CARING FOR BUSHLAND

Nature Conservation Information Sheet

Bushland management overview

Bushland in the Margaret River region is valuable. In a largely altered landscape, remnant native vegetation provides a refuge for many species of plants and wildlife. It provides protection against soil erosion and salinity, assists in maintaining water quality, provides natural pest control, stores carbon and modifies climate. It provides diversity and beauty in a largely cleared and altered landscape.

Remnant native vegetation and associated wildlife face many threats including clearing, grazing, Phytophthora dieback, tree decline, weeds, feral animals and fire. A brief overview of some of the actions needed to conserve bushland and protect its many values is outlined below.

Develop a plan. A bushland management plan will provide a valuable tool to prioritise actions needed to conserve and improve the biodiversity values of your property. A plan includes identifying natural areas on your property, assessing their condition and ecological values, determining threats to them, and developing actions to manage the threats and to protect and improve environmental condition. See Nature Conservation Information Sheet *Biodiversity Management Plans.*

Minimise disturbance. Don't use your bushland to store equipment or supplies, or dispose of rubbish, car bodies, garden refuge or dead livestock. Wherever possible don't extract gravel or sand from bushland and avoid creating tracks. These **disturbances can result in degradation** via the introduction and spread of weeds and disease, loss of vegetation, and soil compaction.

Control stock access. Stock should be kept out of bushland as they eat and trample native vegetation, ringbark trees, spread weeds, add nutrients and cause soil compaction. All the effects of grazing pressure occur under light stocking rates as well as under heavy stocking; the effects are largely a matter of degree and are slower to appear. The **negative impacts of grazing** are gradual and degradation may not be obvious in the short term. Grazed bushland will eventually be dominated by aging shrubs and trees and with no regenerating seedlings surviving, it will die out.

Control invasive introduced plants. Environmental weeds are plants that have been introduced to our area from other parts of the world, including other areas of Australia, and are spreading and displacing native species. In bushland, where the aim is to retain a healthy native vegetation community, environmental weeds represent a threat to vegetation condition. First consideration should be **prevention of establishment** which means keeping disturbance of the bush to an absolute minimum; ensuring the plants that you introduce to your garden, windbreaks and landscaping don't escape into bushland; and controlling emerging weed problems early before they become established and widespread. Second step is to plan and **implement weed management** as described in the Nature Conservation Information Sheet: *Managing Environmental Weeds*.

Control introduced pest animals. Introduced animals that may impact on the biodiversity values of your bushland include rabbits, foxes, cats, pigs and feral honeybees. These animals compete with native fauna for food and shelter, damage native plants, prevent regeneration, and predate on native fauna. The conservation value of remnant vegetation will be improved if introduced pest animals are controlled. For further information go to https://www.agric.wa.gov.au/pests-weeds-diseases/pests/pest-animals and Nature Conservation Information Sheet: *Fox Control*.

Manage Phytophthora dieback. Phytophthora dieback is a deadly plant disease caused by the introduced pathogen *Phytophthora cinnamomi*. This pathogen lives in soil and plant tissue and is spread in water and soil. It attacks the roots of plants causing them to rot and resulting in plant death. At least 40 percent of the plant species in the south west region are susceptible to Phytophthora dieback. The first principle of Phytophthora dieback management is to minimise the introduction and spread. **Any activity that introduces or moves soil, gravel or sand should be avoided if possible**. Considerations include: minimising tracks and roads through bushland; keeping footwear, vehicles, bicycles, tools and equipment entering bushland free of all mud and soil; not bringing soil, gravel or sand into bushland; and keeping out horses and stock. If dieback is already present in your remnant vegetation planning and management can minimise its impact. Excellent information on dieback management is available at www.dwg.org.au

Reduce tree decline. Native trees do best when growing in healthy bushland. They rely on complex interactions with the soil and other plants and animals. When these interactions are disturbed trees cannot function properly and may go into a slow decline leading to ill health and premature death. There are many factors that may result in native tree decline including climate change, drought, loss of native understorey, changes to soil composition and structure, over abundance of insect pests, plant pathogens and fire. Things you can do to protect and improve tree health include leaving bushland around trees intact, restoring native understorey, minimising soil compaction and root disturbance, preventing ring barking and trunk damage, controlling pests and diseases, and preventing and controlling dieback. Further information at Nature Conservation Information Sheet: *Marri Decline*

Retaining and creating habitat for wildlife. Retain old and dead standing trees as many of these contain hollows used by birds and small mammals. They also provide perching sites for birds of prey. Fallen timber provides habitat for reptiles, invertebrates and other animals and is an important element of healthy bushland. If there are too few nesting hollows on your property, artificial hollows or nest boxes may be a solution. Go to www.birdlife.org.au for information on nesting boxes for birds. For nest box designs for possums go to www.possumcentre.com.au/Pages/nestbox_1.html and https://geocatch.asn.au/wp-content/uploads/2018/01/Nest-Boxes-for-Native-Animals.pdf

Fire and biodiversity. Planned burns are used in remnant vegetation to reduce fire risk and/or encourage regeneration. An understanding of the ecological impacts of fire can enable land managers to plan and implement burns in a way that will minimise negative impacts on the ecosystem and hopefully result in improvements in condition. This is no simple

matter with many elements to consider including the reason for burning (hazard reduction or promoting regeneration), vegetation type to be burnt, fire history of the remnant, the possible frequency and timing of burning, the extent of the area to be burnt, the impacts on Phytophthora dieback management, and post-fire management needs including weed, feral animal and grazing control. For further detail see Nature Conservation Information Sheet: *Bushland and Fire*.

Revegetation and assisted regeneration. As a general rule the priorities are to protect existing vegetation first, encourage natural regeneration next and lastly undertake revegetation. Protecting and enhancing natural regeneration is the most cost efficient and effective way to revegetate a site. Protecting natural regeneration requires the control of grazing and weeds, and can be enhanced by small pile burns and the introduction of seed through direct seeding and brushing.

In areas where natural regeneration is unlikely to occur revegetation can be used to improve the condition of bushland, streams and wetlands and to establish corridors between areas of remnant vegetation.

Using plants that are native to your area is highly recommended. These plants are valuable to local wildlife and will not become a weed problem in the future. When planting trees think carefully about the long term impact - will they shade your house or cause a fire risk once they reach their full size? For more see Nature Conservation Information Sheet: *Revegetation with Local Natives*.

References and further information

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