

FORESTRY BULLETIN

The Dangerous Business of Felling Trees

Part One: What's Happening in Logging

Since the introduction of the Health and Safety in Employment Act on 1 April 1993, felling trees has caused one third of logging fatalities and one quarter of serious harm logging accidents reported to OSH. The LIRO Accident Reporting Scheme also shows the same ratio of felling accidents as the OSH figures.

We have produced two *Forestry Bulletins* to look at what is happening in felling and ways of reducing fatalities and serious harm. These should be read together.

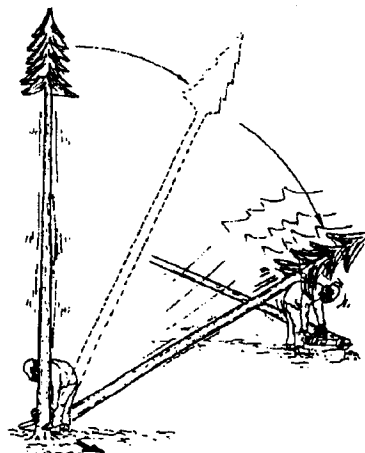
No. 107: The Dangerous Business of Felling Trees—Part One: What's Happening in Logging

No. 108: The Dangerous Business of Felling Trees—Part Two: Ways of Reducing Fatalities and Serious Harm Accidents

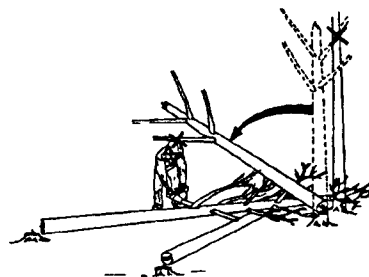
Fatalities

Let's first look at the cause of felling fatalities from 1 July 1992 until 30 June 1996

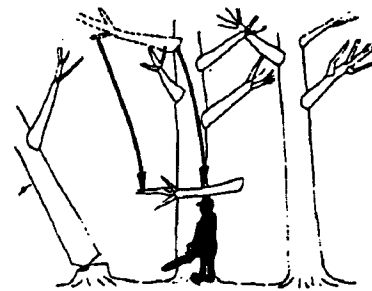
Object disturbed and falling from adjacent tree	3
Tree sliding off another and into work area	2
Cut-up tree falling	2
Cut-up tree falling back into stand and hitting dead spar	1
Cut-up dead spar falls onto worker while he sharpened saw	1
Hit by hung-up tree being winched down	1
When felled, tree kicked across and hit faller	1
Correct escape route not followed	1
Hit by tree felled by fellow worker	1



Hit fellow worker



Cut-up tree



Falling objects

Serious Harm Accidents

Now let's have a look at the causes of the serious harm felling accidents from 1 July 1993 until 31 December 1995. (Figures not yet available for January-June 1996.)

Access (7%)

Slipping, tripping, sliding or falling 7

Falling objects (33%) (dead top, broken branch, dead spar, cone cluster)

Tree being felled 16

Another (usually adjacent) tree 17

Trees (34%)

Bouncing /sliding off stump 14

Hung up falling, pushed or pulled by machine 8

Cut up falling, pushed or pulled by machine 6

Felled by another worker 4

Driven tree slid back 2

Saws (14%)

Kickback 10

Chain broke/came off 2

Fell on saw 2

Strains (5%)

Back strain due to poor posture and occupational overuse syndrome 5

Miscellaneous (7%)

Hit by broken wedge 3

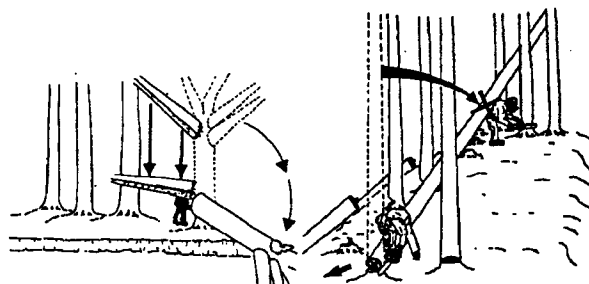
Object in eye 2

Struck by rock disturbed from above 2

These figures relate solely to the actual felling component of the operation.

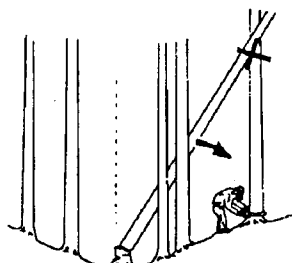
As fallers frequently delimb and head off, they are exposed to other dangerous work. *Forestry Bulletin* No. 111 will look at these parts of the operations. Felling, delimiting and heading off account for over a third of the fatalities and half the serious harm accidents reported to OSH.

In addition, *Forestry Bulletin* No. 112 will outline ways to reduce fatalities and serious harm accidents.

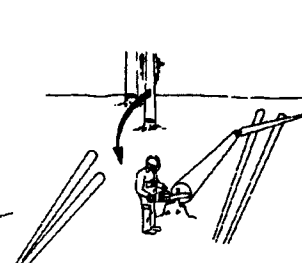


Falling objects

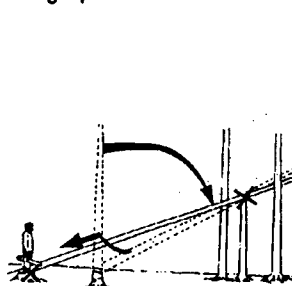
Hit fellow worker



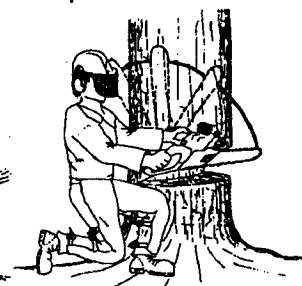
Hung-up tree



Cut-up tree



Sliding tree



Kickback

Odds and Ends

1. Additional 1995-96 fatality to those contained in Bulletin No. 102

Land clearing:

A self-employed farmer was clearing trees. He had cut one side off a double leader beech tree and while felling the remaining leader it sat back and jammed the saw. Makeshift wedges were used to free the saw but the tree fell directly backwards from the intended direction of fall and struck the faller as he tried to escape. Two helpers escaped to the side.

2. Forestry Bulletin No. 106

The account of the fatality in this bulletin concentrated on the accepted methods of backpulling and recorded the tragic result of incorrect procedures and did not cover the machinery used.

The use of machinery not equipped with at least ROPS and FOPS is not acceptable to an operation of this type.