

Integrated Pest Management Strategy

1. Introduction

This strategy sets out how pests and diseases will be managed in Group member's woodlands. The strategy will put primary importance on prevention and encourage the use of alternative control methods where practicable. This management strategy is designed to reduce the use of chemical pesticides in line with the forest certification requirements.

2. Prevention

2.1 Monitoring Existing Woodlands

The forest monitoring plan shall include monitoring for forest invertebrate pests, tree diseases and invasive species, in order to enable early detection of these before they become established. Managers should be vigilant for any signs of ill health even if they cannot identify the agent. For any trees showing symptoms which cannot be explained specialist assistance should be obtained. The forest owner/manager shall co-operate in any national programme monitoring invasive and emergent pests and diseases as well as mammal damage.

2.2 New Woodlands and Restructure Planting

Species choice should consider the potential impact of pest and diseases known to be in the county and the likelihood of the site being affected within the rotation. Also consider the likelihood of significant threats from new diseases. Diversity of species is the main protection against current and future pests and diseases. Where Felling Licence replanting conditions allow, fallow periods between felling and replanting should be considered to minimise the use of pesticides for the control of *Hylobius abietis* (Large pine weevil). Forest owner/manager should keep up to date with the latest information on pests and diseases e.g. through DAFM/Coford Notes and Research publications. Matching species choice to site type can also reduce the need for chemical use by promoting quick establishment.

2.3 Reporting

Records shall be kept of monitoring observations, any forest pests and diseases, including those recognised as invasive, shall be reported to the relevant authorities, and action shall be taken to control these according to best national or international practice. Records of correspondence and actions taken shall be retained.

3. Reduction

3.1 Protecting Biodiversity

On designated sites or where a priority habitat or species might be affected the appropriate regulator or conservation agency must be consulted prior to chemical pesticide application.

Careful consideration must be given to the potential environmental impacts when chemical controls may affect:

- Old Woodland Sites (OWS)
- Semi- natural features within Plantations on Old Woodland Sites (POWS)
- Rare or Protected Habitats or Species
- Watercourses, ponds and lakes
- Wetland habitats
- Veteran trees
- Decaying deadwood habitat
- Any other valuable or diverse habitat or features

Where potential impact(s) on protected species are identified this shall prohibit the use of chemical pesticides.

Impacts on other identified features should be avoided altogether. If this is impractical, plans for controlling any potential impacts on any of the items listed above must be included in the Pesticide Decision Record (See Appendix 1).

3.2 Buffer Zones

Buffer zones, or setbacks, shall be maintained to the minimum criteria below:

Table 1: Water Setback Widths			
<i>(setback applies to each side of the water feature, e.g. to both banks of an aquatic zone)</i>			
Type of Water Feature	^{a)} Set back for the Aquatic zone reflects both DAFM Forestry & Water Quality Guidelines and DAFM Environmental Requirements for Afforestation ^{b)} Setbacks as per DAFM Environmental Requirements for Afforestation ^{c)} Setbacks as per DAFM Forestry & Water Quality Guidelines		
1. Aquatic Zone: [See notes ^{a)} - ^{c)}]			
Slope leading to the aquatic zone (apply as appropriate, where slope varies over the site):	Setback width ^{a)}	Setback width for peat soils & for sites within the catchment area of high status objective waterbodies ^{b)}	Buffer zone width for highly erodible soils ^{c)}
Moderate (even to 1-in-7 / 0-15%)	10 metres	20 metres	15 m
Steep (1-in-7 to 1-in-3 / 15-30%)	15 metres	25 metres	20 m
Very steep (1-in-3 / >30%)	20 metres	25 metres	25 m
2. Relevant watercourse:	5 metres	} Setbacks as per DAFM Environmental Requirements for Afforestation	
3. Hot spot:	5 metres		
4. Drinking water abstraction point:	20 metres		

Forest Service guidelines on application of chemicals near water setbacks apply.

3.3 Field Assessment

No control agent will be applied without a prior field assessment. A problem must have been identified on site or assessed as highly likely before control methods are considered. If possible, the area requiring control should be mapped and reduced to the minimum possible for effective control.

3.4 Biological Control Agents

There are a limited number of pests and diseases for which EU approved biological control agents exist, e.g. *Phlebiopsis gigantea* for the treatment of conifer stumps against certain fungi such as *Heterobasidion annosum* or *Fomes annosum*. Where these are available, managers should use these biological control agents in preference to chemical controls. Precautions to avoid accidental introduction of forest pests and diseases should be taken by acquiring biological material from trusted/certified sources.

If biological control agents are used, the forest owner/manager shall demonstrate that such use is in strict compliance with national laws and internationally accepted scientific protocols.

The forest owner/manager shall maintain comprehensive records of the use of biological control agents and make these available for the purpose of the evaluation and monitoring of their effects on both target and non-target species and habitats.

3.5 Mechanical Controls

For some situations there may be mechanical alternatives to chemical use such as mechanical flailing of bracken or cutting of Rhododendron. However there are limitations to these controls including cost and site suitability (steep slopes, access etc.). Forest owner/manager must consider these options and apply them where practical.

4. Controlled Chemical Use

4.1 Pesticide Decision Record

A Pesticide Decision Record must be completed before the use of a chemical control is authorised (see Appendix 1). Completed forms must then be kept on file for five years.

Forest owner/manager must justify the use of pesticides, biological control agents and fertilisers by demonstrating that there is no practical alternative in terms of the economic, social and environmental costs.

Pesticides, fertilisers or biological controls may be used to:

- Establish trees rapidly on fertile sites
- Control locally damaging native pests
- Control non-native pests
- Improve nutrient availability
- Control invasive vegetation

4.2 Pesticide Choice

Pesticides and biological control agents can only be used if:

- they are approved for forest use in Ireland by the Pesticide Registration & Control Division of the Department of Agriculture, Food and the Marine, AND
- they are not banned by international agreement, AND
- they are not included on the most up to date list of Highly Hazardous Chemicals (HHC) unless their use is permitted by the Group's certification scheme and Derogation has been approved (copy of HHC list and the Derogation shall be held on file by the forest owner/manager and conditions of the derogation shall be complied with).

Where there are a choice of products available, managers should select the product which best minimises the risk of adverse effects to the environment and the operator.

4.3 Training

All those employed to use pesticides must be trained to at least PA1 (Principles of Safe Pesticide Application)/PA6 (Handheld Pesticides Applicators) standard. Managers should obtain copies of the certificates of any contractor employed to carry out pesticide work before work commences.

4.4 Site Planning

Aquatic zones, relevant watercourses, hot spots and drinking water abstraction points should be identified on site and appropriate setbacks marked on site. Appropriate storage areas for chemicals should be identified and discussed with contractors. Forest Service guidelines on storage of chemicals near water setbacks apply.

Documented contingency plans should be in place in case of a spillage. Managers should ensure that contractors have the appropriate equipment to deal with a spillage. A written emergency plan should be available to operators on site.

A record shall be kept by the forest owner/manager or contractor of all spillages of chemicals, fuel and oil, the actions taken listed, and the outcomes evaluated. The evaluation shall result in the inclusion in the procedure of any recommendations for the revision of the procedure or its implementation.

Forest owner/manager should discuss with contractor when weather and/or ground conditions make the site unsuitable for application. Contractors must be made aware that they should be prepared to delay an operation if the conditions are not suitable.

4.5 Application

Contractors will be expected to follow the instructions on the pesticide product label including Personal Protective Equipment (PPE), application rates and equipment suitability.

Chemical pesticides shall be used in minimum effective quantities, and with strict observation of controls and regulations relating to use.

All equipment should be maintained in good working order.

Forest owner/manager should specify that any washings should be used as part of the programme, and ensure that contractors have suitable facilities for preparation, cleaning and maintenance such that any spillage or run off will be prevented from entering watercourses. Forest Service guidelines on cleaning of equipment near water setbacks apply.

Water for the programme should not be abstracted on site unless it is put in an intermediate container or the sprayer is fitted with a device preventing back siphoning.

Where access to the forest is provided to the public, dated notices shall be posted to inform the public of chemical pesticide use.

4.6 Waste

Contractors must be made aware of their responsibility to deal with chemical waste responsibly. All chemical containers and bags which contained fertiliser or treated trees must be disposed of as chemical waste in accordance with waste disposal regulations and EPA guidelines. Such waste items should not be stored overnight on site.

Waste should be taken in an appropriate container to a legal waste disposal site. Waste transfer notes should be obtained and retained on file.

4.7 Record Keeping

Contractors must provide the forest owner/manager with a record of the quantity of product used by each operator at the end of the job. **Tem.06a Pesticide Use Record** must be completed and retained on file.

5. Review

This strategy will be reviewed periodically to keep up to date with changes in legislation and research.

References:

DAFM Forestry and Water Quality Guidelines

http://www.agriculture.gov.ie/media/migration/forestry/publications/water_quality.pdf

DAFM Environmental Requirements for Afforestation (2016)

<http://www.agriculture.gov.ie/media/migration/forestry/grantandpremiumschemes/2016/EnvironmentalRequirementsAfforestationDecember121216.pdf>

Guidance Notes on Integrated Pest Management for Use on Irish Farms

<http://www.pcs.agriculture.gov.ie/media/pesticides/content/sud/Guidance%20Notes%20on%20Integrated%20Pest%20Management.pdf>

7 STEPS: GOOD PRACTICE GUIDE FOR EMPTY PESTICIDE CONTAINERS

http://www.pcs.agriculture.gov.ie/media/pesticides/content/sud/Good_Practice_Guide_for_empty_pesticide_containers.pdf

Guide to integrated pest, disease and weed management in certified forests and plantations, 2009

<http://www.fao.org/sustainable-forest-management/toolbox/tools/tool-detail/en/c/217965/>

Reducing Pesticide Use in Forestry (Forestry Commission, 2004)

[https://www.forestry.gov.uk/pdf/fcpg015.pdf/\\$FILE/fcpg015.pdf](https://www.forestry.gov.uk/pdf/fcpg015.pdf/$FILE/fcpg015.pdf)

List of 'highly hazardous' pesticides:

<https://ic.fsc.org/en/what-is-fsc/what-we-do/strengthening-standards/pesticides>

Appendix 1

Decision recording sheet

Completed by: Date:

Site name: Compartment name/no.:

STAGE 1: use Core decision key

What is the problem and what are the likely consequences if the problem is not addressed?

Which control option is most suitable?

▶ TAKE NO ACTION	▶ AVOID THE PROBLEM	▶ TAKE REMEDIAL ACTION
		Continue to next step

Tick as appropriate and note reason for choice.

Which remedial action is most suitable?

● Non-chemical method	▲ Chemical method
Continue to Stage 2	

Tick as appropriate and note reason for choice. Record why a non-chemical method is unsuitable.

STAGE 2: use Pesticide decision key

Which chemical method is most suitable?

Note reason for choice.

If no suitable pesticide can be identified, a non-chemical method may need to be reconsidered.

Archive this sheet in a safe place for future reference.

Source: Reducing Pesticide Use in Forestry (Forestry Commission, 2004)