



GOOD PRACTICE MANAGEMENT

Piri-piri Bur (*Acaena novae-zelandiae*)





GOOD PRACTICE MANAGEMENT GUIDE FOR Piri-piri Bur (*Acaena novae-zelandiae*)

Other names: Biddy-biddy, Pirri-pirri burr

For ID guides and more information:

<https://www.plantlife.org.uk/uk/discover-wild-plants-nature/plant-fungi-species/pirri-pirri-bur>

<http://wildflowerfinder.org.uk/Flowers/P/PirriPirriBur/PirriPirriBur.htm>



Piri-piri Burr (*Acaena novae-zelandiae*)

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MANAGEMENT SUMMARY



Ecology and impact of Piri-piri Bur

Piri-piri Bur is a dwarf shrub of coastal and sandy soils, where it grows in dense mats which suppress the growth of other plants. It is highly invasive, and it is extremely efficient at colonising new areas through its burs, which readily attach to the fur of animals or clothing and footwear of humans. Prevention is the best method for controlling *A. novae-zelandiae*, and robust biosecurity measures should be in place in areas where the species already persists or in areas considered to be at risk from invasion. The plant is readily identifiable in early growth stages so early detection is possible and is vital in preventing further spread, although it becomes much more conspicuous when the flowers grow.

Effective management: summary

There are a number of treatments that have been used to control and eradicate *A. novae-zelandiae*, including chemical, mechanical and manual. When working with this species it is paramount that good biosecurity is in place; all clothing and equipment should be meticulously checked before leaving a site to prevent accidental spread.



Chemical control

Glyphosate Treatment

Method: Targeted application of glyphosate as per instructions on chemical container

Potential equipment requirements (excluding PPE): Pesticide applicators, depending on chosen method.

Most suitable situation for method: When the plant is growing over a large area, and there are no other species of interest nearby that may be killed through non-target application of glyphosate.

Efficacy: High, but only if treatment is repeated.

Constraints: As glyphosate is a broad-spectrum herbicide, it is likely to kill vegetation in close proximity to target species, but this can be reduced with a more targeted applicator.

When to manage *A. novae-zelandiae* with glyphosate

Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
When in active growth											

Mechanical control

Roto-burying

Method: Treatment of areas of plant growth with a roto-burier, effectively uprooting and exposing roots and burying assurgent growth. Will destroy other vegetation present, so reseeding may need to be considered to prevent other opportunistic species from taking over. Has potential to be used in summer to smother active growth or in winter to expose rhizomes and roots to damp and frost.

Potential equipment requirements (excluding PPE): Roto-burier/stone-burier.

Most suitable situation for method: For use over large areas where other vegetation is not of conservation importance.

Efficacy: High, at least for several years (the current extent of research into this method).

Constraints: Equipment is expensive to purchase and method is not target-specific.

When to manage *A. novae-zelandiae* with burying

Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec



Manual

Hand Excavating

Method: Excavating plants by hand then disposing of the material either through composting or burning. Extreme care must be taken when carrying out disposal method as broken stolon (long shoots with nodes) can propagate and form new colonies.

Potential equipment requirements (excluding PPE): Hand tools, buckets and bags. Vehicle and trailer also needed if not disposing of material on site, although this is not recommended due to risk of spread. Suitable fine meshed net to enclose compost/burn site.

Most suitable situation for method: Only suitable in areas that can be contained and where the colony is small.

Efficacy: High as long as care is taken to remove all plant and root material. May take a number of years to full eradicate, and useful in conjunction with chemical control.

Constraints: This method is labour intensive, and risks the spread of the species through root or plant material being dropped.

When to manage *A. novae-zelandiae* with hand excavation

Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec



Environmental

Carpet dragging

Method: Drag a section of carpet that burrs will stick to across affected area when plants have burrs to collect them up. The carpet should then be incinerated. Can also be done by hand picking.

Potential equipment requirements (excluding PPE): Section of old carpet and method of dragging e.g. quadbike or vehicle. If hand picking then white hazmat suits should be worn to ensure no seeds stick to clothing.

Most suitable situation for method: Suitable as a way of limiting spread by removing burrs, particularly in areas where human footfall is high. If entire site can be covered then that is preferable.

Efficacy: High for removing burrs.

Constraints: Not a method for eradication.

When to manage *A. novae-zelandiae* with carpet dragging

Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
When in seed, usually mid-summer											



Environmental (cont)

Grazing

Method: Graze goats in areas where *A. novae-zelandiae* is growing. Useful in controlling both emergent growth and for breaking up roots and stems through trampling, exposing them to frost at the right time of year.

Potential equipment requirements (excluding PPE): Grazing livestock.

Most suitable situation for method: Where the aim is to control rather than eradicate.

Efficacy: High for controlling growth and spread.

Constraints: Grazing is not an eradication tool but is helpful in suppressing the plant and reducing spread. Care must be taken so animals do not spread burrs to other areas.

When to manage *A. novae-zelandiae* with grazing

Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec

Ineffective or unavailable control

Burning

Burning will destroy all seeds and foliage but unless fire is of a very high intensity, rhizomes of established plants will survive and will grow well on bare ground left behind by burning. This method has potential for use in newly established areas, but is incredibly destructive to all life within the burn site.



References

Davey, P. (2004) Comments on Nibblers Forum by Phil Davey, Lindisfarne NNR, English Nature.

Day, J. 2009. Controlling invasive non-native plants. In: RSPB reserves 2009. A review of our work. (eds Gilbert, J & Ausden, M.), http://www.rspb.org.uk/images/reserves1_tcm9-229499.pdf

GB NNSS (2015) Pirri-pirri burr Rapid Risk Assessment. <https://secure.fera.defra.gov.uk/nonnativespecies/downloadDocument.cfm?id=1404>

Invasive Weed Solutions (n.d.) Pirri-pirri bur.

<https://www.invasiveweedsolutions.co.uk/invasive-weeds/non-native/pirri-pirri-bur>



Preventing spread

The plant clings readily to clothing and animals, so an essential part of biosecurity or eradication plans will involve good signage around affected areas and on nearby reserves. To prevent either spread around a site or spread to other sites, signs should be erected where footpaths enter or pass near areas where *A. novae-zelandiae* is known to be growing. Volunteers should insure that all plant material is removed from clothing and footwear.

Legislation

A. novae-zelandiae is not currently covered by any specific legislation in the UK. As is standard practice, appropriate permissions should be sought if working on land owned by others or with special designations (SSSI etc.).

Health and Safety

Use of glyphosate requires AqHerb01 approval and NPTC PA1 & PA6 qualifications.

[Application to use herbicides in or near water](#)

[City & Guilds Level 2 Principles of Safe Handling and Application of Pesticides \(PA1\)](#)

[City & Guilds Level 2 Award in the Safe Application of Pesticides using Pedestrian Hand Held Equipment](#)

[Health and Safety Executive Code of Practice for Plant Protection Products](#)

Useful resources and guidance on health and safety when planning a project working with invasive species is available on the GBNNSS website:

<http://www.nonnativespecies.org/index.cfm?pageid=266>



Where To Go For More Information

- ◆ <http://www.anglingtrust.net/>
- ◆ <http://www.invasive-species.org/>
- ◆ <http://www.europe-aliens.org/>
- ◆ <http://www.nonnativespecies.org/beplantwise>
- ◆ <http://www.nonnativespecies.org/home>

RAPID

RAPID is a three year EU funded LIFE project led by the Animal and Plant Health Agency (APHA), with Natural England and Bristol Zoological Society as key partners that piloting innovative approaches to Invasive Alien Species (IAS) management in freshwater aquatic, riparian and coastal environments across England. The project is supported by a number of further Technical Partners.

<http://www.nonnativespecies.org/rapid>