

# Seeing the Green

A look at the stewardship of pesticides and the shared responsibility of the whole turf industry in this.

Maintaining good quality, high performance turf is not an easy task. To do it well requires a greenkeeper with excellent training, personal dedication and resourcefulness. It also requires commitment to integrated turf management programmes and access to suppliers and products, which support and add value to greenkeepers' efforts and management skills.

While greenkeepers' techniques around the world may vary, they all share the same goal: To create an exceptional golf experience for their customers. But it is also a shared goal - one shared by turf industry suppliers.

## A SHARED CHALLENGE - RISING INDUSTRY PRESSURES

Well maintained greens, tees and fairways enhance the playability of a golf course and, in the end, lead to improved player satisfaction. Studies have also shown that properly maintained golf courses have environmental benefits, offering a sanctuary for local flora and wildlife. Despite these benefits, the golf course industry continues to come under pressure from environmental and misinformed groups. At the same time, pressure to ensure golfers satisfaction also continues to grow.

Recognising the value of turf as well as greenkeepers' need for unique solutions to these industry issues, pesticide manufacturers have committed to investing the necessary resources to bring to market new products and technologies. These are specifically developed, formulated, and packaged for professional turf management so that they are useful, practical, reliable, cost effective, and pose negligible risk to applicators, consumers and the environment.

## A SHARED RESPONSIBILITY - TURF INDUSTRY STEWARDSHIP

Pesticides have proven that they can contribute and play a valuable role in an overall disease, weed and pest management programme. However, to make certain that pesticide manufacturers can continue to invest in the development and support of turf products and that greenkeepers can continue to deliver on the full value of well managed turf requires stewardship.

Correct stewardship of turf pesticides is a responsibility shared by pesticide manufacturers and greenkeepers alike.

## COMMITTED TO BRINGING PRODUCTS TO MARKET

For pesticide manufacturers, stewardship comes in the form of product innovations, regulatory compliance, industry involvement and customer support and education. New active ingredients (AIs) are difficult to find, time consuming and costly to develop. On average, a new AI may cost in excess of £85 million and take 10 years to get from research to the marketplace. On top of this already substantial investment, there are specific additional costs associated with the development of turf products.

Before they can actually get into a greenkeeper's hands, new turf products must meet strict regulatory guidelines related to toxicity to non-target wildlife and lack of short or long term environmental impact, including surface



water, drinking water and soil. As stewards of the turf industry, pesticide manufacturers have invested significantly to ensure that turf products meet these requirements - a benefit to the environment and to customers.

Turf specific formulations are another way in which pesticide manufacturers act as industry stewards. Specifically designed for turf use, turf products are formulated so that they remain stable during storage and are easy for greenkeepers to mix and apply. These improvements in the formulation and packaging of products make them more convenient for greenkeepers and improve safety in handling.

Pesticide manufacturers also continue to seek performance and technical advancements, which extend the range of pests controlled or the range of situations in which existing products can be utilised. While these enhancements and additional testing require further investment - regulatory authorities require that any new uses are registered in every country where they are to be used - pesticide manufacturers continue to innovate because such use extensions increase the value of turf products for greenkeepers.

## DELIVERING VALUE BEYOND PRODUCTS

Pesticide manufacturers know it isn't enough to deliver innovative, dependable turf products. A high value, intensely managed market, like turf, also demands expertise, continuing education and innovation. Pesticide manufacturers support professional turf management in a variety of ways, providing both financial support and the expertise of their staff. This investment - helping to ensure the future of the industry - is a necessary part of doing business.

As mentioned earlier, new turf products are hard to find and expensive to develop. Once available, it is important that they be used wisely and

knowledgeably. To that end, good stewardship on the part of pesticide manufacturers includes commitment to building greenkeepers' professionalism through provision of technical training, information on integrated turf management practices and overall support for the professional turf industry.

Leading pesticide manufacturers sales and technical representatives are well equipped to provide greenkeepers with product training, problem solving skills, integrated solutions to turf management issues and the ability to resolve product use issues. Manufacturers also sponsor other educational resources for greenkeepers, including industry and university research with the aim to develop the best turf agronomic practices.



In addition to providing continuing education opportunities for greenkeepers as well as scholarships to help prepare the next generation, pesticide manufacturers' active membership in professional organisations, such as BIGGA and other turf organisations, aims at ensuring the turf industry a voice before the various audiences upon which its future depends.

At the same time, non governmental organisations (NGOs) seek to influence public opinion such that regulatory authorities are challenged to restrict the use of turf care chemicals. As a result, regulatory authorities may demonstrate reluctance to approve the use of products specifically designed for turf care, even though these products may be more effective and more environmentally beneficial than alternatives. Working in concert with trade associations, pesticide manufacturers endorse reasonable, science based solutions to these regulatory issues.

### GREENKEEPER STEWARDSHIP

Pesticide manufacturers are committing significant resources to support the future of the turf industry. However, greenkeepers play an equally important role. Stewardship on the part of greenkeepers falls into two primary areas: responsible use and industry support.

Good stewardship requires support to maintain the effective products already on the market. It also involves improvements to those products and investment in new turf products, all of which frequently hinge on informed and responsible use.

### RESPONSIBLE USE

Pesticides are just one tool in a greenkeeper's integrated turf management toolbox. In order to get the maximum benefits and results, turf products should be incorporated into an integrated management programme that includes: irrigation, fertility, mowing management, cultural practices and use of pesticides.

Great demands are placed on greenkeepers to deliver the full value of the turf that they manage. That value can only be fully realised through safe and effective control of diseases, weeds, and insects. But with that control - most often achieved with pesticides - comes responsibility to comply with the regulations governing their use.

Regulation of professional turf chemical products varies from country to country, but includes these basic elements:

- It is a requirement in all countries that every turf pesticide product must be registered according to local rules. Although European countries have their individual schemes, they are all based on the principles of 91/414/EC, the European legislation covering use of pesticides.
- Applying a product outside of its approved uses or using a product not labelled for turf is illegal unless a "specific off label approval" (SOLA) exists. Off label use is only given where there are no products already registered for the particular situation; SOLA's are not based on any biological performance data and are not supported by the manufacturer. They are used at the user's own liability; crop safety is not investigated.
- Products should only be applied by those well trained in their use and, in the case of the UK, specifically licensed to apply the products.
- Maintaining accurate records of product applications.
- Products should only be applied to the areas intended for treatment.
- Application in inappropriate weather conditions can result in spray drift to nearby gardens and into other non target natural areas, with the possibility of unintended side effects. Incidences like these may be publicised as a justification for banning pesticide products or challenging the professionalism of the operators.
- Application equipment should be well maintained and recalibrated regularly to ensure accurate application. Over application of a product not only risks increasing disease resistance but also the cost per application of the product.
- Products should be stored under lock and key and empty packaging and any unused product disposed of according to local rules and in an environmentally friendly way.



### INDUSTRY SUPPORT

In the UK regulations governing the use of professional turf care products are quite specific. Only professional products having specific approval for use on managed amenity turf can be applied and, as stated above, only by those certified in their use and holding a Certificate of Competence.

Regardless of location or specific regulation, the most common argument used to justify using unapproved products is cost. However, any short term economic benefits are far outweighed by the risks. Pesticides approved for use on turf have been developed and formulated to be effective and are also fully supported by the manufacturer.

A Turf Manager's investment in and responsible use of approved turf products not only improves the course's playability, but also acts as insurance to protect the high value of the turf and to reduce the potential for liability. Off label use is not the answer. Correct product use and healthy competition between approved turf pesticides are the most effective ways to ensure effective turf control and competitive pricing.

### A PRICELESS VISION

The real value of turf products is considerably more than just the price. The benefits in increased player satisfaction, alone, are invaluable. The purchase and appropriate use of every turf product drives the delivery of new, innovative turf products and formulations, funds the highest levels of knowledge and service to customers and the industry, and supports a wide array of integrated turf management resources to help greenkeepers optimise the value of the turf they manage.

By working together and by supporting one another, greenkeepers and pesticide manufacturers will achieve their shared goal to enhance the appearance and playability of their golf course in order to create an exceptional golf experience for their customers.

