


# The Appropriate Way to use a Top-Handled Chain Saw in the UK



One-handed Use Of A Chain Saw is not acceptable

By Paul Elcoat

In the course of my business, I get to observe many contracting companies and climbing arborists performing their day-to-day duties.

I spend my time offering services as a 'rent-a-director' in arboricultural and landscape companies that need a helping hand with various aspects of their business. One of the areas that I have found can yield quick efficiency wins is looking at the on-site routines and practices. Things that I tend to note are:

- ▶ Safe working practices
- ▶ The efficiency of the observed working practices
- ▶ The appropriateness of the observed working practices
- ▶ Concurrent activity among the team or, indeed, the lack of it
- ▶ Anticipation of needs at all levels
- ▶ Effective use of equipment
- ▶ Further equipment needs
- ▶ Unproductive attitudes and relationships

I invariably find that my outlook is different from the arborists who I am working with in that while they are thinking about trees, personal income, going home in the evening and all of the other 'look-forwards' that individuals have on their minds, I am thinking commercial; how can we do this more efficiently and safely? How can we fit more paid opportunities into the day and maintain the effective fitness of our people?

At this point, let us consider the following set of assumptions. They are sweeping generalizations, but I am sure that you will get my point:

- ▶ Excellent tree work is the commodity that we sell to generate income.



*This injury is the result of contact between a top handled chain saw and a lower left forearm. This damage was sustained from a chain that was "running down."*

*Let me make it clear from here on in; the single-handed use of a top-handled chain saw as your normal operating technique is not acceptable.*

- ▶ Increased efficiency as well as increased sales yield increased profit.
- ▶ Regardless of how professional we consider ourselves to be, to the domestic customer we are simply the people who take away the green refuse.
- ▶ We are, sadly, judged on price and clean up rather than the quality of our pruning.

- ▶ Accidents cost a lot of money.
- ▶ A damaged individual is not productive.
- ▶ A tired individual is not productive.
- ▶ Ill-maintained or inappropriate equipment is not productive.

The bottom line, whether you are the owner of the operation or an individual arborist, is that you owe it to yourself and your colleagues to take full advantage of the excellent tools and systems available to us nowadays and to adopt proven safe and efficient working practices as your standard operational procedure. Such operation will ensure profitability, continued income, staff welfare and customer satisfaction. Additionally, of course, it will enable you to develop a good working relationship with your local enforcement agencies; it's great to have these experts on your side.

This nicely brings me to the subject of top-handled chain saws and their appropriate use by competent arborists.

An all-too-common observation is a climber using the "hold-and-cut" habit. They hold the piece to be cut off with their left hand and cut it off using a simple top to bottom cut with a top-handled chain saw held in their right hand. This is regularly justified to me as being "what these saws were designed for" and "how else would you do it!" Apparently it is the best way to ensure that the area below the tree remains undamaged and it facilitates the passing down of the cut section to the ground staff?

Once hold-and-cut has become part of the climber's existence, they do it unconsciously all of the time. I regularly see people removing the last 12 inches of stub by holding onto it, cutting it off and then dropping it straight to the ground. More recently, arborists in the United Kingdom (where the author lives and works) have started to use bucket trucks to reduce the risks from working at height and a whole new suite of horrible practices have developed. Hold-and-cut while standing in the bucket or, worse still, several people in the bucket; one person driving, one person holding the lump to be removed and one person cutting with a chain saw.

I have seen, investigated and heard of enough accidents to be able to make a com-

ment about hold and cut:

**IT IS VERY DANGEROUS – DON'T DO IT!**

**YOU WILL SERIOUSLY HURT YOURSELF OR YOUR COLLEAGUES.**

Let me make it clear from here on in; the single-handed use of a top-handled chain saw as your normal operating technique is *not* acceptable. It is generally considered to be unprofessional and simply a demonstration of your inability to achieve a good work position and to make appropriate cuts. It significantly increases your exposure to risk and is likely to shorten your effective working life.

I hope I said that well!

### Case studies

In the UK, professional arborists report incidents to the Health and Safety Executive (the UK version of OSHA) so that statistics can be analyzed and better standards developed. The HSE may also use the reports as anecdotes in their publications to illustrate a point.

The case studies below are taken from “Tree Work Accidents – an analysis of fatal and serious injuries,” (2003).

#### Case 1

A trainee arborist needed 35 stitches to his left arm after it came into contact with



*Correct positioning prior to making the cut allows for two hands on the saw, enabling a climber to make appropriate cuts.*



*An all-too-common observation is a climber using the “hold-and-cut” habit. They hold the piece to be cut off with their left hand and cut it off using a simple top-to-bottom cut with a top-handled chain saw held in their right hand.*

the running chain on a top-handled chain saw. He had failed to position himself correctly in the tree. To steady his position, he placed his free hand below and in line with the cut he was making on the branch. When the saw completed the cut, it

dropped through onto his arm.

Top-handled chain saws should only be operated by arborists who have undergone specific training in their use. Where possible, top-handled chain saws should always be held with both hands. Poor positioning in the tree is not an excuse for one-handed use.

#### Case 2

A self-employed arborist cut the tendons and artery in his forearm when he tripped while de-limbing a felled tree in a domestic garden. He was using a top-handled chain saw one-handed.

Top-handled chainsaws are designed to be used up in trees. He should have used a conventional chain saw when working on the ground.

The photograph on the facing page shows the result of contact between a top-handled chain saw and a lower left forearm. This damage was sustained from a chain that was “running down” rather than being under power and subsequent investigation revealed that it was done by about six to 10 cutters on the chain. They simply counted the teeth with meat on them!

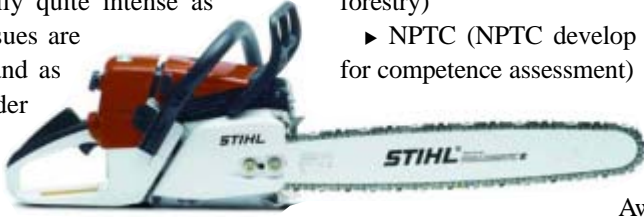
I am hoping that readers are starting to

identify a trend here.

In the UK, the arboricultural industry is in the privileged position of working closely with several key stakeholders in the development of standards, and these stakeholders operate under the collective title of The Arboriculture and Forestry Advisory Group, or AFAG, as it is more commonly known. Standard-setting meetings are usually quite intense as the various issues are thrashed out and as each stakeholder argues his/her position. This has meant that our training, assessment and regulatory material all largely reflect the same consensus opinion, is finalized to be a reasonable response to accident statistics and is industrially credible.

Members of this partnership are:

- ▶ Representatives from industry



A standard chain saw.

- ▶ Representatives from manufacturers
- ▶ The Health and Safety Executive (HSE)
- ▶ The Arboricultural Association (UK industry professional body for arboriculture)
- ▶ The Forestry Contracting Association (UK industry professional body for forestry)
- ▶ NPTC (NPTC develop the standards for competence assessment)
- ▶ Lantra Awards (Lantra Awards develop training material and courses)

### Top-handled chain saw use

I would like now, to introduce some of the guidance that has been developed in relation to the use of top-handled chain saws in order to clearly explain the UK stance on appropriate use.

**AFAG 308 – Top-Handled Chain saws**  
This is the industry guidance leaflet that describes best practice in straight-forward terms. It is the guidance that would be referred to as being the standard if enforcement action was being taken for negligence in the management of health and safety.



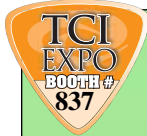
A top-handled chain saw.

I have extracted the following guidance for your consideration:

*Top-handled chain saws have two handles. To maintain proper control of the saw you must, wherever possible, grip both handles.*

*Poor work positioning in the tree is not an acceptable reason for one-handed use.*

*Keep the saw well clear of yourself and*



## Tools of the Trade for the Professional Arborist



Deluxe Master  
11290



Deluxe Pinnacle  
11291T



Deluxe Traverse  
11292



Deluxe Versatile  
11293



Big Buck Climber Pad  
Model 3118  
Double strap system with an angled metal insert & thick felt padding for comfort & support.

**B**UCKINGHAM MANUFACTURING  
SINCE 1896 COMPANY INCORPORATED

P.O. Box 1690, 1-11 Travis Avenue  
Binghamton, NY 13902  
Tel: (607) 773-2400

E-Mail [sales@buckinghammfg.com](mailto:sales@buckinghammfg.com)  
[www.buckinghammfg.com](http://www.buckinghammfg.com)

"ArborMaster® is a registered trademark of ArborMaster Training, Inc., used by license on Buckingham products."

Please circle 21 on Reader Service Card

your climbing equipment at all times. Ensure you obtain the best available cutting position to minimize the risk of being struck by the saw (including kick-back) or by severed pieces of wood. Incorrect, one-handed use significantly increases the risk of injury from the saw if it kicks back, skates or bounces on contact with a branch, or drops through at the end of a cut. Never 'hold and cut' a section. Do not attempt to catch a falling section. One-handed use should be restricted to circumstances where one hand is required to maintain a stable working position and the saw is used at extended reach with the other hand, e.g. while cutting at the extremities of limbs. (Note to the reader: This is not an ANSI Z133-condoned practice for the U.S.) The chain saw may be attached to the climber's harness by means of a strop. However, it should not be attached to the

**ANSI Z133.1-2006, 6.3.7: When operating a chain saw, the arborist or other worker shall hold the saw firmly with both hands, keeping the thumb and fingers wrapped around the handle.**

climber in situations where there is a risk of the chain saw being trapped or taken with a severed section.

The chain saw should be switched off, or the chain brake applied, after each cutting operation.

Do not leave the engine running for long periods when not in use.

This and the other guidance leaflets can be seen at [www.hse.gov.uk/pubns/forindex.htm](http://www.hse.gov.uk/pubns/forindex.htm)

Take a look, they are very good. They make ideal handouts for trainees or reference documents in the "truck file." They

can even be used as site-inspection check-lists.

**NPTC CS39 – Use of a Chain saw from a Rope and Harness**

CS39 is the set of standards used by NPTC Assessors when observing a candidate prior to the award (or not) of the certificate of competence for the use of a chain saw from a rope and harness. Again, I have extracted some key content below:

*Limbs and limb sections should be removed taking the following points into account:*

**Hit your target more often!**

**Use the "Bullet Bag" by Bishop Company.**

The Bullet design offers greater accuracy, easier use and more durability. The long slim shape tends to fly straighter and with less deflection, whether you are tossing by hand or a mechanical device. The slender bag and smaller attachment dee-ring makes retrieval through tight spots possible. By reducing the number of pieces and seams in the bag construction and correctly matching the bag to shot volume to allow internal energy absorption on impact, the Bullet Bag will perform longer. Choose from five weights with color coding for easy identification.

**Bullet Bag only (8,10,12,14 or 16 oz.) .....\$10<sup>73</sup>**  
**Bullet Bag w/150' Dynaglide throwline ...\$26<sup>73</sup>**

Buy the **Bullet Bag** by itself or add 150' of **Dynaglide** high strength throwline for a complete package.

Offers Expires 1/31/08

To place an immediate order for a Bullet Bag or other arborist supplies, please CALL 800.421.4833, email [sales@bishco.com](mailto:sales@bishco.com) or now order online at [www.bishco.com](http://www.bishco.com).

**bishopco.**

Please circle 17 on Reader Service Card