



## Japanese knotweed - *Fallopia japonica*

A tall herbaceous perennial plant with bamboo like stems. Introduced in the early 19th century as an ornamental plant and now widespread across the UK. Spreads rapidly with negative impacts including out competing native flora, contributing to river bank erosion and increasing the likelihood of flooding.

### Management Options:

#### Chemical Treatment

Glyphosate at 6l/ha treatment of young (preferably < 1m) growth by weedwipe or knapsack sprayer.

**Suitability:** Large infestations, where treating mature growth will result in unacceptable levels of spray drift, or where allowing canes to achieve full height will compromise land use.

**Equipment:** Knapsack sprayer, preferably with a long-lance. Life jacket and any other personal protective equipment deemed necessary after risk assessment.

**Efficiency:** Moderate.

**Constraints:** Requires AqHerb01 approval from the Environment Agency and NPTC PA1 & PA6 qualifications. Potential non-target damage.

#### Chemical Treatment

Glyphosate at 6l/ha treatment of mature growth by weedwipe or knapsack sprayer.

**Suitability:** Large dense infestations, during the initial stages of long-term treatment. Encouraging good sward growth reduces the risk of erosion, so this method is usually replaced by control methods with less non-target damage after the initial treatment.

**Equipment:** Knapsack sprayer, preferably with a long-lance. Life jacket and any other personal protective equipment deemed necessary after risk assessment.

**Efficiency:** Good, particularly just after flowering but before autumn senescence.

**Constraints:** Requires AqHerb01 approval from the Environment Agency and NPTC PA1 & PA6 qualifications. High risk of drift and non-target damage.

#### Chemical Treatment

2,4-D amine treatment of young (preferably < 1m) growth by weedwipe or knapsack sprayer.

**Suitability:** Sites that either have dispersed knotweed growth, and/or is prone to erosion and therefore requires a selective herbicide to protect the sward.

**Equipment:** Knapsack sprayer, preferably with a long-lance. Life jacket and any other personal protective equipment deemed necessary after risk assessment.

**Efficiency:** Moderate, but Good if retaining a grass sward is an important priority.

**Constraints:** Requires AqHerb01 approval from the Environment Agency and NPTC PA1 & PA6 qualifications. Potential non-target damage to broadleaf species.

**Chemical Treatment**

10/1 solution of glyphosate applied into a stem freshly cut just beneath a node. Dye or food colouring added to indicate treated stems. Herbicide can also be applied to intact stems using stem-injection applicators.

**Suitability:** Smaller infestations, or sites that are sensitive to non-target herbicide damage due to organic, water quality, sensitive area constraints. Areas in which there is a grass sward in close proximity, such as areas of dispersed JK colonisation

**Equipment:** Adapted backpack sprayer or stem injection equipment. Life jacket and any other personal protective equipment deemed necessary after risk assessment.

**Constraints:** Requires AqHerb01 approval from the Environment Agency and NPTC PA1 & PA6 qualifications.

**Combination Treatment**

Any treatment described within the knotweed code of practice (See:<http://www.environment-agency.gov.uk/business/sectors/31364.aspx>) that involves a combination of chemical treatment and physical disturbance of soil, such as combination treatments and bund formation.

**Suitability:** Tend to be used on development sites. May be appropriate for flood defence capital schemes in riparian areas. Refer to knotweed code of practice for option descriptions.

**Equipment:** Digger/swing-shovel, dumper/tractor & trailer. Life jacket and any other personal protective equipment deemed necessary after risk assessment.

**Efficiency:** Good, but likely to be of limited use in riparian situations unless for capital schemes.

**Constraints:** Requires AqHerb01 approval from the Environment Agency and NPTC PA1 & PA6 qualifications. Potential non-target damage.

**Manual Cutting**

Cutting of canes using a hook or brush cutter.

**Suitability:** Generally used to clear an area prior to chemical treatment of regrowth. Not recommended as a sole method of treatment, as it generates potentially infectious waste and would need to be performed annually for many years to provide control. Suitable for volunteer groups.

**Equipment:** Brushcutter, hook, fork. Vehicle & trailer if not disposing at site. Life jacket and any other personal protective equipment deemed necessary after risk assessment.

**Efficiency:** Good, but canes must be disposed of carefully.

**Constraints:** Time-consuming, and requires good access.

**Time Scale**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Chemical – Glyphosate Young Growth												
Chemical – Glyphosate												

