

## FELL SMALL TREES



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## PUBLICATION NOTES

*BHP Billiton Iron Ore is proud to support Greening Australia to provide valuable conservation and land management training to communities throughout the Pilbara through the Indigenous Training Program.*

*This Learning Guide series has been developed as part of our partnership of the program.*

Gavin Price, Head of Environment, BHP Billiton Iron Ore

*Greening Australia is proud to produce and provide the comprehensive suite of new ALEP Learning Guides. The guides are compatible with the new horticulture and conservation industries training package and are suited to developing skills in Indigenous communities within remote areas of the country where employment opportunities are limited. We would like to thank BHPBIO for their generous support in the development of the guides.*

Brendan Foran, National CEO, Greening Australia

The second series of ALEP Guides is aligned with a number of units of competence from the *Training Package AHC10 – Agriculture, Horticulture and Conservation and Land Management* (Release 8.0). The units selected are frequently used within Certificates I to III in Horticulture and Conservation and Land Management. As such they cover, where possible, the elements, performance criteria and required skills and knowledge of each unit.

The principal goal of these resources is to support the learning process; the learning activities may complement a trainer's assessment plan. The intent is that they will be used in an interactive manner with learners rather than as self-paced study guides. The structure and sequence have been designed to follow the logical steps of the practical tasks wherever possible. Concepts are introduced and then consolidated with discussion and/or practical activities.

The writers consider that these guides can provide a sound technical foundation but also strongly encourage trainers to complement the guides with additional, authentic resources from relevant industry texts and websites. The guides can be used in part or in their entirety but should always be linked to practical activities to strengthen the teaching and learning.

Genuine consideration was given to the level of language used in the guides. The goal has been to find a balance between simplifying the language to an accessible level and ensuring that the vocational concepts are addressed. The writers contend that with appropriate support these texts can provide an opportunity for students to strengthen their language, literacy and numeracy skills, which may be required for pathway progression.

A number of Aboriginal people have been involved in developing this ALEP Guide, which is considered suitable for use within a program based on Aboriginal pedagogies.

# INTRODUCTION

Welcome to *Fell small trees*. This learning guide provides information about the process of small-tree felling. The program covers the following topics:

- Workplace health and safety
- Get ready at your base
- Assess and prepare the site
- Fell the tree
- Finish the job and clean up

You need to already have the skills and knowledge about chainsaw maintenance and use that were covered in the ALEP Guide *Operate and maintain chainsaws*.

To be competent in assessment for this unit, it is also necessary that you have undertaken first aid training. Knowledge of emergency and first aid procedures is a requirement of this unit but is not covered in this guide.

## RESOURCES REQUIRED

To complete this training you will need the following:

1. Appropriate Personal Protective Equipment (PPE)
2. Tools for doing maintenance on chainsaws
3. Manufacturer's instructions for the chainsaw being used
4. A chainsaw
5. Access to small trees to fell

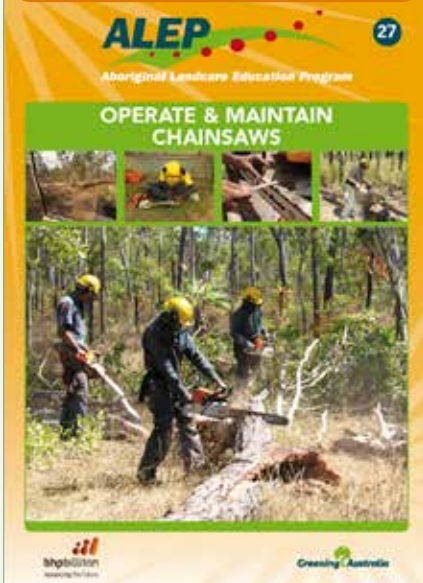
## LEARNING ACTIVITIES

There are three kinds of activities to complete. These activities may go towards your final assessment.

SECTION	ACTIVITY	SATISFACTORY (Y/N)	DATE
<b>DISCUSSION ACTIVITIES</b>			
1.1	Workplace policies and procedures		
1.2	Hazards and Standard Operating Procedures		
2.1	Local government regulations		
2.2	Job roles and communication		
2.5	Plan tools and equipment		
3.1	Tree and site assessment (2 scenarios)		
4.8	Complex jobs		
<b>PRACTICAL ACTIVITIES</b>			
2.2	Communication and hand signals		
2.3	Job Safety Analysis		
2.6	Pre-start checks		
3.1	Tree and site assessment		
4.9	Practice sawing		
<b>PROJECT</b>			
5.4	Putting it all together		



*Much of the training for this unit should be completed on the job.*



## WORKPLACE HEALTH & SAFETY (WHS)

In this unit, your workplace is wherever you are doing the work. This might be in bushland on Country or be in a home garden or community area such as in a park, a school or accommodation area.

### 1.1 WHAT WE ALREADY KNOW

Everything from the ALEP Guide *Operate and maintain chainsaws* is relevant to the work you will do in this unit. It is recommended you access this guide and do a quick revision of the following topics:

- Hazards, risks and controls
- Legal requirements (standards)
- Policies and procedures
- Manufacturer's instructions



### DISCUSSION ACTIVITY

List the policies and procedures in your workplace that relate to felling a tree. If you don't have any, use the Standard Operating Procedure (SOP) from the *Resources* section.

With your work team, read through and discuss the document(s).



See *Resources R1* and *R2*, pages 38 & 40

### 1.2 ADDITIONAL HAZARDS

There are more hazards present when you use a chainsaw to fell trees than when you just use it to cut timber on the ground. Many of the hazards are the same, but the tree, the surrounding area and the felling activity present some additional hazards.



### DISCUSSION ACTIVITY

What are the hazards listed in the SOP or Safe Work Method Statement (SWMS) you will follow?






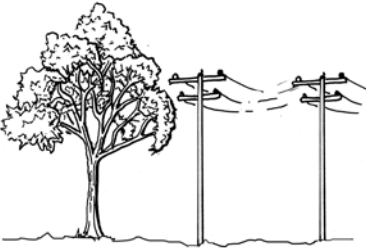


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Once you have identified the hazards, it is important to do a risk assessment.

We'll look at this in *Section 2.3*.

HAZARDS	CONTROLS
<p><b>FALLING LIMBS &amp; TIMBER</b></p> <p>Risk of: Crushing, cuts and bruises, broken bones</p> 	<ul style="list-style-type: none"> <li>• Follow SOP</li> <li>• Avoid felling onto other trees</li> <li>• Wear appropriate PPE</li> </ul>
<p><b>SLOPING GROUND</b></p> <p>Risk of: Crushing, cuts and bruises, broken bones caused by timber rolling down the slope</p> 	<ul style="list-style-type: none"> <li>• Assess tree according to SOP</li> <li>• Set up exclusion zone</li> <li>• Chainsaw operator stands on uphill side of tree while sawing</li> <li>• Remove plant, equipment and bystanders from downhill area</li> <li>• Wear appropriate PPE</li> </ul>
<p><b>WIND GUSTS</b></p> <p>Risk of: Crushing, cuts and bruises, broken bones caused by tree falling unpredictably during felling or other debris falling</p> 	<ul style="list-style-type: none"> <li>• Do not fell trees in very windy conditions</li> <li>• Monitor wind direction</li> <li>• Wear appropriate PPE</li> </ul>
<p><b>BOULDERS, STUMPS &amp; OTHER TREES</b></p> <p>Risk of: Crushing, cuts and bruises, broken bones caused by tree moving unpredictably as it hits other objects or gets hung up</p> 	<ul style="list-style-type: none"> <li>• Assess tree according to SOP</li> <li>• Fell a tree into a clear area, avoid other objects</li> <li>• Wear appropriate PPE</li> </ul>
<p><b>FORKED OR DAMAGED TREES</b></p> <p>Risk of: Crushing, cuts and bruises, broken bones caused by tree splitting or falling unpredictably during felling</p> 	<ul style="list-style-type: none"> <li>• Assess tree according to SOP</li> <li>• Use appropriate sawing techniques</li> <li>• Wear appropriate PPE</li> <li>• Seek specialist assistance if required</li> </ul>
<p><b>UTILITIES &amp; SERVICES</b></p> <p>Risk of: Electrocution, crushing, burns</p> 	<ul style="list-style-type: none"> <li>• Conduct site assessment according to SOP</li> <li>• Use equipment such as elevated work platform to avoid damage to utilities and services</li> <li>• Use felling techniques to avoid damage to utilities and services</li> <li>• Apply for disconnection permit prior to work</li> </ul>



#### NOTE

*A near miss is a kind of incident that should be treated in the same way as an accident.*

*A near miss is when someone is nearly injured but is not actually injured.*

## 1.3 DUTY OF CARE

'Duty' means a legal obligation – something you must do. So 'duty of care' means that legally, you must care for yourself and those around you. Under Workplace Health and Safety law, employers and employees have responsibilities.

### EMPLOYER RESPONSIBILITIES

The key responsibility of an employer is to show a duty of care towards their employees. They do this by:

- Providing a safe workplace that is free from unnecessary hazards
- Supplying the required PPE and safety equipment for all employees working with equipment that presents a hazard
- Supplying equipment and tools that meet Australian Standards
- Making sure all employees who need to work with equipment that presents a hazard are trained appropriately
- Listening to and acting on feedback from employees

### EMPLOYEE RESPONSIBILITIES

The key responsibility of an employee is to show a duty of care to themselves and others. They do this by:

- Completing the training provided by the employer and following the processes learnt
- Using and looking after PPE and safety equipment as directed
- Following the workplace policies and procedures
- Reporting any accidents and near misses
- Following manufacturers' safety instructions on equipment and when using dangerous materials
- Making suggestions as to how to reduce risks in the workplace

## 1.4 EMERGENCY PROCEDURES

If you are involved in an emergency situation, it might be the result of:

- Something related to the felling work
- Something else happening at the site where you are working

For your work, follow emergency procedures in your SOP or Job Safety Analysis (JSA), or follow the directions of your supervisor. These might require you to call emergency services and/or administer first aid. For ambulance, police or fire brigade, call 000.

At a site managed by others, you need to follow their procedures. You might have learnt about these at a site induction. At all times, you need to follow the safety directions of authorised personnel such as emergency services or the site Health and Safety Officer.

Make your way to the muster point or safe area and work with your supervisor to check that you know where everyone in your work team is.

