

TECHNICAL INSIGHT

PEST MANAGEMENT

Sustainable management of weeds, pests and diseases

We explain how effective weed, pest and disease management is an essential component of sustainable practice that protects the environment and people

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The need to control and manage weeds, pests and diseases is a requirement for all involved in maintaining and developing sports spaces. Indeed, it is a vital part of keeping these areas safe, healthy and fit for purpose.

Excessive weed growth can create slip hazards on hard surfaces and impact playing conditions on sports pitches. Even in created environmentally friendly areas, control of certain species is important to avoid competition problems. Effectively, weed management is an essential component of sustainability and protecting the environment and people.

LEGAL ISSUES

Prior to the UK leaving the European community, weed management was subject to various directives, including the Sustainable Use Directive. Arising from this, each member country had to have a National Action Plan in place, which established legal requirements and guidance, and was applicable to all involved in weed, pest and disease management in agriculture and horticulture.

The current plan is based on guidance and establishing targets. However, there are also legal requirements

in terms of operator training, sprayer testing and obligations when purchasing plant protection products.

Following the UK's departure from the EU, the National Action Plan is under review and a new one was due well over a year ago. This means the current one still applies. There are, however, some clear messages emerging from government that are very relevant to management operations. Paramount will be the emphasis on ensuring all approaches to the task of weed, pest and disease control are undertaken in the most sustainable manner by adopting an integrated approach.

What 'sustainability' means can sometimes be misunderstood – and the same applies to the term 'integrated'. Some jump to the conclusion that it means not using pesticides; some use the language of seeking alternatives. In truth, taking an integrated approach involves assessment of all the factors and methods involved so as to choose the most appropriate mix for a given situation that is economic, efficient and effective – and minimises impact upon the environment and protects the public.

SUSTAINABLE PRACTICE

For any given situation sustainable practice begins with producing a plan often referred to as an integrated management plan, which needs to consider the following points:

- Is control essential and could the need for it be eliminated or minimised by improved management and better planning of its use and requirements?
- If it is needed, what level of control is required? For example, does it need

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complete control, or could a certain level of disease, weed or pest damage be tolerated?

- The plan will review all the various approaches and methods available either as single methods or combinations. These include cultural, mechanical and plant protection products. These approaches will then be evaluated in terms of cost, effectiveness, safety, and health and environmental impact, and ideally be subject to life-cycle analysis to measure carbon impact.
- In creating the plan, it is also important to seek coordination of activities across all involved in managing the facilities.
- Following this review, an approach will be determined and adopted. If the approach involves the use of plant protection products, checks



DARIA NIPOT, SHUTTERSTOCK



will be listed to ensure such products are safely stored meeting legal requirements, and that fully tested and inspected equipment is used by appropriately certificated and trained operatives.

- The plan will also include a method of review and will be updated regularly to take account of developments and innovations.

All of this can seem quite daunting, but it does not need to be complex or involve lengthy documentation. It does, however, require evidence that all stages have been considered. The outcome is a demonstration of best sustainable practice. In my opinion, a sustainable practice is best practice.

PESTICIDES OR NOT?

Any article on this topic cannot avoid addressing the debate on pesticides. There are active lobby groups that

Above: Weeds can be a problem when growing on hard surfaces such as pavements

Inset: Clear surfaces are less of a slipping hazard

Bottom left: Pesticides have a role to play in integrated weed control

believe that all such products are unacceptable and unsustainable. However, it is important to take a balanced and evidence-based view.

Undoubtedly, in years gone by some of the pesticides used have been proved to be unsafe and removed. However, existing products are rigorously tested (far more so than for many other domestic ones) and subject to ongoing review. Strict regulations apply in terms of their storage and use. Again, the emphasis is that being sustainable is not about giving up pesticides as such,

but ensuring that where their use is needed, application is targeted and minimised in an integrated approach. It's also worth noting that the term 'plant protection products' now also encompasses biological products.

FOCUS ON CARBON

In all the approaches, carbon emissions and footprint must be considered. A recent comprehensive study undertaken by independent experts looked at a range of approaches to weed control on streets in Cardiff. Its results were very significant in that, looking at all the factors and including carbon implications, using plant protection products, far from being the least sustainable approach, was indeed the best for that particular situation.

Taking a balanced and integrated approach to weed, pest and disease management is the best

policy – indeed, many are almost certainly adopting such approaches without knowing. I recently spoke to a manager of sportsturf pitches in a city. She described her approaches and was surprised to hear from me that she was already very much adopting sustainable practice – she just didn't realise it.

All of us can and should aim to contribute to a more sustainable integrated approach to weed, pest and disease control.

■ **John Moverley is the former chair of the UK Amenity Forum, and has considerable experience of the sector and strong networks. He is the owner of JMM Solutions, a consultancy specialising in providing policy advice and assistance to amenity businesses seeking to develop sustainable practices.**