

Managing **invasive** native scrub

Under the *Native Vegetation Act 2003* clearing of invasive native scrub classified as remnant vegetation requires approval.

Approval is not required when clearing invasive native scrub that has regrown since 1 January 1990 in the Eastern or Central Division, or 1983 in the Western Division, because it is classified as regrowth (see Info Sheet 4 for more detail on regrowth).

What is invasive native scrub?

Invasive Native Scrub (INS) comprises:

1. A plant species that invades vegetation communities where it has not been known to occur previously OR a species that regenerates densely following natural or artificial disturbance, *and*
2. The invasion and/or dense regeneration of the species results in change of structure and/or composition of the vegetation community, *and*
3. The species is within its natural geographic range or distribution.

Native plants that are invasive vary according to location, but include:

- woody weeds such as Turpentine and Budda that are widespread throughout western areas of the State, and

- dense growth-locked cypress pine and localised stands of dense eucalypt regeneration, for example Bimble or Poplar Box, that commonly occur in the central part of NSW.

Why is INS an issue?

INS can cause environmental and production problems.

In environmental terms, dense stands of INS reduce habitat and can lead to increased potential for soil erosion, changes to soil surface hydrology and a change in biodiversity as a result of reduced ground cover. These effects can be made worse when combined with grazing.

In production terms, INS can result in reduced pasture production, difficulties in mustering livestock and increased problems with feral animals.

However, INS species are native to NSW and provide habitat for some native plants and animals, and connections for the movement of wildlife across the landscape.

The NSW Government is responsible for the sustainable and equitable management of native vegetation, balancing the need to maintain production with protection of the environment.

What plant species are considered invasive?

There are over forty native plant species listed as INS in NSW.

Different species are listed for different areas, and each Catchment Management Authority (CMA) has a list of plant species that are known to behave invasively within all or part of their catchment. See the table at the end of this Info Sheet for more information.

Species can be added to or removed from the list at the request of the CMA and following review of supporting scientific evidence. Proposed changes are reviewed by a panel of independent experts to determine whether they are appropriate for inclusion as INS for the area concerned. All updates are required to be displayed on a public website at www.nativevegetation.nsw.gov.au

The listed species do not always behave invasively in every situation. CMA officers confirm that a listed species is behaving invasively.

Once confirmed, INS can be assessed for clearing.

How is clearing of INS assessed?

CMAs assess the clearing of INS using the PVP Developer. A special assessment process has been specifically designed for clearing to manage INS. The assessment process is called the INS Tool. This was developed by the INS Working Group which included representatives from CMAs, agencies and independent scientists in consultation with stakeholders and the general public.

The INS Tool sets out the treatments that allow landholders to clear INS to restore open woodlands and native grasslands. Offsets are not required when using the INS Tool.

After assessing a clearing proposal using the INS Tool, a Property Vegetation Plan (PVP) is prepared by the landholder and the CMA.

For more information on assessing the clearing of native vegetation see Info Sheet 8.

Why was the INS Tool reviewed?

The Minister for Natural Resources established a review of the INS Tool in early 2006 on the advice of the INS Working Group. The Group recognised that there were

likely to be teething problems with the INS Tool due to the short timeframe within which it had been developed.

The review examined:

- New INS species
- When Accredited Experts are needed
- Stem Diameter Thresholds
- Retaining Small INS Trees
- Using Exotic Species, such as Lucerne, to stabilise soils
- Increased Cropping Rotations
- Treating INS in Threatened Ecological Communities
- Incentives for treating INS
- Training and communication required for INS management.

The review was finished in August 2006 and proposed changes to the INS Tool. The Natural Resources Commission independently reviewed the proposed changes and made recommendations to the NSW Government on the changes. The NSW Government accepted the recommendations and they have been incorporated into a revised INS Tool.

What methods can I use to treat INS on my property?

The following INS treatments are available within the INS Tool:

1. burning;
2. clearing of individual plants with no disturbance to groundcover, for example chemical spot treatment or ringbarking;
3. clearing of individual plants with minimal disturbance to groundcover, for example grubbing;
4. clearing of plants in paddocks with nil to minimal disturbance to soil and groundcover, for example chaining, slashing or roping;
5. clearing of plants in paddocks with temporary disturbance to soil and groundcover, for example blade-ploughing;
6. clearing of plants in paddocks with longer term disturbance to soil and groundcover, for example cropping.

The INS Tool classifies each of the six treatments in terms of their impact on non-INS vegetation and the amount of soil disturbance they cause.

The treatments are indicative only. Landholders are not limited to the examples provided but can use other techniques where the impact is the same.

Some treatments cannot be used in some environmentally sensitive areas such as threatened ecological communities, riparian areas and rocky soils. Contact your local CMA to get advice on this and to discuss your clearing proposal.

Paddock-scale treatments can be used in threatened ecological communities that are not in high condition where the proposed treatment will have a low impact on non-INS species. In rocky soils paddock-scale treatments are only allowed where they have a minimal disturbance to soil and groundcover, and in riparian areas they are not allowed at all.

How much of the INS on my property am I allowed to treat?

You can treat up to 80% of the extent of INS on your property.

INS is native to NSW and has naturally existed in patches of varying density across the NSW landscape. In order to maintain a mosaic of habitats the INS Tool requires that at least 20% of the INS extent on a property remain untreated.

Landholders can retain areas in a pattern to match their landscape conditions. However, it is preferred that INS be retained in patches and clumps across the property. INS can also be retained as separate buffers between treated areas of INS rather than as a single large block.

There are limits on the amount of clearing that can be undertaken using each treatment method at any one time. The limits are based on the risk of soil and groundcover disturbance in each option. The local CMA can provide information on how this relates to your clearing proposal.

The table below outlines the initial and minimum treatment limits.

Treatment	Initial Limit	Maximum Treatment Limit
Burning	80%	80%
Clearing of individual plants with no disturbance to groundcover	80%	80%
Clearing of individual plants with limited disturbance to groundcover	60%	80%
Clearing of plants at paddock scale with minimal disturbance to groundcover	60%	80%
Clearing of plants at paddock scale with temporary disturbance to groundcover	40%	80%
Clearing of plants with longer term disturbance to groundcover	20%	80%*

* There can be extra retention requirements for this option in some circumstances.

The CMA can approve treatment of additional areas once it is satisfied that the initial area treated has been rehabilitated.

Landholders will need to apply to the CMA if they wish to treat additional areas. They will need to demonstrate that the areas they have previously treated have adequately recovered. This generally means the area has attained 50% groundcover of which 75% is native vegetation.

What is the maximum size of INS plants that I am allowed to clear?

The INS Species Database lists the maximum diameter of trees that can be cleared for each species. You can view the database at www.nativevegetation.nsw.gov.au

Larger trees provide greater habitat for animals, particularly in the hollows that trees form over time. Changing environmental conditions across the State and even within a catchment may affect the size at which tree species will develop hollows and other habitat features.

CMAs can vary the diameter at which tree species must be retained by +/- 5 cm to reflect environmental conditions and tree growth on a landholder's property. Trees of INS species larger than the specified diameter cannot be removed regardless of where they are located or which treatment method is used.

How many small INS plants do I need to retain?

You are required to retain a proportion of small plants for some INS species. The INS Species Database lists the proportions and number of small plants that must be retained. You can view the database at www.nativevegetation.nsw.gov.au

Different INS small plants have different proportions in the database.

Small plants are retained so that when larger trees eventually die there are young plants to replace them.

Landholders are not required to retain small plants for INS shrub species or for white and black cypress pine when using paddock-scale treatments.

Can I clump together small INS plants which I need to retain?

Yes. In fact there are two ways in which small plants can be retained. These are:

1. Retain clumps of invasive native scrub totalling at least 10 hectares for every 100 hectares treated. The pattern must mimic natural vegetation patterns. Ideally the clumps would be located around existing larger trees and along landscape features such as watercourses. This option is only available for paddock-scale treatments;
2. Retain individual trees of invasive native scrub species at a specified number per hectare across every hectare that is being treated.

Where more than one INS species occurs in an area, the retention figures for small plants are not added together. Only the highest retention number is used for all of the small INS tree species. You do need to retain a range of sizes and a mix of species in the correct proportions. The CMA can advise you about this during your clearing proposal.

Example: Bimble Box and Black Box species are being cleared and the higher retention requirement for these two species is 20 stems per hectare. The species occur at an approximate proportion of 60% Black Box and 40% Bimble Box. The species should therefore be retained at a rate of 12 Black Box trees for every 8 Bimble Box trees.

Can I sow introduced pasture plants such as Lucerne as part of my INS management?

Yes. In some areas lucerne may be planted after the two highest-disturbance treatment methods such as blade ploughing and cropping. This is to rapidly establish groundcover after disturbance caused by INS treatment.

Management of INS is designed to create a mosaic of native woodland and grassland habitats. The introduction of exotic vegetation, such as lucerne, is only permitted on the basis that it will increase the chance of successfully recreating the mosaic. Other exotic perennial species may also be used for this purpose in the future, subject to consideration by a panel of independent experts.

Can I crop as part of my INS management?

Yes. Landholders with an INS PVP that includes cropping as a treatment are allowed to plant up to three crops in 15 years.

There is no restriction on when these crops are planted. For example, all three crops could be planted in the first three years, or they may be spread evenly over the 15 years. This flexibility will allow crops to be planted when season and rainfall are most conducive to effective control of invasive native scrub.

Do I need to maintain the area after clearing INS?

Yes. Before clearing INS you should prepare an after-clearing management strategy.

This should include:

- how native perennial grasses will be re-established
- how total grazing pressure will be controlled
- what alternative grazing can be provided for domestic stock during treatment of the area
- what follow-up treatment will be needed and how it will be funded
- a sustainable future grazing regime for the treated area, and
- how the treated area can be monitored in a practical way.

Your local CMA can provide information about best practice for managing INS in your area.

Can I get funding to treat INS on my property?

Yes. CMAs may be able to provide you with incentive grants to assist with some of the costs of treating INS. Contact your local CMA for more details.

How do I get a Property Vegetation Plan (PVP)?

Contact your local CMA to obtain a PVP for clearing INS. A CMA officer will contact you and arrange an on-site visit. The officer will work with you free of charge, to help prepare your plan.

What other legislation affects the clearing of INS?

Approvals may be required under other legislation or under your local Council's Local Environment Plan. Please seek advice from your local CMA or Council. The 'woody weeds' exemption for the Western Division under the *Native Vegetation Conservation Act 1997* no longer applies. This exemption has been replaced by the PVP process for treating INS.

Can I vary my existing INS PVP?

Yes. If you already have an approved PVP for INS you can vary your PVP to take advantage of the new rules. Contact your local CMA to for more information on varying your PVP.

Listed invasive native species by Catchment Management Authority

Invasive native species	Catchment Management Authority (listed species may apply to all or part of the CMA)										
	Border Rivers/Gwydir	Central West	Hawkesbury Nepean	Hunter and Central Rivers	Lachlan	Lower Murray/Darling	Murray	Murrumbidgee	Namoi	Southern Rivers	Western
Acacia aneura (Mulga)		X						X			X
Acacia deanei (Deane's Wattle)	X	X			X				X		
Acacia farnesiana (Mimosa)	X	X							X		X
Acacia homalophylla (Yarran)		X									X
Acacia mearnsii (Black Wattle)										X	
Acacia paradoxa (Kangaroo Thorn)							X				
Acacia salicina (Cooba or Native Willow)	X	X									
Acacia stenophylla (River Cooba, Black Wattle)	X	X						X	X		X
Bursaria spinosa (Blackthorn)									X	X	
Callitris endlicheri (Black Cypress)	X	X	X	X	X				X		X
Callitris glaucophylla (White Cypress)	X	X			X			X	X		X
Cassinia arcuata (Sifton Bush)	X	X	X		X				X	X	
Cassinia laevis (Cough Bush)	X								X		
Cassinia quinquefaria	X								X		
Casuarina angustifolia									X		
Casuarina cristata (Belah)									X		X
Dodonaea viscosa subsp. angustissima (Narrowleaf Hopbush)	X	X			X	X		X	X		X
Dodonaea viscosa subsp. mucronata									X		
Dodonaea viscosa subsp. spatulata (Broadleaf Hopbush)	X	X			X	X		X	X		X
Eremophila bignoniiflora (Eurah)	X	X							X		X
Eremophila bowmanii subsp. bowmanii (Silver Turkey Bush)					X						X
Eremophila duttonii (Harlequin Fuchsia Bush)											X
Eremophila gilesii (Green Turkey-bush)											X
Eremophila longifolia (Emu Bush)	X	X			X				X		X
Eremophila maculata (Spotted Fuschia)	X										
Eremophila mitchellii (Budda, False sandalwood)	X	X			X	X		X	X		X
Eremophila sturtii (Turpentine)		X			X	X		X			X
Eucalyptus camaldulensis (River Red Gum)	X	X					X	X			
Eucalyptus coolabah (Coolibah)	X	X							X		X
Eucalyptus intertexta (Red Box)											X
Eucalyptus largiflorens (Black box)	X	X					X		X		X
Eucalyptus populnea (Bimble box, Poplar Box)		X									X
Geijera parviflora (Wilga)		X									X
Kunzea ericoides (Burgan)			X							X	
Kunzea parvifolia (Violet Kunzea)			X							X	
Leptospermum brevipes (Grey Teatree, Teatree)	X								X		
Maireana microphylla (Eastern Cotton Bush)		X									
Muehlenbeckia florulenta (Lignum)											X
Nitraria billardieri (Dillon Bush)		X					X				
Olearia elliptica (Sticky Daisy Bush, Peach Bush)	X								X		
Sclerolaena birchii (Galvanised Burr)		X			X			X	X		X
Sclerolaena muricata (Black Roly Poly)		X			X		X		X		X
Senna form taxon 'artemisioides' (Silver Cassia)		X			X	X		X			X
Senna form taxon 'filifolia' (Punty Bush)		X			X	X		X			X

This species list is current at 10 November 2006. Please check the website or your local CMA for any changes. The Northern Rivers CMA and Sydney Metro CMA currently have no listed invasive native species.

For more information:

Contact your local CMA, or you may also:

Visit: www.nativevegetation.nsw.gov.au **Email:** info@nativevegetation.nsw.gov.au **Freecall:** 1800 237 012

Note: This information does not constitute legal advice. Please seek specific advice from your local CMA before undertaking any clearing.