

## More Dangerous Logging Work Delimiting and Heading-Off Trees

### Part Two: Ways of Reducing Fatalities and Serious Harm Accidents

Ensure all protective clothing and equipment required is present, properly maintained and used by persons at your work site.

#### 1. Chainsaw kickback (23%)

- Hold the saw firmly in both hands and maintain good balance and body position while operating the saw.
- Do not overreach or use your saw above shoulder height.
- Maintain the chain to the manufacturer's recommendations as to tension, sharpening and depth gauge settings and use the correct bar and chain combination.
- Make sure all safety features (chainbreak, mitt) are operable. Check the operation of your chainbreak at regular intervals.
- Size of saw and length of bar should be only sufficient to perform the operation efficiently.
- Long bars increase the possibility of kickback.
- Be especially careful when there is light material entwined in the branches to be delimited or generally present as ground cover as these can easily be caught in the chain and cause kickback.
- Avoid using the bar nose for cutting.
- Be aware of the position of the guide bar nose at all times.

- Cut only one branch at a time.
- Use extreme caution when re-entering a previous cut.

#### 2. Slipped or fell off log (13%)

- Spiked boots should be worn by those on delimiting and heading off.
- Where practicable, carry out delimiting from the ground providing there is no danger of the tree/log rolling and that debris or light scrub is not a hindrance or problem. There are proven methods which are designed to reduce injuries and combat fatigue. The Logging and Forest Industry Training Board Inc. Rotorua, will give you information on training that can be provided in your area.
- If delimiting has to be done off the top of the tree or log, watch for branch stubs, cones vines or other obstructions that may trip you and force you off.
- Avoid delimiting more than 1.5 metres above the ground.

#### 3. Cut loaded (tensioned) branches (18%)

- a) Threw chainsaw back (12%)
- b) Branch hit worker (6%)

Cutting loaded branches is the prime cause of both these type of accidents. Follow the tips below to reduce danger from tensioned branches.

- Identify the tension and the likely direction of spring of the branch.
- Stand in a safe position clear of the reach of the loaded branch. Make the relieving cut away from the trunk and then complete a flush cut now that the tension has been released; or
- If practicable, stand on the side away from the tension, and release the tension with two cuts, first on your side and then on the other side. Flush cut if necessary.
- Maintain stable footing and a balanced body position. Do not overreach.
- If a branch has been missed, do not reach behind to cut a loaded branch. Body and saw position will not be correct.

#### **4. Lacerations from general chainsaw work (12%)**

- Adopt the correct working stance and hold the saw firmly but comfortably.
- Do not overreach.
- Make sure that your feet are correctly and safely positioned.
- Approved delimiting methods provide built in safety measures—use them.
- Use the right sized saw for the job. Longer than necessary guidebars can be awkward to handle and restrict movement.
- Keep the guide bar on the far side of the stem to avoid coming into contact with the chain when walking forward.
- Be aware of the position of the guide bar especially when your feet and legs are close to the working area.
- Be alert to any rotten parts which may cause a sudden movement of the saw as it cuts faster through the less dense section and may endanger your body.

#### **5. Tree or log moved while being worked on (14%)**

##### **a) Delimiting (8%)**

- Make sure the tree is stable and will not roll or move before starting delimiting or considering heading it off.

- Where a tree is held up off the ground, make a series of cuts in large branches from the outside and move in towards the stem to test stability. One large branch is all that is needed to hold the tree up. When cut, the tree can roll on you.
- On a slope, work from the upper side of a tree as there may be danger of the tree rolling.
- Watch carefully as you delimit a tree with branches under tension as removing a few branches may cause the remaining ones to break under the strain and allow tree movement.

##### **b) Heading off (6%)**

- Closely examine the tree and determine if it is liable to roll, drop or swing when the cut has been completed. If it is not obvious what is holding a tree on a slope, you should assume that it may move at any time and avoid working or entering any potential danger area.
- Make sure that other persons will not be endangered if the headed-off tree rolls down slope.
- Avoid making cuts while you are standing on the tree as it may move as the cuts are made or completed and throw you off.
- Do not complete the cuts from the lower side of a tree.
- Do not head-off trees that are more than 1.5 metres above the ground as the saw will have to be used above shoulder height. Have the tree moved to a satisfactory position before heading off.
- Examine the tree for any top, side or bottom tension or compression and adjust your cutting pattern to suit the circumstances.
- Do not forget your hammer and wedges.

Access (6%) and objects falling into work area (4%) have already been covered in Bulletin No. 108.

Falls, trips, slides, slips and loss of balance contribute to a large number of accidents. We will look at these in a future bulletin.