

Environmental Issues for Golf Clubs

Part 2: Additional Environmental Initiatives

Introduction

As summarised in Part 1 of this Fact Sheet, golf clubs are obligated to comply with all relevant environmental laws. Beyond their legal requirements, golf clubs are not obliged to do anything. However, for moral, commercial or other reasons, many clubs will choose to implement additional environmentally beneficial initiatives, some of which are summarised below in Part 2 of this Fact Sheet.

Additional Environmental Initiatives

There are a number of environmentally beneficial initiatives golf clubs may choose to implement, over and above their legal obligations. Some examples include:

- Establishment and restoration of native vegetation and wetlands
- Improving native wildlife populations and their habitat
- Managing and minimising waste
- Resourcing local products
- Implement an environmentally and financially sustainable management regime
- Implement best management practices (BMP)
- Use of an environmental management system (EMS)

Establishment and Restoration of Native Vegetation and Wetlands

Golf clubs may decide that they would like to restore or re-establish areas of native vegetation and/or wetland ecosystems. New Zealand has lost over 80 percent of the lowland forests that were standing in 1840. Also an estimated 87 percent of wetlands have been lost since human settlement.

By incorporating areas of native vegetation and/or wetlands in their course layouts, not only will clubs be improving the local biodiversity, but it will also help to create 'uniquely New Zealand' golfing landscapes.

Such initiatives can be simply achieved by committing to plant native species when replacing existing plantings and/or by committing areas of the course to native plantings and/or wetlands. Ideally, these activities should be based on a clear vision for the golf course landscape and research to determine the appropriate plant groups and establishment

methods. NZSTI can assist clubs through the preparation of 'Golf Course Landscape' plans that establish the clear vision and provide specific guidelines for this.

Improving Native Wildlife Populations and their Habitat

As a result of habitat loss, populations of native birds, mammals and insects have declined, many to the point of extinction. Golf clubs may want to address this by increasing the number of native birds, insects and other fauna present on their course.

To achieve this, clubs may undertake to develop suitable habitats for target fauna, for example, selecting food source plants such as Kowhai and flax to encourage Tui and Bellbirds on to the course. Clubs may also establish corridors that link to adjacent properties to encourage wildlife movement onto their course. This goes hand in hand with development and restoration of native vegetation and wetlands.

Managing and Minimising Waste

Waste generated from a golf club can be extensive in quantity and varied in nature, from mountains of grass clippings to the occasional old broken machinery part. Currently in New Zealand, a formal waste management plan and waste minimisation are not legal obligations as they are in some countries. However, this is something simple that clubs may choose to implement, perhaps in small steps, building up to a holistic initiative – eventually managing all waste arising from the day-to-day activities associated with the running of a golf club.



The English Golf Union Limited (EGU) in collaboration with the Sports Turf Research Institute (STRI), have produced a best practice guide to Waste Management which highlights the use of the waste hierarchy: Eliminate, Minimise, Re-use, Recycle and Dispose (pictured left). If done correctly, a waste minimisation plan may, not only benefit the environment, but also produce cost savings for the club.

Resourcing Local Products

One way to not only help the environment but also support local businesses is to utilise local resources, products and services. Many of the products and machines used for golf course maintenance are imported so there isn't a 'buy local' option. However, clubs may choose to adopt a policy of always using locally manufactured products where possible. This philosophy could expand through all areas of the golf club, from course maintenance products and machines, to all aspects of the club house maintenance and operation.

Environmental and Financially Sustainable Management Regime

Golf clubs should continually review the amount of resources used to maintain their course by developing and implementing policies to move to more sustainable practices. The aim should be to avoid unnecessary excesses in the consumption of water, fertilisers, agrichemicals and fuel. Reducing the amount of resources used will provide both

environmental and financial benefits. There is no legal obligation to introduce sustainable practices however having such practices in place is highly desirable. It is one which NZSTI encourages clubs to adopt and is able to help clubs to implement.

Reducing resource consumption is a philosophical decision and one that may change the way a golf course looks and/or plays. Implementation of such an initiative should be based initially on an independent review of existing course maintenance practices and will require good communication with members, a robust course policy document that is both realistic and relevant to the club's requirements and a genuine commitment by the club.

Best Management Practices

Best Management Practices (BMP) have already been developed for a wide range of practices and are generally implemented to mitigate adverse environmental effects and/or reduce resource consumption. BMP should be developed specifically for individual golf courses - what is best for one course may not be for another.

Implementing BMP may provide financial benefits as well as environmental benefits. For example, a BMP for insecticide use would involve monitoring insect numbers and only applying an insecticide if a documented threshold is exceeded, as opposed to treating at the first sign of activity or on a calendar basis. The club will not only bring about environmental benefit by minimising the amount of insecticide applied to the land, but also the financial benefit from the use of less insecticide. NZSTI encourages clubs to adopt BMP and is able to help clubs to implement these processes.

Environmental Management Systems (EMS)

Another approach a club can take is to develop a formal Environmental Management System (EMS). An EMS would give a club a systematic approach to managing the consequences of all their operations on the environment. An example of an internationally recognised EMS is ISO 14001.

An EMS could form a major part of a club's course policy documents. However, EMS can demand a considerable investment of time and resources to establish and maintain the policies, action plans, documentation and monitoring and measurements, which are all required as part of the system. This considerable investment means that EMS's are probably best suited to larger golf clubs in New Zealand.

Also note that having an EMS does not guarantee compliance with the legal obligations discussed in Part 1 of this Fact Sheet. This will only be achieved through the implementation of the 'environmental action plans' developed as part of the EMS process and implementation of best management practices.

For further information on the initiatives discussed in this fact sheet contact your local NZSTI agronomist, or NZSTI Head Office.

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