

# ALEP

*Aboriginal Landcare Education Program*

5

## Collect, Treat and Store Seed



Learning Guide

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Student name:.....

Student number:.....

# INTRODUCTION

Welcome to *Collect, Treat and Store Seed*. This learning guide covers the collection, treatment and storage of seed from native plant species. You might need to be able to collect and treat seeds when working for councils, carrying out bush regeneration work, nursery work or ranger work or when managing your own country.

Training for this module should be completed on the job and out in the field in various habitats such as woodlands and monsoon forests.



## NOTE

*It is recommended you work through the Recognise Plants learning guide first. This will give you the plant identification skills needed to collect seeds.*

## EQUIPMENT REQUIRED

To complete this training you will need the following:

1. Appropriate Personal Protective Equipment (PPE).
2. Safety gear for field work including first aid kit, maps and water.
3. Secateurs, bags, buckets and other equipment for collecting seed.
4. Sieves, scales, bags, labels and containers for cleaning and storing seed.

## ASSIGNMENTS

There are three assignments you will need to complete.

Some of these assignments may go towards your final assessment.

Section	Assignment	Competent (C) Not yet competent (NYC)	Date Achieved
<b>Getting Prepared</b>	Assignment 1. Project Risk Assessment		
<b>Collecting Seed</b>	Assignment 2. Flowering and Fruiting Calendar		
<b>Clean and Store Seed</b>	Assignment 3. Collect Seed		

## 1A. COLLECTING INFORMATION

Some good books about collecting seed and identifying plants can be found in the References on page 20. We recommend you work through the learning guide for *Recognise Plants* first as it has lots of information about identifying plants, including more references.

There is also a wealth of information available online.

1. For Australia wide information on seed collection go to the Florabank website.



[www.florabank.org.au](http://www.florabank.org.au)

2. For information on Northern Territory plants go to the Department of Natural Resources, Environment, the Arts and Sport.



[www.nretas.nt.gov.au/plants-and-animals](http://www.nretas.nt.gov.au/plants-and-animals)

3. For Australia wide information on plant classification, plants names and identification go to the Australian National Botanic Gardens.



[www.anbg.gov.au](http://www.anbg.gov.au)



## 1B. COLLECTING SEEDS SAFELY

When collecting seeds it is recommended that you use sunscreen, wear a hat, and have sturdy shoes. It is also a good idea to wear a protective long-sleeved shirt and long trousers to keep the sun off. This is called Personal Protective Equipment (PPE).

It will also be essential to carry plenty of water for drinking and also for washing hands, especially if handling poisonous or irritating seeds.

Remember some seeds are very poisonous or should not be handled for spiritual reasons. Always ask your elders or trainer first before handling any plants. Gloves are also recommended when collecting seeds as some sap, fruits, seeds or dust from dried seeds can be toxic and may also cause allergic reactions on the skin. A hard hat may also be useful as there can be dangers from falling branches or fruit. Some seeds are very fine, dusty or hairy and dust masks may be need for the cleaning process.

Make sure that you are familiar with your organisation's occupational health and safety policies and procedures before doing any work. When collecting seeds in the field always inform your trainer or supervisor about where you are going and when you expect to return. Ideally you should not go out into the field with less than three people. Always carry a first aid kit and maps with you. Make sure your vehicle is properly maintained. Check all safety equipment such as radios and mobile or satellite phones before you leave to see if they are working properly. Before you set off also check the weather, road and fire reports for your local area.



Before you begin, use this checklist to confirm you have followed good safety procedures.

**SAFETY CHECKLIST ACTIVITY**



Long trousers, shirt and boots		
Hat (hard hat if necessary) and gloves		
Sunscreen, insect repellent and sunglasses		
Dust mask		
Water		
First aid kit		
Notified others and have phone/ 2 way radio		
Checked weather, road and fire reports		
Permits (if required) and maps		
Compass or GPS		

## 1C. PERMITS AND PERMISSION

### PERMITS

The Northern Territory Government has restrictions on what native plants and seeds can be collected and has a permit system for collecting them. **Make sure you have the right permit before you start collecting seed.** See this website for the latest details.

 [www.nt.gov.au/nreta/wildlife/permits](http://www.nt.gov.au/nreta/wildlife/permits)

### THREATENED SPECIES

Various laws protect all plants listed as threatened. The main laws are the Australian Government's *Environment Protection and Biodiversity Conservation Act 1999* and the *NT Government's Territory Parks and Wildlife Conservation Act 2006*.

These acts conserve biological diversity, and help to prevent the extinction and promote the recovery of, populations of threatened animals and plants and ecological communities. They also aim to stop processes that threaten the survival of these plants and animals.

**Make sure you do not collect seeds from any threatened plants.** Information on threatened plants can be accessed online.

 [www.nretas.nt.gov.au/plants-and-animals](http://www.nretas.nt.gov.au/plants-and-animals)

### PERMISSION

Before collecting seed you need to get permission from the landowner. This includes private landowners, the government and Aboriginal landowners. Most landowners are generally helpful and you can collect seeds without too many problems but always ask first. You should get permission in writing, especially if the land is owned by the government or a council (eg. national parks, roadsides and Aboriginal land).

In many communities you may also need permission from local traditional owners before collecting any seeds. Some plants may have special significance and should never be touched (e.g. totemic plants, local restrictions, local protocols etc.). Always seek local advice before you start collecting seed – not afterwards.

### ACTIVITY

Find out who you need to get permission from to collect seeds in these areas.

Aboriginal owned land	
Roadsides	
Private land	
Pastoral properties	
National or conservation parks	
Council reserves	



Cycads are threatened species



Example of permit for NT Government

## 1D. ABOUT COLLECTING SEED

### WHY COLLECT SEED

The main reasons for collecting seed are:

- To grow plants from seed in a nursery situation.
- To direct seed areas for revegetation purposes (like a farmer sowing a crop).
- For use in arts and crafts.
- To make food.

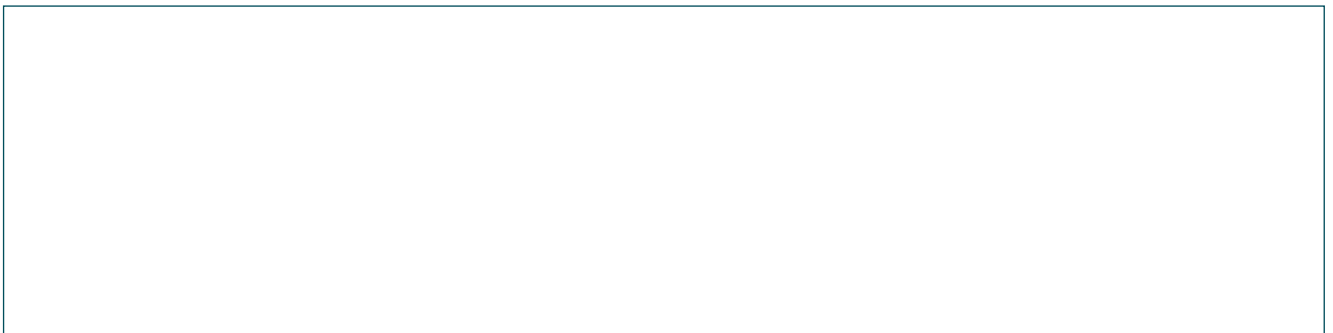
### FROM FLOWER TO SEED

Collecting seed makes us watch the life cycle of plants:

- A flower grows and is pollinated.
- Fruit develops which contains seed.
- The seed is blown, washed or carried away to a new location where it starts growing into a new plant.

#### ACTIVITY

Pick a plant that you know well. Draw a series of pictures showing the life cycle of the plant from the flower bud to the mature seed.



### WHEN TO COLLECT

You should have a list of trees and shrubs you want to collect seed from. Keep a constant watch out for them in flower so you can prepare to get the seed later on. It is a very good idea to make a calendar of fruiting and flowering times so you can easily work out a seed collection program for the year. Seed collecting should occur on dry days to prevent the seeds rotting.

### WHERE TO COLLECT

Collecting seeds might mean travelling large distances. Its a good idea to have map of the area with the plants marked for easy finding.

If you are collecting seed to revegetate your area it is important to collect seed from native plants in the same area. The plants that are native to a particular area have adapted to the local soils, climate and other vegetation and are more likely to grow well there.

It is very important to keep seed from each species separate throughout the whole seed collection and storage process so the right seed goes back to the right area.

