

Landscape Advice Note: Use of Pesticides



www.english-heritage.org.uk/professional/advice/advice-by-topic/parks-and-gardens/

This Landscape Advice Note looks at pesticide use and the regulations which apply to their use in England.

INTRODUCTION

Under the Food and Environment Protection Act 1985, pesticides are defined as 'chemical substances and certain micro-organisms prepared or used to destroy pests'. The term therefore encompasses a number of products including (amongst others) herbicides, fungicides, insecticides and masonry biocides.

WHEN TO USE PESTICIDES

Growing concern for the environment has long made the former practice of automatic use of pesticides in any situation obsolete and untenable. Before even considering to use pesticides, it is important to define what the actual problem is and what options there are for dealing with it. Rather than the old practice of 'spray first and ask questions later' there should be a presumption against the use of pesticides unless there are no other viable options. Pesticide use should only be practised where there is a definite and specific problem which such use can effectively address.

There are a number of justifiable reasons for pesticide use, particularly in weed control. Some plants cannot be successfully controlled by other means, such as the damaging and invasive species Japanese knotweed *Fallopia japonica*. In some situations alternative control measures such as rolling Bracken *Pteridium aquilinum* may not be viable in areas with fragile historic fabric above or below ground. While in some situations alternative control measures are not economic.

TYPES OF HERBICIDE

Herbicides come in numerous different formulations, but most of these fit into two main categories, selective and non-selective, each of which can be further subdivided into residual or non-residual and contact or translocated.

• Selective or non-selective

Unfortunately this implies rather more control than is actually achieved in practice. Non-selective herbicides as the name implies, will kill any plant material, whereas selective herbicides generally only control dicotyledons (broad leaved plants) without harming monocotyledons (grasses). It is not currently possible to have a herbicide which is so selective it will control, for example, valerian (*Centranthus ruber*) without harming anything else. • Residual or non-residual

Residual herbicides remain active and in the soil for prolonged periods and may affect plants in the area sprayed for a year (or occasionally longer). Nonresidual herbicides are broken down into harmless substances on contact with the soil and become inactive almost immediately.

Contact or Translocated

Contact herbicides only kill the plant tissue onto which they are sprayed or come into contact with. Translocated herbicides are absorbed into the plant and move with the sap system before becoming fully active and so spraying of a few leaves could result in the death of the whole plant. This is particularly important to consider when there is any chance of drift onto non-targeted plants.

If chemical control is needed it should always be the least environmentally damaging chemical which is used.

PESTICIDES AND THE LAW

There are two main areas of legislation concerning the use of pesticides, the Control of Pesticides Regulations 1986 (introduced under the Food and Environment Protection Act 1985) and the Control of Substances Hazardous to Health Regulations 2002 (introduced under the Health and Safety at Work Act 1974).

The Control of Pesticides Regulations 1986 (CoPR) aim to protect human beings, creatures and plants, safeguard the environment, ensure safe, effective and humane methods of controlling pests and make pesticide information available to the public. Of the numerous controls introduced by these regulations, three are of particular relevance to organisations using pesticides (as opposed to producing or supplying them).

Only approved products may be sold, supplied, stored, advertised or used. Approval is by the Pesticides Safety Directorate (part of the Health and Safety Executive). Products are either approved as 'amateur' which people can use in their gardens or 'professional' which are for use in public/commercial situations or by professionals in any (appropriate) area. 'Professional' products cannot be sold to or used by amateurs. 'Amateur' products are not necessarily approved for use in public/commercial situations, therefore only 'professional' products should be used in these situations.

Users of pesticides must comply with the Conditions of Approval relating to use.

A recognised Certificate of Competence is required by all contractors and any person born after 31st December 1964 applying approved pesticides (unless working under the direct and personal supervision of a certificate holder). This rule does not apply to private individuals using amateur products on their own property. The only recognised certificate of competence is that issued by the National Proficiency Test Council. It is English Heritage's Health and Safety policy that any of its directly employed staff required to use pesticides should have a Certificate of Competence.

The Control of Substances Hazardous to Health Regulations 1994 (COSHH) require that the risks associated with the use of any substance hazardous to health must be assessed before it is used and the appropriate measures be taken to control that risk.

In order of preference these measures should be:

- Substitution with a less hazardous chemical or product
- Technical or engineering controls (for example, the use of controlled handling systems)
- Operational controls (for example, operators located in cabs fitted with air filtration systems)
- Use of personal protective equipment, which includes protective clothing

To assist with COSHH assessments, manufacturers will supply product safety data sheets to customers and potential customers.

The COSHH Regulations also require that consideration be given to:

- The necessity of using pesticides at all in a given situation
- The label precautions be used as a minimum
- Safety equipment and clothing is properly maintained and that staff are instructed and trained in its use
- Where necessary exposure of workers is monitored and health checks carried out
- Adequate records of all operations involving pesticide application must be made and retained for at least three years

There are also additional restrictions placed on the use of pesticides in, or near, watercourses. Only certain approved products may be used and the Environment Agency has to approve such use in each case. This has become increasingly important as the Water Framework Directive (2000) has made reduced levels of pesticide in water an important part of water management strategies. It is important to be particularly careful to ensure that any pesticide use does not pollute watercourses as highly sophisticated equipment is now available which can trace the source of even minute quantities of water pollution. The storage of pesticides as well as the disposal of empty containers and unused chemical (both concentrated and diluted) is also regulated and details of the requirements can be found on the *Pesticides - Code of Practice*.

MANAGEMENT OF PESTICIDE USE

The decision on whether to use pesticides in any given situation and which products to use needs to be carefully considered. The *Pesticides – Code of Practice* published by Defra makes it clear that people who make policy and operational decisions about applying pesticides, who write specifications for pesticide use and who give advice on the subject should have the necessary skills, knowledge and experience. It also supports the need for Continuing Professional Development (CPD) for those involved in the use of pesticides.

The most effective way to demonstrate competence and CPD is:

- For operatives (who are required by law to have a Certificate of Competence) – membership of the National Register of Sprayer Operators (NRoSO)
- For managers/advisors British Agrochemicals Standards Inspection Scheme (BASIS) Certificate in Crop Protection and membership of the BASIS Professional Register

FURTHER INFORMATION

BCPC The U.K. Pesticides Guide Bracknell: British Crop Protection Council

Control of Pesticides Regulations www.hse.gov.uk/biocides/copr/

Defra 2006 Pesticides – Code of Practice for using plant protection products London: Defra www.pesticides.gov.uk/Resources/CRD/Migrated-Resources/Documents/C/Code_of_Practice_ for_using_Plant_Protection_Products_-_ Complete20Code.pdf

Health and Safety Executive, 2012. Working with substances hazardous to health: A brief guide to COSHH. Health and Safety Executive www.hse.gov.uk/pubns/indg136.htm

The Plant Protection Products (Sustainable Use) Regulations 2012 www.pesticides.gov.uk/Resources/CRD/Migrated-Resources/Documents/P/Plant_Protection_ Products_%28Sustainable_Use%29_Regulations_2012. pdf_

Water Framework Directive 2000 ec.europa.eu/environment/water/water-framework/ index_en.html

ENGLISH HERITAGE OFFICES

North East Bessie Surtees House 41-44 Sandhill Newcastle Upon Tyne NEI 3JF Tel: 01912 691200 e-mail: northeast@ english-heritage.org.uk

North West Suites 3.3 and 3.4 Canada House 3 Chepstow Street Manchester MI 5FW Tel: 01612 421400 e-mail: northwest@ english-heritage.org.uk

Yorkshire and the Humber 37 Tanner Row York YOI 6VVP Tel: 01904 601901 e-mail: yorkshire@ english-heritage.org.uk

West Midlands The Axis 10 Holliday Street Birmingham BI ITG Tel: 01216 256820 e-mail: westmidlands@ english-heritage.org.uk

East Midlands 44 Derngate Northampton NNI IUH Tel: 01604 735400 e-mail: eastmidlands@ english-heritage.org.uk East of England Brooklands 24 Brooklands Avenue Cambridge CB2 2BU Tel: 01223 582700 e-mail: eastofengland@ english-heritage.org.uk

London I Waterhouse Square I38-I42 Holborn London ECIN 2ST Tel: 02079 733000 e-mail: london@ english-heritage.org.uk

South East Eastgate Court 195-205 High Street Guildford GUI 3EH Tel: 01483 252000 e-mail: southeast@ english-heritage.org.uk

South West 29 Queen Square Bristol BSI 4ND Tel: 01179 750700 e-mail: southwest@ english-heritage.org.uk

National Office The Engine House Firefly Avenue Swindon SN2 2EH Tel: 01793 414700 e-mail: customers@ english-heritage.org.uk English Heritage is the Government's adviser on the historic environment with responsibility for all aspects of protecting and promoting the historic environment in England.

The role of English Heritage's Curatorial Department is to help everyone to be inspired and engaged by the Story of England through sites, artefacts and archives.

This guidance has been written and compiled by Alan Cathersides and Emily Parker.

Published by English Heritage 2014 Product Code: 51898

www.english-heritage.org.uk

Please do not print this document unless you really need to.



ENGLISH HERITAGE

If you would like this document in a different format, please contact our customer services department on telephone: 0870 333 1181 fax: 01793 414926 textphone: 01793 414878 email: customers@english-heritage.org.uk