



Buloke and Northern Grampians Landcare Network



**PROJECT WINDHARP – MAPPING, MONITORING
AND REGENERATING OUR REGION'S BULOKE WOODLANDS**

DATA RECORDING

VERSION 1.0

FEBRUARY 2022

TABLE OF CONTENTS

PROJECT WINDHARP - BACKGROUND..... 3

SPECIES INTRODUCTION..... 3

REQUIRED EQUIPMENT..... 4

HEALTH AND SAFETY CONSIDERATIONS..... 5

MAPPING..... 5

DATA COLLECTION..... 6

WHAT TO DO WITH THE DATA?..... 6

ABOUT INATURALIST..... 7

HEALTH SCORES..... 8

Project WINDHARP

PROJECT WINDHARP - BACKGROUND

The Buloke (*Allocasuarina luehmannii*) is an important species in our regional landscape. Colloquially, it is known as the 'Wimmera Windharp', because of the sound made when a breeze passes through the tree's light foliage. This is the origin of the **Project Windharp** name.

The species is in sharp decline, largely as a result of agricultural intensification. It is also much maligned as a tree for replanting activities – predominantly due to its slow growth rate. Further, its straggly appearance and its wood hardness have previously made it a target for removal from within our landscape, for use as firewood. Notwithstanding, the Buloke plays an important role in our ecosystems.

This Project seeks to engage the communities within our region to understand the importance of *Allocasuarina luehmannii*, by:

- Mapping the current distribution of the species in our area.
- Identifying the health of Buloke populations.
- Providing educational information about the species to landholders and the general public.
- Implementing stock-proof fencing of privately owned areas where landholders would like to assist in the preservation of the species.
- Revegetating Buloke species in designated (privately-owned) areas across our Network
- Collecting and storing seed for future propagation.

This document outlines **the procedure for mapping and recording** the Buloke species across our Network.

SPECIES INTRODUCTION

The Buloke is listed as Threatened in the *Flora and Fauna Guarantee Act 1988 (VIC)*. As such it is a legally protected species.

Mature trees are between 5-15m in height, with rough, deeply-fissured bark and ascending branchlets (instead of leaves). It prefers sandy clays and will tolerate a wide range of conditions including drought, frost, strong winds and saline soil. It is very sensitive (negatively) to fire, but not prone to insect activity. It is a nitrogen-fixing plant, and the species is *Dioecious* – ie. Individual trees are either male or female.

The species flowers - (male flower spikes) - in the October-November period. *[We will record the presence of flowers and cones, but won't remove them.]*

Seedlings are highly palatable to livestock and rabbits and require 5-7 years to establish. Permanent fencing is therefore recommended to ensure long term health of existing trees or areas of regeneration.

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Figure 1: Bulokes – near Mt Jeffcott (Photo: Andrew Borg)

Buloke flowers and cones are shown below, in addition to a couple of other similar species



Figure 2: From Connecting Country – Buloke Factsheet

REQUIRED EQUIPMENT

Mobile phone or camera

Local area map

Pad and pencil/pen, Project Windharp Recording Sheet(s)

Measuring tape

This document! 😊

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HEALTH AND SAFETY CONSIDERATIONS

Volunteers are expected to look after themselves while out and about.

Ensure adequate precautions (sunscreen, adequate footwear and clothing) are taken before heading out!

DO NOT Enter private properties without the express permission of the land-owner.

MAPPING

This activity includes identifying large remnant stands of Buloke across the region; and randomly selecting some of the larger trees and recording information about them. Its distribution across our State is as shown in Figure 2.

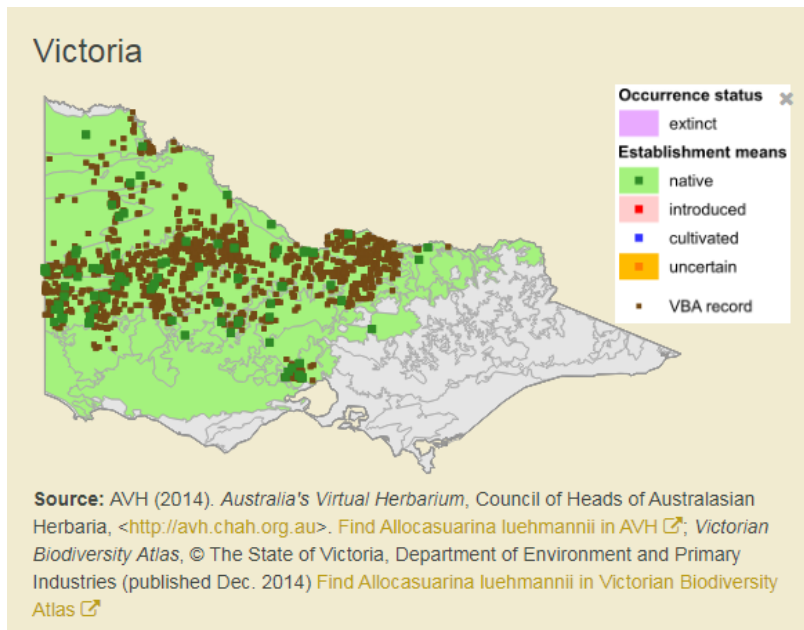


Figure 3: Buloke distribution

For our project, we need either an address location or a Latitude-Longitude for each of the remnant stands/trees. Note that Latitude-longitude can be extracted from the photographs that also need to be taken as part of the process (providing this option is selected on your camera phone).

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DATA COLLECTION

The **Project Windharp Recording Sheet** identifies all that sorts of data that will be useful to our project.

Please record your contact details at the top of the sheet.

For each patch of Bulokes:

1. Record the location, and indicate if it is Public (ie roadside) or Private (ie paddocks) land.
2. Estimate the number of Buloke trees in the patch/paddock (<5, 5-20, 20-50, >50, 100s)
3. For each patch:
 - a. Is the patch predominantly mature trees or is there a mix of mature/suckers/saplings? (Mature/Mix)
 - b. Is the patch on the roadside or in a paddock? (Roadside/Paddock)
 - c. Does the Buloke stand have dedicated fencing around the plot?
 - d. Can you see any flowers or cones on any trees? (Yes/No)
 - e. Can you see any Buloke Mistletoe? (Yes/No)
 - f. Are there any other shrubs/trees growing amongst the Bulokes? (Add some Notes)
 - g. Did you spot any wildlife living amongst the Bulokes? (Add some Notes)
 - h. Take a photo or two!

Optional activity:

4. For large Buloke populations (say 100 in a 2Ha area), select the 10 largest trees. Record:
 - a. The girth of the selected tree at a height of 1.3m
 - b. An observation of bark health (see page 8): 0 (no damage) – 10 (severe damage, no bark)
 - c. An observation of canopy health (see page 8): 0 (no foliage) – 10 (dense, healthy foliage)
5. Upload any photos you've taken to the **iNaturalist** app/webpage - this will require an app to be downloaded or an account to be created – or send them to bnglandcare@gmail.com

WHAT TO DO WITH THE DATA?

Once you've gathered some data, you can let the Landcare Facilitator (Andrew Borg) know by calling him on 0407 856 227 or e-mail: bnglandcare@gmail.com

It would also be really useful to upload any photos you have taken to iNaturalist and identify them as Buloke. This will add the location to the Buloke Project Map.

....and finally..... give yourself a pat on the back! **You're helping to preserve an Endangered Species.**

Project WINDHARP

ABOUT INATURALIST

iNaturalist is a great app/site for recording and collating observations (ie plants, birds, insects, animals)

If you have a Mobile Phone, you will need to download the app. Alternatively, you can create an account on the Web.

The basic instructions for recording your observations can be found at:

<https://www.inaturalist.org/pages/getting+started>

HEALTH SCORES

The following method for scoring the health of Bulokes is taken from *Management of Buloke feeding habitat in the Southern Wimmera* (2005) authored by Martine Maron.



Figure 2. Buloke trunk with no visible bark damage, scoring 0/10 for bark damage score (left) and Buloke trunk with severe damage and bare heartwood, scoring 9/10 for bark damage.



Figure 3. Buloke with dense, healthy canopy, scoring 9/10 for canopy health (left) and Buloke showing severe dieback, scoring 2/10 for canopy health (right).