Roland Taylor gives some tips on establishing wild flower areas on your golf course...

Wild things

A golf course is ideal for developing areas of wild flowers, but if these floral features are to continue to flourish, they need to be carefully managed. If left to their own devices, the dominant species will eventually crowd out the other plants. Most of the wild flowers found in today’s meadows originally thrived in old meadows where farmers grazed livestock and had made hay. This meant that, periodically, the top growth was removed and any nutrients would have produced were returned to the soil. Strange as this may seem, it encouraged many species, especially the rarer varieties to survive. The removal of the cut material is critical for another reason: left on the surface, it suffocates the plants underneath.

When establishing wildflower areas, this scenario has to be created and managed. It is not just a matter of cutting the meadow and sitting back expecting results. This is a sure-fire way to failure.

When a site is being considered, it is important to sow or plant indigenous species to the area. At this stage calling in the experts is strongly recommended. There is a wealth of experience out there to draw from and suppliers can advise on suitable species and the management necessary to ensure success.

Preparation of the site is similar to that for most seedbeds, but there are important differences. A fine weed-free tilth is necessary if healthy germination is to occur. The soil should be low in nutrients. In areas known to have high fertility, annual weeds need to be eradicated with a systemic herbicide and then allow the ground to remain fallow for a season. There are two alternative methods: use sheet or remove the topsoil. Whichever one of these is used the final seedbed needs to be cultivated to a depth of 10 cm with a fine surface tilth.

Sowing can take place any time of the year as long the the right seeded varieties or mixture is used, but the best time is from mid August to the end of September.

The seed will need mixing thoroughly to ensure an even distribution of the different species of wild flower. Recommended sowing rates are 1.25 grams per m² for mixtures containing grasses and 0.5 to 1 grams per m² for pure wildflower. Broadcast the seed and follow by rolling to a depth of 5 mm. Finally, roll with a ribbed roller to cover the seed and ensure its contact with the soil particles. There are machines on the market that will carry this out in one operation.

If the mixture is made up of small seeds, this can be bulked out with silica sand or ground barley at a ratio of 1:4. Irrigation is not recommended, let nature take its own course.

The seeds have germinated and everything is looking good, so what next? Bearing in mind this is like growing a crop, it is necessary to remove the weeds and grasses. As herbicides cannot be used, an alternative is necessary and this is where mowing comes in. In the first year begin cutting in March or April depending on conditions. Cut down to a height of 2 cm two or three times a week when the sward reaches 5 cm. It is important that all the cutting materials are removed.

The final cut will be between September and October. Something else that needs to be taken into account is that any persistent weeds, e.g., docks, will require spot herbicide treatment or removal.

By the time the second year comes round the wildflowers should be well established and the mowing regime is completely different. Between March and April the first cut and collect should be carried out leaving the sward at a height of 5 cm. The second cut is done at the same height at the end of the flowering season, which can occur somewhere between August and October depending on climate. A further light up-division may be required in the autumn.

Failures can occur especially in the first year and amongst these is that the high levels of maintenance required have not been upheld and all the cut material must be removed. This later operation can be extremely expensive and labour intensive if the right equipment is not used.

In this country you cannot bank on the weather, and if the past few years are anything to go by, more often than not it’s going to be wetting and thick leaf growth. Cutting and collecting can be a mistake in these situations. Machinery continually has to be stopped and the system unblock, thus considerably slowing down the operation. When considering mowers for this type of work there are some important points to take into account. The rotary principle relies heavily on moving grass out of the cutting deck fast; otherwise it quickly builds up and slows down the blade. This compounds the problem and results in the unit finally stalling. During this process, both engine power and fuel are locked up, plus components are placed under considerable loading.

To avoid this in mind, the ideal machine is one that gets rid of cut material from the deck fast, so the chute needs to be wide and as deep as possible with no obstacles between blade and the back of the collector. In addition, the cutting system has to be designed so that maximum power is constantly available to the blades to maintain tip speed.

When considering machinery for this type of application, demonstrations should be carried out on the same day in the same conditions, preferably wet, then a true picture can be seen of each one’s capabilities. Cutting dry, fairly short vegetation is relatively easy. It’s the tough, lush, wet growth that sorts the men from the boys.

Conclusion

- Get the initial seedbed right.
- The quality and purity of the mixtures is vital, so only the best should be used. As with most products today, cheapness can be a recipe for disaster as some products have proved in the past.
- Check the mixtures that you are buying are clean and not just horsetails straight from a meadow. Use reputable companies who specialise in wild flowers.
- Follow the correct mowing schedule.
- Before deciding, have mowers demonstrated in the worst possible conditions, i.e. wet and thick growth. The wrong equipment can turn it into a very expensive labour intensive operation.

After the first year, the maintenance programme is relatively straightforward and a wildflower site will virtually take care of itself, providing the correct mowing programme is carried out. Because suitable conditions are available, other species can thrive alongside the grasses.

The key to success is to seek expert advice from day one and ensure you have the right mowers to maintain the site.