



NATURAL AREA ESTABLISHMENT AND MANAGEMENT ON THE GOLF COURSE

Tim Butler provides some useful information on managing natural areas on your course

Nature on the golf course is gaining continued publicity. Golf course landscapes typically contain a diverse range of habitats, which provide opportunities for wildlife. Planting naturalistic areas on golf courses may be a very useful way of increasing the appeal of the course to golfers, while consequently accentuating the natural diversity and image of the golf course. Natural plantings are suitable for diverse areas including roughs, hillsides, along ponds and streams. Integration of naturalized areas is commonly practiced on new golf course developments, however little has been written concerning the implementation of natural areas on existing courses. From experience, meeting with turfgrass managers, much confusion exists about how to go about integrating natural areas on the golf course. With much media attention regarding the environment, people are beginning to realise that native areas can be very attractive when maintained properly. In the past, golfers had expectations about how the greens and fairways should look. In more recent times these expectations have also shifted to bunker and rough management and in some instances, the maintenance of native areas.

IN OR OUT OF PLAY

Probably one of the most commonly used methods of establishing natural areas is through the introduction of native grasses. This system as well as benefiting the environment may lead to a reduction in maintenance. Natural areas can be established in areas that are both in-play and out-of-play. Out-of-play areas can be planted to wild flower meadow mixes with species such as cowslip and foxglove included. It is very important to realise that these plants will grow tall over time and will greatly reduce playability if sown in the wrong location. Grasses such as the fescues are often sown and used for in-play areas. Such grasses will maintain a low growing habit and are often used as a base material for other plants to colonize the area. One of the main benefits with fescues is that they

will not develop the density of many other grasses, which makes them ideal for areas that receive a little play. It is vital that careful planning is put into deciding in and out of play zones or areas on the course or playability may be dramatically reduced.

Golf course superintendents spend a lot of time and money each year maintaining areas along stream banks and around ponds and wetlands. Grass strimming of these areas is a slow and tedious practise which staff rarely enjoy. Careful planting of wildflowers and native grasses in such locations if properly managed can dramatically reduce the amount of maintenance around these course features. Coupled with this, golfers on the course will be delighted to see masses of colour around lakes and other areas as it adds to the character of the course.

Wildflowers should be kept out of locations which receive a lot of traffic. Besides the issue with lost balls, wildflowers unlike grasses do not often rebound well from trafficking. In the past some people felt that wildflowers should be planted in small spaces, often nearby the clubhouse. It is vital to remember that when planting natural areas, "natural" needs to be kept in focus and these natural areas need space, sunlight and room to prosper. Natural areas will also serve to enhance wildlife on the course, although many do not realise that even in such surroundings that wildlife still need protection from predators and tree and shrub planting in these natural areas often serves to protect the wildlife.

ESTABLISHMENT

Establishment of natural areas on golf courses can be complicated and numerous methods have been suggested. In my opinion, excellent preparation is the key to the success of wildflower plantings. I have come across so many situations, where poor consideration was given

into weed management prior to sowing the natural grasses or wild flower areas, which in time lead to failure of the natural grasses and flowers due to excessive weed growth. Weed management is essential on new and existing sites, since weed seed banks are usually high in most soils. For in-play areas some suggest that you can stop mowing the areas in the rough that you have decided to naturalize and letting the existing grasses grow taller. From experience this method often raises problems, since the grasses will grow tall relatively quickly leading to in-play areas that are almost unplayable. In my opinion, one of the best options is to kill off the grass in the areas that you have decided to naturalize. It is important to ensure that you check the roughs prior to herbicide application in order to maintain any native flowers that may be growing.

The grass or wildflower seeds can be sown onto the bare soil and rolled in after sowing. When choosing wildflower seed, it is important that the seeds are native wildflower seeds. A good seed mixture often contains a variety of perennials as well as some annuals. Wildflower seeds are different to grass seeds in that some species within the mixture may take several weeks or even months to germinate, so patience is essential. Fertiliser application at establishment is usually not required except on very poor fertility areas. Wildflower areas may need light seeding every couple of years in order to prevent specific plant species from dominating the stand.

MANAGING NATURALIZED AREAS

Wildflower meadows like all turfgrass systems require some management. During the grow-in year 4-6 cuts may be required in order to get the meadow established and allow non-germinated seedlings to grow. The cut material needs to be removed after each cutting to prevent problems with poor air circulation and grass death. Basically, the rough needs to be treated like a hay field and we have come across situations where animal fodder has been cut from golf course roughs and sold. Having said this, some wild flower species can be poisonous to animals and humans and careful thought should be put into species selection. In many cases, golf course superintendents choose wild flower mixes that can be consumed by animals and this gives more freedom in future management strategies. After establishment meadow mowing is often reduced to 2-3 times yearly.

WEED CONTROL

Probably one of the biggest problems with establishing natural areas is weed invasion both during and after sowing. Perennial weeds usually pose most problems in the long term in native areas, with annual weed problems usually subsiding after a couple of years. Weed control strategies include:

- Mowing
- Manual weed removal
- Herbicide spot applications

Mowing twice yearly is usually an effective means of controlling many weeds, although some weeds may persist. Spot treating with herbicides does work, but emphasis needs to be placed on the fact that many so called weeds may actually be important plants in the native system and correct identification and inspection by a turfgrass agronomist is essential in order to build a management programme and maximise the golf courses potential.

Advice that we give to many turfgrass managers is to start small, evaluate how the native areas establish and grow, and if happy with the results then larger areas on the course can be converted to natural areas. It is vital that areas which are planted with natural grasses and wildflowers do not overly affect the playability of the course. In the past, some courses have rushed into planting native areas and have ended up with over penalizing golf courses. Native areas that encompass wildflowers may attract a myriad of birds and butterflies and provide a sea of colour and

fragrance throughout much of the year. We have all at one time or other seen pictures on postcards or on television of meadows full of vibrant yellows, oranges, blues etc. Unfortunately such images are not common place in many areas of Ireland or the U.K. in recent years. Planting native areas on the golf course could be an excellent way of differentiating your golfing facility from the rest. Golf is a cut throat business and standing out from the crowd is a way of attracting more golfers, which is where native planting may turn into an important marketing tool.

ABOUT THE AUTHORS

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Knautia species



Cornflower and Corn Chamomille



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