

The positive benefits of the healthy ecosystem you create will extend beyond the woodlot out into the broader farmland. For example, birds living in the woodlot can fly out to predate crop-damaging insects beyond. In the same way, isolated living remnant trees, which too are highly-valued, are also protected by your woodlot inhabitants: "dieback", the scourge of many old lone remnant trees, is blamed on the lack of biodiversity and an unhealthy ecosystem. Your wildlife woodlot can help to protect our old remnant gum trees!

The firewood properties of native trees vary considerably. Brock, G (2004) DPI Note AG1150 and Hamilton, L (2002) DPI Note AG1106 are useful additional reading when planning your woodlot. These references provide information on firewood species selection and on how much firewood and how much land is required to achieve a sustainable annual yield of firewood for personal use.

A well-managed property, with aesthetically pleasing landscape features and with a healthy natural environment (with birds and butterflies in abundance) offers the landholder a great deal of satisfaction and contentment. A well-managed property requires the least amount of work in return for the most amount of farm productivity. The farm becomes a good place to be, rather than a place to toil. Prospective buyers will sense this and the re-sale value of your property will reflect this.

Maintaining your wildlife woodlot

As a general rule, a little maintenance often is better than a big "fix-up job" just occasionally! Once you have created your patch

of native bush in the form of a wildlife woodlot, it will be too easy to walk away and forget about it. However, some periodic maintenance is required. Keep an eye out for:

Pest animals - Vegetative cover and the prospect of easy pickings from your new wildlife residents can attract feral pests such as cats, rabbits, foxes and Indian Mynas to the belt.

Weeds - Keep an eye out for weeds and keep them under control.

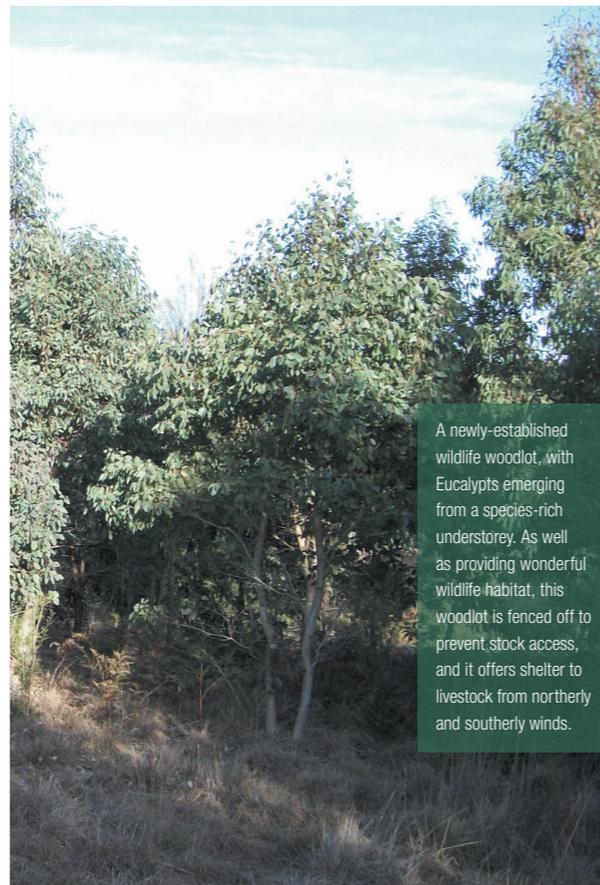
Fences - Keep your wires taut and trees and limbs off them, and your livestock will stay out.

Harvesting your wildlife woodlot

- Clear-felling your woodlot, or parts of it will create much disturbance, both to your wildlife inhabitants and to

the plant life which creates the habitat. Selective harvesting of trees is better as it is far less disruptive.

- Younger trees are much easier to harvest than older trees. They are smaller, greener, and safer to fell. Being small, they are easy to saw into suitable short lengths, and will require less, if any, splitting. Smaller trees create less collateral damage when they fall. Selecting younger trees obviates the need to fell older, larger trees.
- Older trees continue to age and over a long period of time will develop natural hollows for habitat. They produce a lot of bark, foliage, flowers and seed, all of which are necessary in a healthy ecosystem – food for wildlife and seed for regeneration.
- Living trees will produce firewood that will require drying before use; plan for this.



A newly-established wildlife woodlot, with Eucalypts emerging from a species-rich understorey. As well as providing wonderful wildlife habitat, this woodlot is fenced off to prevent stock access, and it offers shelter to livestock from northerly and southerly winds.

Monitoring your wildlife woodlot

Take an interest in your new wildlife presence. Observe the various species and keep a list of what creatures you spot. Ponder

any seasonality of their presence; note any migrating birds which drop into your shelterbelt.

Most of all, take time to enjoy your wildlife and take pleasure from your contribution to their well-being!



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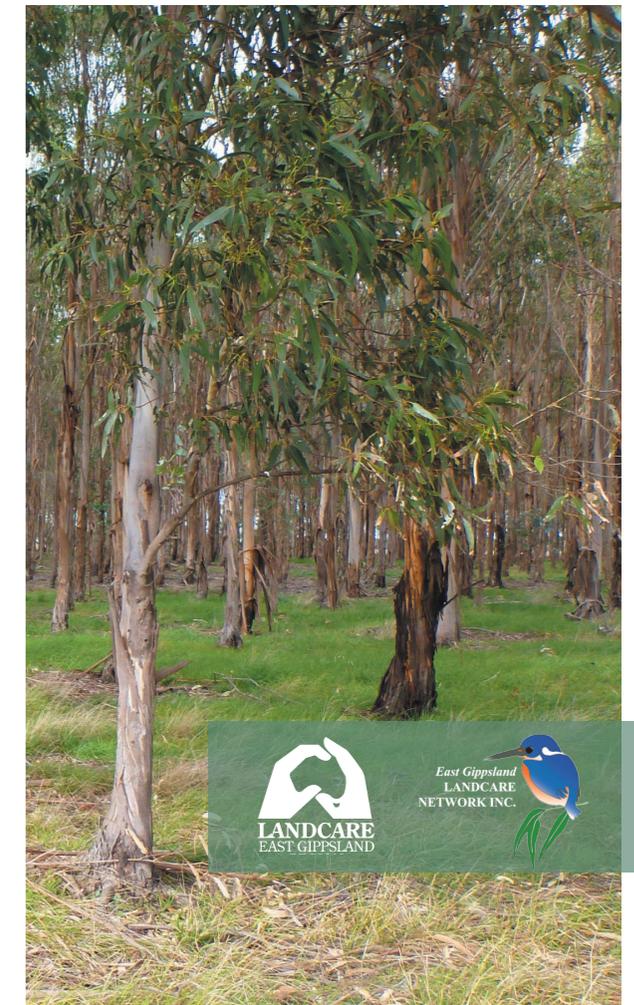
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Develop a woodlot for fuel and for wildlife habitat

A guide for creating a woodlot to provide you with firewood and valuable habitat for local wildlife.

One of a series of practical Landcare guides.



East Gippsland LANDCARE NETWORK INC.



Introduction

Woodlots are generally defined to be smaller-scale timber plantations established on private farms, often for the purpose of providing the

landholder with a supply of firewood. Trees chosen for the purpose may be native species or exotic species, with the ability to coppice (re-shoot new growth) from cut stumps. When native species are grown, they are usually species which are chosen for their wood-burning properties, and as such are often not local species.

This guide, one in a series of Practical Landcare guides, offers you, the landholder, ideas on how to establish a wildlife woodlot which will offer you both a sustainable supply of firewood and a place of valuable habitat for your local wildlife.



The benefits of a wildlife woodlot

A wildlife woodlot is a woodlot comprising locally native (indigenous) plant species; not just trees, for your firewood, but a

whole range of plant forms such as trees, shrubs and groundcovers, creating a place of valuable wildlife habitat. Using the right mix of plant species and plant forms in the right density and at the right spacing's will create a healthy ecosystem (a living environment) with a great diversity of plant and animal species. A food web is created, where all creatures eat and are eaten. Your ecosystem will comprise all manner of plants, lichens, mosses, fungi, birds, mammals, bats, reptiles, amphibians, insects, macro-invertebrates, and countless other organisms living within its soil.

Creating a healthy ecosystem within your woodlot offers local wildlife not just a place of habitat, but a valuable place of refuge and source of food; some species will now have a place to nest and to perform breeding rituals.

Your woodlot can serve your needs and the needs of local wildlife.

Your natural woodlot can also serve the needs of your farming enterprise too, by contributing to the farm's productivity. A wildlife woodlot can cast shade into your grazing paddocks to provide relief to your livestock from the hot summer sun, and it can provide shelter to your stock and your crops from harmful winds. Sitting adjacent to a farm dam, it can help reduce water loss from evaporation. Incorporating an area prone to soil erosion, your fenced-off woodlot can reduce this erosion, by both root-binding the loose soil and by preventing trampling by livestock.

With a sustainable source of firewood from your wildlife woodlot, you need not expend time and effort in searching out firewood from other parts of the farm (e.g. from remnant trees) or from nearby forests.

A wildlife woodlot provides fuel for fire, habitat for wildlife and productivity gains for your farm!

A wildlife woodlot can also occupy an area on your farm which otherwise might not be the most suitable land for grazing or cropping (e.g. a wet boggy area).

With the right local species selected for this difficult site, establishing a wildlife woodlot here will maximise your returns from the property.

What makes a wildlife woodlot?

A wildlife woodlot, unlike other forms of woodlot or tree plantation, comprises a rich mix of indigenous plant species to create

both a sustainable source of firewood and a place of wildlife habitat. The species selected are those which will recreate the natural bush that would have existed at the site prior to land clearing. Trees are not selected for their wood-burning properties alone.

Whilst some trees are left to mature and are not harvested (creating, over the long term, habitat trees with hollows), others are selectively harvested for firewood. Selective harvesting provides minimal disturbance to the new habitat you have created. Clear felling is not used as this creates too much disturbance. Harvesting a mix of older and younger trees will maintain a sense of natural bush promoting good, stable wildlife habitat.

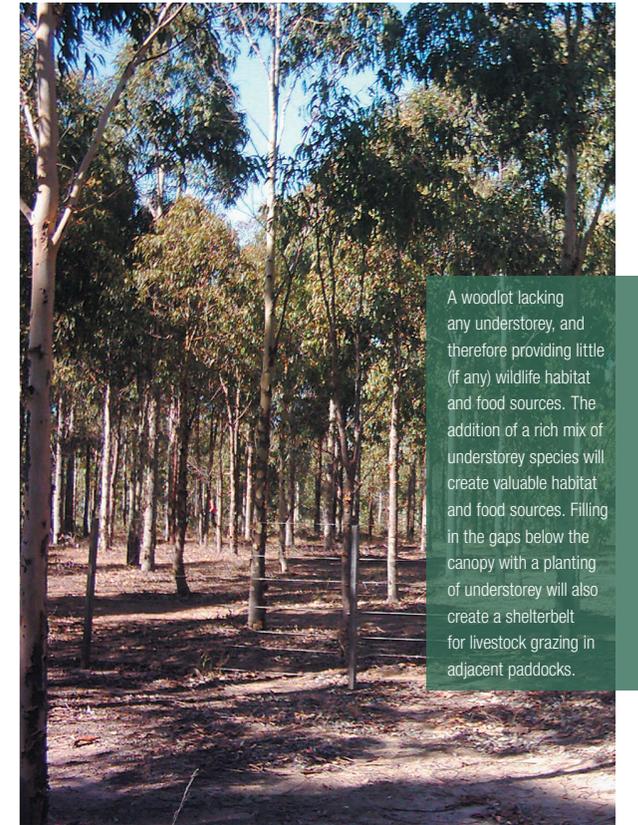
Many of our native trees have the ability to re-shoot from cut stumps (that is, they will coppice). The ability for a tree to coppice means that harvesting will not kill the tree; in time, new stems will emerge and grow into more harvestable firewood. With the right number of trees set aside for harvesting over your required timeframe, the woodlot is a sustainable wildlife woodlot.

Establishing a wildlife woodlot

When designing your wildlife woodlot, you might like to consider the following:

- Use indigenous plants, selected for the specific site of your wildlife woodlot.
- Site it in a problem non-productive part of your farm such as a wet area or erosion-prone area, to retain your most productive land for grazing or cropping.
- Site it and shape it to exploit its inherent sheltering ability; that is, as well as being your firewood source, it can be a natural shelterbelt for your livestock as well!
- Site it and shape it to link remnant stands of native bush, thereby creating a wildlife corridor, enabling wildlife to move around the landscape within the protective cover of the native vegetation.
- Incorporate any remnant bush in your woodlot, whether that includes a patch of old native bush or just one or two old gum trees.

- Remnant bush or just trees provide very valuable habitat and food source for our wildlife.
- Locating your woodlot alongside existing fences will reduce the amount of new stock-proof fencing required (reducing costs and labour).
- Install farm gate(s) to access the woodlot for harvesting as well as some periodic maintenance (e.g. weed and pest animal control).
- Ground litter is an important component of the wildlife woodlot. It is the "stuff" which falls from native vegetation – being made up of leaves, twigs and bark – which accumulates other organic matter arising from decomposition over time. Lying on the ground, litter provides home and food to a vast array of life (fungi, lichens, macro-invertebrates, insects, birds, mammals, frogs and reptiles). For some animals, it provides nesting material and a place for performing breeding rituals (e.g. Satin Bowerbirds). It is a vital component of a healthy ecosystem. As it breaks down it provides nutrients into the soil which feeds nearby vegetation. It softens the impact of heavy rainfall and it reduces soil erosion.



A woodlot lacking any understorey, and therefore providing little (if any) wildlife habitat and food sources. The addition of a rich mix of understorey species will create valuable habitat and food sources. Filling in the gaps below the canopy with a planting of understorey will also create a shelterbelt for livestock grazing in adjacent paddocks.