

BTS Training – Working at Height seminar



Up before dawn and into the cold East Anglian sunshine for a seminar courtesy of BTS Training, and there is nothing like the risks and hazards from working at height to bring you back down to earth. The seminar was held on 25th November 2009 at the Elizabeth Hotel in the village of Copdock, near Ipswich. A good selection of speakers clearly exercised and engaged delegates as seen by the wealth of questions following all presentations. Rarely will a seminar generate so many meaningful and penetrating questions, this time from an audience covering a wealth of knowledge and practical experience of working at height.

The seminar was organised and chaired by Jim Philpot (Regional Manager for BTS Utility Arb in Yorkshire), himself an experienced arborist with more than 20 years in wide ranging roles. He introduced the speakers and kept the running-order effective and smooth, which was none too easy given the variety and intensity of questions and questioning from the floor.

The wide range of topics included climbing, ladders and scaffolding, but the pros and cons of climbing versus MEWPS was the feature which clearly interested many experienced climbing arborists in the audience.

Working at Height Regulations

The first speaker was Frances Hirst from the Health & Safety Executive (HSE) on 'Working at Height Regulations – History, Application and Enforcement'. Hirst works in HSE's Agriculture and Food Sector and leads in arboriculture, often being asked by field inspectors for advice and guidance in arboriculture matters. She worked closely with the authors of the Arboriculture Association's 'A guide to good climbing practice' and 'A Guide to the use of MEWPS in Arboriculture'. Frances began with statistics on safety (or lack of it), commenting how they were not good. The 34 fatalities amongst employees in 2007/8 were 18% up on the previous year. Figures for self-employed were better she said, the 24 registered in 2007/8 representing a 25% reduction over ten years. 19% and 48% of all reported fatalities in employees and the self-employed respectively were the result of falls from working at height. Between 50-60% of all fatalities from working at height occur in the construction industry.

She explained the background, development and arrival of the 'Working at Height Regulations 2005' that set out and govern working at height within the law. In 2001 the industry had looked at what was 'on the books' and consolidated all under the 2005 'Regs' which came into force on 6 April 2005.

There was no transitional period because it was a consolidation of material that was already 'good practice'. Hirst emphasised key points of the 'hierarchy' system underpinning the regulations:

1. Avoid – do not work at height if at all possible
2. Prevent – if working at height is absolutely necessary then take steps to prevent falls
3. Minimise – minimise the consequences of any fall

The scope of the regulations is broad, covering all industries and defined as 'Work in any place from which a person could fall at distance and liable to cause injury'. As such it covers the construction, utilities and manufacturing industry as well as arboriculture, and work at ground level and below (e.g. mining) as well as above. One of the few things it does not cover is permanent stairways. The bottom line, said Hirst, is "if you don't have to go up there don't", suggesting the use of pole pruners and other ground-operated equipment as the safer alternative option.

Hirst categorised duty holders as employers, the self-employed and those in control of people at work, to the extent of their control, and which clearly includes local authorities. Employees have specific duties and obligations too, said Hirst, which is to use the correct equipment in the right way and to report any deficiencies to their employers.

The essential framework for safe success when working at height is 'Organisation, Planning and Competence'. This means a detailed and appropriate risk assessment with subsequent proper planning in relation to site characteristics and prevailing weather conditions. This must include, said Hirst, appropriate supervision (including emergency planning/rescue) and ensuring work is not carried out if weather conditions could jeopardise health and safety. For instance, there should be no working at height in high winds.

To ensure selection of the right equipment duty holders and users must consider:

- Working conditions
- Access and egress
- Height distance and consequences of any fall
- Duration and frequency of use/task
- Ease of rescue/evacuation
- Risk of use, installation and removal of work equipment

In selecting the right equipment collective protection comes before personal protection.

- Select guardrails/working platforms (including MEWPS) before personal fall prevention (e.g. work restraint)
- Select nets/airbags before personal fall arrest

The competence of those carrying out the work and others in a supervisory role is essential. Those working at height should be competent or, if being trained, are supervised by a competent person said Hirst. However, she freely admitted how there is no clear definition of competence required whether in regard to the right level of training, experience or particular certificated qualifications. These defining deficiencies were later seized on during intense questioning from the floor.

Hirst emphasised how working at height should be avoided where at all possible, but that following good practice should mean the duty holder and operator should be doing enough to comply with the regulations. Her underlying message that MEWPS offered an all round superior and safer option came over loud and clear, but this was quite apparently not accepted by large sections of the audience – clearly experienced climbers and still apparently preferring that option for working at height.

Audience exercised and engaged

Questions from the floor flew fast and furiously, and became the hallmark of this fascinating and interesting seminar. The first question predictably concerned competence, and its definition within the context and frame of working at height. Hirst was completely upfront, saying how the HSE was notoriously bad

at giving any definition of competence, and how this failure to specify what a competent person is has become a universal problem. This brave statement led to further questioning about the lack of a dedicated and nationally recognised certificate of competence and what duty holders should do about accepting (or refusing) certification from other countries like Australia.

Throughout the session Frances Hirst advised the use of MEWPS over climbing, but there was strong disagreement from the floor and questioning of any suggestion of universal superiority of MEWPS over climbing on various grounds including type of work, ease and extent of access, speed of work, ground compaction and particularly cost, pointing out how inclusion of MEWPS in tenders pushes up costs and ruins competitiveness.

Frances Hirst was also asked to be more specific about fatalities occurring in arboriculture. The figure she said was 2-5 per year which included those from working at height. Paul Hanson, who spoke later, said in 2007/8 there were 37 fatalities in agriculture, 2 in forestry and 3 in 'tree work' of which 2 occurred from working at height. Asked for separate fatality figures for MEWPS versus climbing Hirst said they were not known. Discussion then went even deeper with one member of the audience asking if a guy comes down off of a tree, walks away and then has a fatal heart attack, does that count in the 'working at height fatality figures'. Frances Hirst said it could do, depending on where it occurred and the local HSE's particular reporting system.

Questioning then switched from people to machinery, with one delegate pointing out how there were many excellent dedicated tree MEWPS in the United States but if they were not CE marked then they could not be used. Frances Hirst pointed out how their eligibility would depend on the European Directive (ED). Some US MEWPS exceed 180 degree angle in movement which automatically translates into a 'negative' movement value which means they are automatically disqualified under the ED. Tongue in cheek she suggested that the industry could lobby for a change in European legislation, which brought predictable howls of laughter from 'climbers' who thought there was as much chance of this as defying gravity. But another member of the audience claimed the problem could easily be overcome by the manufacturer of the machine writing its own standards and obtaining a CE mark in this way.

Superb audience participation

This stiff and penetrating questioning

continued for the next speaker, Peter Ryles, Group Health and Safety Manager at BTS, who stood in at the very last minute for Paul Ellis on the subject of 'Risk Assessment and Access Solutions for Working at Height in the Utility Sector', that clearly covers tree work and at height. One arborist in the audience asked how the speaker arrived at a figure of 2 hours as the maximum length of time (in any one session) for working from MEWPS, adding how it was not at all clear to him because it would depend on what task the person was carrying out. This question clearly engaged the audience who said there were not and should not be any 'hard and fast' rules and that the time length was flexible with the type of equipment being used. Two hours was perhaps too long when working from a 'small bucket' said one.

The matter of weather conditions and especially wind speed was 'got up' by the audience. If you look up and 'wind gusting' is causing physical movement in the device then it is an unacceptable hazard and risk was one 'rule of thumb' suggestion. However, it was generally agreed you cannot possibly know whether wind speed is excessive for use of a particular MEWP at a specific height unless you measure wind velocity appropriately with a wind meter. Again and again the audience questioned what they appeared to regard as 'unquestioned' benefits of MEWPS over climbing, with one pointing out his perceived dangers of working astride busy roads from MEWPS which could swing out into the path of oncoming high vehicles.

Some of the most interesting discussions took place following a presentation (MEWPs in Tree Work) by Paul Hanson, Managing Director of Arboretum Internationale Ltd and current chairman of the AA's Scottish branch. Hanson, who is one of the authors of the recently published 'A guide to the use of MEWPs in Arboriculture', considered the range of MEWPs available and how their use is being adopted by and adapted to tree work.

First from the floor was a BP (British Petroleum) 'man' who claimed it was difficult to find companies that can use MEWPs. Another member of the audience questioned the 'biological cost factor' (to trees) from using a 17 tonne machine around the root zone especially on development sites. And how this introduced a 'money cost factor' said another, from necessary use of geotextiles, aluminium road options or the use of larger machines that can work from outside the root zone, all to avoid soil compaction problems.

The discussion then moved to the type of work best undertaken by MEWPs, including crown lifting and crown



reduction and the speed achieved relative to climbing. With a sizable tree, said one, there could be a need to move the MEWP four or five times and for speed there was no competition with climbing. Another quipped that all this MEWP movement may be OK in Scotland, but was a definite 'no-no' on London Clay.

Several speakers implied that arboriculture was not viewed or regarded as a professional industry by the public at large but that regulations and dedicated publications on climbing practice and MEWP usage could help change all that. An increasing role and use for MEWPs came over loud and clear from the speakers, but if the ensuing discussion that was triggered is anything to go by, there appears to be a long way to go before working arborists are convinced of MEWPs' universal benefits.

Other speakers were Martine Brooke (Bratts Ladders) 'Ladders Yes or No' and Kevin Moore (BTS Training) 'Two Rope Working in Agriculture'. Kevin also organised the seminar and must be congratulated for what was one of the most lively and enlivening I have ever attended. Audience participation is the best measure of success and on that basis the seminar deserves 10 out of 10.