with disease.

Reduce the maintained area

Clubs may need to learn to accept a slightly more “unkempt” look that is a consequence of retiring areas from maintenance. Reducing the maintained area and concentrating resources in the playing areas will reduce costs. Reduce or eliminate grooming (raking) on bunkers. They are hazards after all and there is no reason not to hand this job over to the players.

Machinery choices

The answer here will lie in turning back the clock. Changing to hand mowing greens will have benefits in terms of reduced costs to buy and maintain the machinery, reduced petrol usage, improved turf quality and health benefits for those doing the mowing. The problem with walk-behind mowing is that it is more time consuming. However, if we slow down the growth of the grass as discussed previously, a reduced frequency of mowing will be possible without a reduction in turf quality. Hence, the overall amount of man hours required may be no different.

Dispense with dedicated fairway and rough mowers that are more expensive to purchase, maintain and run. Instead, revert back to trailed gang mowers towed by small tractors. These are quicker, much cheaper to run (usually as petrol) and quicker. The drawback is that some relatively trivial aspects of turf quality will not be as good. For example you can not achieve that really vivid, striped mowing pattern. Forget about mechanised bunker rakes – the golfers can rake the bunker.

Another thing to consider is that if growth rates are reduced to the suitable minimum, machinery will last a lot longer and hence the ongoing replacement cost will be reduced significantly for example, if you mow three times a week rather than six or seven times a week, mowers will last twice as long. Reduce the number of trees so that mowing in the rough takes less time and can be completed successfully with a set of trailed gangs.

Reintroduce livestock

Both Cap Kidnappers and Kauri Cliffs golf clubs use livestock on occasion to mow some parts of the golf course. The ultimate low resource used golf course is one where the greens and green surrounds are the only areas that are mown/highly maintained using walk behind mowers. Everything else is maintained by the sheep. If we ignore the greenhouse guest issues this is clearly the ultimate in low cost golf course maintenance. It should also be

noted by those who have never played on such golf courses that such golf courses can provide a very high quality golfing challenge and experience. While many might laugh at the prospect, this may ultimately prove to be a necessity for golf club survival in some cases.

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