

Use of insecticides for the management of the large pine weevil

Guidance published through the Forestry & Water Scotland initiative www.forestrywaterscotland.com



This guidance covers the safe, legal and responsible use of insecticides or pre-treated trees in forestry so that to protect the water environment. Following this guidance will avoid accidents happening on site as well as potential damage to the water environment.

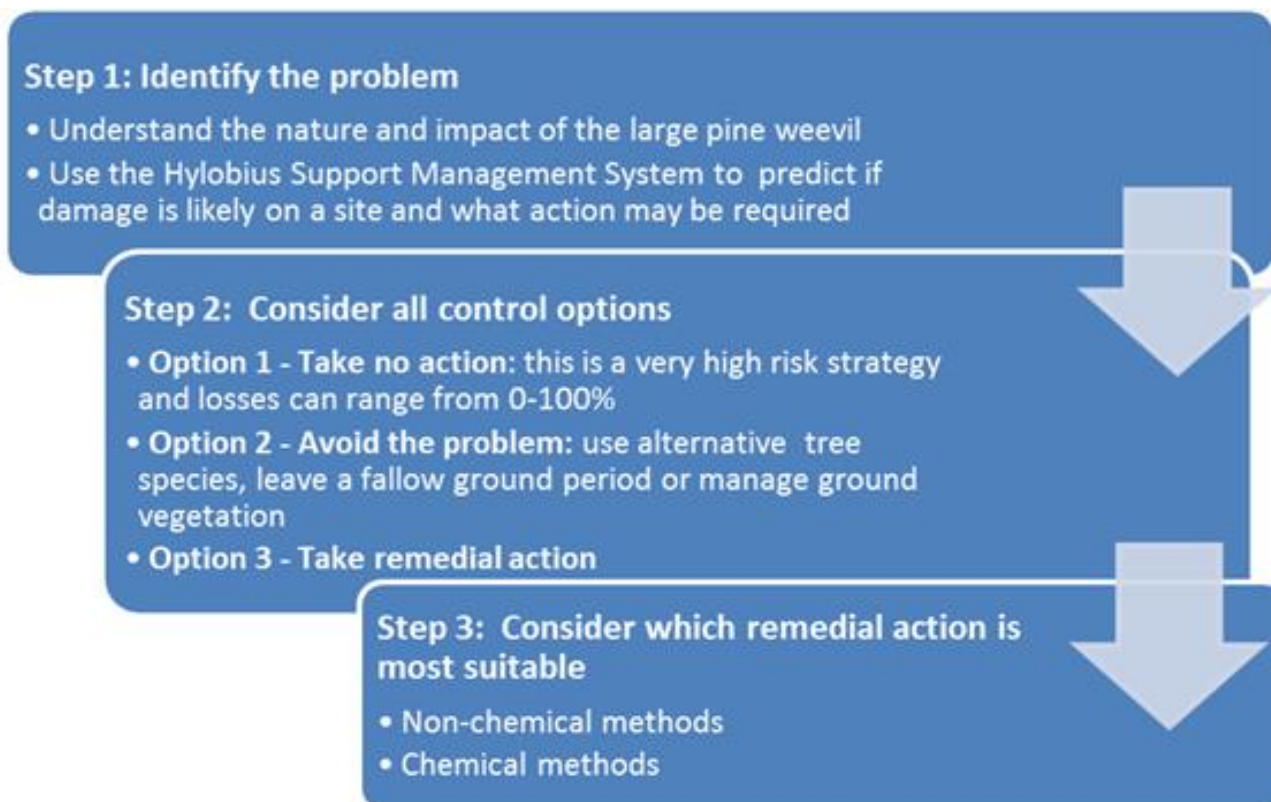
The large pine weevil (*Hylobius abietis*) affects both conifer and broadleaved trees on newly and re-planted sites in Scotland. Without protection losses of trees can average around 50% and in the worst cases all trees can be killed.

Reasons for this guidance

- Control of the large pine weevil must be considered within an integrated pest management approach- refer to the 'further information' section
- **The use of insecticides must be kept to a minimum and must be targeted**
- Protection of operators and the public is covered in the [Code of Practice](#) that must be followed when using plant protection products in Scotland
- **Consider all options available before acting**

An integrated pest management approach

- Options available include assessing the risk of pest damage (testing), assessing pest populations and considering all control options (including non-chemicals) as well as a combination of control measures



- The Forest Research [interim guidance](#) gives comprehensive advice on integrated pest management of the large pine weevil. Table 2 (page 16) includes a summary of the efficacy, costs and potential risks of the main control options

How to use insecticides

- There are times when the only practical and cost-effective solution is to use insecticides
- As with all pesticides, operators **MUST** comply with the [Code of Practice](#) and the legal and good practice requirements included in the forestry [Know the Rules](#) booklet
- Always use the correct product and follow the approved conditions of use on the label
- Do not exceed the maximum dose allowed as stated on the label
- Applications should be targeted and applied at the right time (informed by monitoring) and only when needed
- If used incorrectly, insecticides pose a risk to the water environment and can cause widespread damage, including wipe out ecosystems – refer to the 'what if it goes wrong' section

In just one second, two sprayer nozzles can deliver enough insecticide to contaminate 3km of watercourse

On site **ALWAYS** follow the precautions below:

Storing and preparing insecticides on site

- Keep containers and products away from any water
- Take away all containers used and dispose of at an approved location

Using pre-treated trees

- Keep pre-treated plants away from any water
- Take away all plant bags and dispose of at an approved location

Targeted application of insecticides

- Only trained operators can apply insecticides in the forest
- Calibrate the equipment appropriately
- Keep dosage and frequency of application to the minimum needed for control
- Follow the approved conditions of use on the label
- Don't apply within the buffer areas (these should be marked on site)
- Don't apply when windy
- Only apply during dry weather, or when rain is not due for 6 hours
- Add dye to the solution to check coverage is accurate
- Maintain the equipment appropriately
- Take away all containers used and dispose of at an approved location

- The above rules, the [Code of Practice](#) and the [Know the Rules](#) booklet secure a controlled used of insecticides, prevent environmental damage and costly remedial action

- Water courses, water bodies, drains, sensitive and vulnerable areas (protected by buffer areas) should be clearly marked on the plan and everybody working on site must be able to identify them
- Any control measure, including application of insecticides, should be recorded and their success assessed to inform future control measures

Which insecticide?

- The [UK Pesticide Register](#) includes information on plant protection products with on-label authorisations- only these products should be used. Up-to-date approval must be verified before using a product on site
- If the product is used on a Forest Stewardship Council certified site, [check that its use is permitted](#)
- The Forest Research [interim guidance](#) gives advice on authorised products to use either in the nursery (pre-treated trees) or on site and potential risks to the environment

What if it goes wrong?

- If you follow the [Code of Practice](#) and the [Know the Rules](#) booklet, things are unlikely to go wrong

STOP	STOP action immediately. Contact the forest work manager and the SEPA pollution hotline on 0800 80 70 60
THINK	Understanding the chemical properties of the product will help reduce its spread. Read the product label carefully and seek further information if needed (see below)
ACT	Take simple steps to block the chemical entering the wider environment to reduce the potential impacts. For example blocking drains, using absorbent material (dry sand) to soak up spillage or directing drainage water to land soakaways

- Take remedial action quickly
- Follow the advice on the product label and in the contingency plan on what to do in case of a pollution incident
- Carry an appropriate 'spill kit' and know how to use it
- Never hose down a spillage
- Never use an empty food or drink container to hold insecticides
- Inform downstream users (including private drinking water supply owners) and the relevant authorities (Scottish Water or the local environmental health department, Forestry Commission Scotland)
- Any misuse of insecticides can expose operators to high remedial costs, enforcement action and fines. A damaged reputation takes a long time to restore and may drive operators out of business

Further information on managing Hylobius

- [Hylobius Support Management System](#) on-line tool
- [Forest Research guidance](#) on integrated Hylobius management
- [Pesticides register of UK Authorised Products](#)
- [Pesticide Properties Database \(PPDB\)](#)

- FISA Safety Guide [Application of pesticides by hand-held equipment](#)

Further information on legislation and good practice

- [Know the Rules](#) good practice booklet
- [UK Forestry Standard and Water Guidelines](#)
- [Controlled Activities Regulations - A practical guide](#)
- [Forest Stewardship Council](#) on using insecticides on certified sites
- Forestry Commission Scotland on [Why we use chemicals to protect young trees](#)
- Scottish Government [Keeping pesticides out of water](#)