



Safety Bulletin

National Parks and Wildlife Service

Welcome to the first Safety Bulletin from the National Parks & Wildlife Service (NPWS) Division Workplace Health & Safety (WHS) Committee for 2020. This particular bulletin is produced by the staff from the Kangaroo Island Region and their WHS Committee on behalf of the NPWS Division WHS Committee. Throughout the year a different NPWS branch or region will provide a safety bulletin to keep staff updated on new workplace safety initiatives, a particular theme, or other information in regards to workplace safety.

THEME – safe operation of chainsaws

“Its bite is worse than its bark”

**“Safety is vital, and improving safety to all staff is of highest priority.
Look after your workmates!”**

The chainsaw is a vital piece of equipment for park operations and is used for a variety of purposes from fire management activities, to road clearance and trail maintenance. When handled by a competent operator, and with the right size chainsaw, even large trees can be felled and cross-cut with minimal risk to the operator or bystanders.

However, the chainsaw is not a pocket knife! There have been injuries and near misses by DEW staff and care MUST be taken.

In 2019 an incident occurred on Kangaroo Island where a well-trained and experienced chainsaw operator was using a chainsaw. When removing the branch that had just been cut, they didn't engage the chain brake properly and it nicked their finger with the chain of the saw. Luckily first aid was on hand and the operator was taken to hospital for medical attention. No serious injuries resulted from this incident but it's a reminder that incidents can occur when using high risk plant, and that planning and preparation is fundamental when conducting hazardous tasks.

There are three levels of risk management when operating plant and equipment:

1. Assess hazards and risks associated with plant [Plant Safety Management Procedure](#)
2. Assess the hazards of the task [Job Safety Analysis Procedure](#)
3. Provide method for completing work safely (Safe Work Practice) [Job Safety Analysis Procedure](#)



Reminders for safe chainsaw use:

Training and induction:

Before completing any work with a chainsaw, operators are to ensure they obtain suitable qualification. Under DEW's [WHS 4 WHSIM Training Procedure](#), employees will “Not operate dangerous plant, equipment, or vehicles without holding a current and valid license or certificate of competency.” The minimum training requirements for cross-cut is the nationally recognised course:

[AHCMM213 – Operate and maintain chainsaws.](#)

Operators should ensure they maintain their required training.



Cross-cut refers to the technique of using the chainsaw to cut already fallen timber across the main grain. Undertaking the above mentioned course does not give the operator the skills required to fell standing trees. Felling trees is graded based on the difficulty involved in felling the tree, ranging from basic to intermediate and finally to advanced. Courses which cover these are below:

[FWPCOT2236 – Fall trees manually \(basic\)](#)

[FWPFGM3212 – Fall trees manually \(intermediate\)](#)

[FWPFGM3213 – Fall trees manually \(advanced\)](#)

Employees unfamiliar with a new chainsaw or one of a different size should be inducted into the piece of equipment by a suitably trained and experienced operator. Inductions should cover all aspects of chainsaw use including:

- Relevant Safe Work Practices
- Pre and post use checklists
- Adjustments, controls and chain brake functions

Pre-start inspections

Pre-start inspections must be carried out on chainsaws prior to conducting any fieldwork. These checks include bar tension, fuel and lubricant levels, chain sharpness, chain brake function and that the chainsaw's idle and throttle are working appropriately. Tracking faults, issues and hour usage in the pre-start inspection checklist is a handy way of monitoring maintenance requirements of chainsaws, particularly if there are a number being used at any one time.

Things to consider before you leave

Operators should consider the following:

- ✓ Are staff suitably trained to undertake the task?
- ✓ Is the area remote and how difficult is access to the area?
- ✓ Do I have a first aid kit with me and is it suitable?
- ✓ Do I have suitable first aid training or someone on my team has this training?
- ✓ Is my Personal Protective Equipment in good working order?
- ✓ How big is the tree/limb to be removed?
- ✓ Is my chainsaw suitable for the specific job? – length of bar, engine size etc
- ✓ What additional tools and equipment are required for the job e.g. axe, wedges, fuel etc?
- ✓ Can a mechanical aid be used instead, such as a front end loader?
- ✓ Is the material being chipped, stored on site or trucked away?
- ✓ Will traffic be impacted by the work?
- ✓ Does a Traffic Management Plan need to be implemented?
- ✓ What risk to bystanders exist?
- ✓ What is the fire danger rating for today?

Personal Protective Equipment (PPE)

A Safe Work Practice (SWP) provides a methodology for safely completing tasks and determines the type of protective clothing required. An example of PPE required for chainsaw use include:



GLOVES –
Tight
fitting



EAR PROTECTION



PROTECTIVE
GLASSES



REFLECTIVE VEST



HARD HAT



CHAINSAW
VISOR



CUT-
PROOF
CHAPS

Site Hazard and Risk Assessment Talk

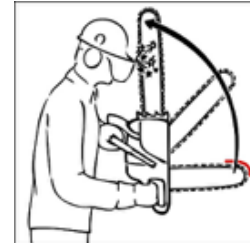
Before works commence, one member of the works crew should address the rest of the team in order to brief the objectives of the task and new risks which may arise not covered by the SWP (e.g. rocky terrain, dew on grass etc). It is also good practice to designate a safety officer and delegate roles to team members to avoid confusion (chainsaw operator,

trimming removalist, chipper operators). Communication strategies should also be discussed, particularly when working in remote or isolated areas. As using a chainsaw and associated vegetation removal is a hazardous manual task, the [Hazardous Manual Tasks Procedure](#) should be referred to.

Working with and near chainsaws

All operators and other members of the works crew must wear appropriate PPE. Operators must wear appropriate hearing protection in accordance with the [Hazardous noise levels procedure](#).

Chainsaw type	At ear of operator (dBA)	Bystander 7.5m (dBA)
MS 201	99	81
MS 251	103	82
MS 362	106	85
MS 660	113	93



Operators must be aware of the risks of kickback when operating a chainsaw. Kickback occurs when the tip of the chainsaw bar is the only section of the saw to make contact with wood. This is extremely dangerous and all operators must ensure they use proper techniques for avoiding such instances and must know how to position their body so that if kickback does occur they are not in danger.

Debris and other tripping hazards should be removed as far as practical to make the immediate area around where the operator is to work safe.

To avoid pinching the chainsaw bar, compression and decompression cuts should be made rather than one cut all the way through the wood. Depending on the position of the wood, pressure may be applied in different areas and cuts should be made to avoid this situation.

When cutting large trees with dense foliage, operators should remove any weight which may cause trees to roll or shift whilst cutting. This usually involves starting from the smallest or thinnest branches and working "down" the tree towards its base, removing weight as you go along.

Operators should position themselves on the uphill side of large timber to avoid having heavy logs roll onto them, and should try to wedge or stop logs rolling downhill and having the potential to strike bystanders or other colleagues.

Post use check

After completing all chainsaw work, the saw should be cleaned and maintained be ready for the next user. An example of the Kangaroo Island post-use check can be seen below and outlines hours used, cumulative hours used and other such recordings in order to gauge levels of use before the chainsaw is required to have a service.

A post use check should include the following:

- ✓ Chainsaw clean; Clean air filter; Clean air inlet on fan housing
- ✓ Check guide bar in good conition (not bent, pinched, sprocket spins) – deburr as required
- ✓ Check chain sharp, even, depths correct, in good condition
- ✓ Check chain tension/orientation
- ✓ Check spark arresting screen clear
- ✓ Check and fill fuel and oil, and check oil and fuel filler caps
- ✓ Check start cord in good condition
- ✓ Check idling correctly, and check idle adjustment – chain must not rotate when idling

The chainsaw is a critical piece of plant but operators must comply with relevant DEW procedures and understand the risks associated with their use. Other relevant DEW Procedures:

[Safe Work Practice - Chainsaw operation](#), [and Work Health Safety and Injury Management Policy](#)