

## **A View of ARBORICULTURE 1854-2008**

by

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### **Abstract**

*[Arboriculture is a young emerging profession which necessitates specialized training calling for a very considerable breadth of technical and general knowledge. The accepted foundations of which, lie in a sound education in the theory and practical art of managing trees. Arborists of today are husbandmen, businessmen, scientists and environmentalists. Further more they must keep pace with discovery and experiment, with ecology and the laws of the land on which trees grow and the laws which allow people to work safely. Today's entrants to Arboriculture can finish their preliminary education with a degree, the true professional will then continue their training by taking part in lifelong learning programmes. The Victorian legacy of magnificent tree collections deserves to be managed by the methods most appropriate to maintain their great values.]*

Arboriculture is not a new term; it was used in the days of Nelson by landed gentry who followed the good example set by Admiral Collingwood of planting acorns outside of the forest. Many attempts have been made to define arboriculture, my summary of these would indicate that arboriculture is a term applied to tree cultivation when they are not grown for harvesting for the primary objective of timber production. Today's Scottish and English Royal Forestry Societies once had the titles of arboricultural societies, the Royal Scottish Arboricultural Society was founded in 1854 and the English Royal Arboricultural Society was founded in 1882. The war years determined a need for title change which came in 1919 as the emphasis on tree growing turned to forestry to replace rapidly diminishing stocks of timber.

The profession of Forestry established seats of learning (Edinburgh, Cambridge, Oxford, Aberdeen and Bangor) in the late 1880's and early 1900's. However, a degree level course in straight Arboriculture has not been available until the 1990's. Yet, nearly half of all the foreign trees introduced to this country arrived in the years between 1800 and 1844, these included; Monkey Puzzle, Giant Redwood, Sequioa, Douglas Fir and Atlas Cedar. The trees were planted as specimens in botanic gardens and on great estates, such as Chatsworth (1834) in Derbyshire. It was at this time (1850) that urban planting became more structured stimulated by the affluent upper classes. The Victorians planted streets and parks in towns and cities creating parks for public enjoyment and (Birkenhead park 1843) industrial towns often had parks named Victoria.

By the 1930's commercial tree care companies were offering a range of tree services such as pruning and felling works. Interim Preservation Orders (IPO) available from 1943 introduced the concept of the modern Tree Protection Orders, that name change

came in 1947, however, few Local Authorities had officers that could deal specifically with tree related issues. Skilled tree surgeons were thin on the ground in 1964 when the Association of British Tree Surgeons and Arborists (ABTSA) was founded by contractors. Standards of professionalism were low, the production of BS 3998: Tree Work in 1966, a world first set the standard to be attained for the industry. The ABTSA group held their annual conference at Merrist Wood Agricultural (now Guildford) College. As a result the very first college department of Arboriculture headed by Peter Bridgeman was established in this country in 1968. Another initiative prompted the funding of the Arboricultural and Advisory Information Service (AAIS) managed by Derek Patch. The Arboricultural Association (AA) was founded in 1964 to serve Local Authority Tree Officers as they could not be seen to be working in co-operation with contractors. The unfreezing of attitudes led to the amalgamation of the AA and the ABTSA in 1974. The new AA was described at the time as standing for high standards, if people wanted professional recognition they should show it by examination to a high standard. The premier arboricultural examination at that time was offered by the Royal Forestry Society and given the title of Professional Diploma in Arboriculture and today is still known by that name but is administered by and awarding body called ABC. The qualification now has National Qualification Framework (NQF) recognition through the Qualification and Curriculum Authority (QCA) at level six which equates to a BA Honours degree. In 1970 came the first full time college arboriculture course, which has eventually led to the creation of degree level courses based at Middlesex University and Myerscough College. (Soon to produce an 'on-line' version)

Most significant in 1974 was the introduction of the Health and Safety at Work Act and the formation in April of 1974 of the Forestry Safety Council (FSC) which produced guidance on best practice for chainsaw operations. The 1970's saw general acceptance of the wearing of safety clothing and more colleges offering training. The 1980's saw a deluge of Acts and Regulations that provided further guidance for employers and employees on safety issues and safe best working practices as promoted by the newly formed Arboricultural Safety Council. (ASC) The registration of chainsaw instructors and assessors was organised in 1989, to operate a system of assessment for chainsaw competence, with certification provided by the National Proficiency Testing Council. (NPTC) 1991 saw the amalgamation of the FSC and ASC into one body called the Forestry and Arboricultural Safety and Training Council (FASTCo), with developments in the range of chainsaw competence units and Hazard and Risk assessment. FASTCo then considered to be the industry lead body for arboriculture was absorbed into LANTRA a newly formed lead body which 'leads' the way today.

Since the introduction of chainsaws, manufacturers have continued to upgrade the safety features incorporated in their design, most significant being the chainbrake which may prevent or reduce the severity of any cuts arising from contact with the sawchain teeth. Today's models bear little resemblance to yesteryear's saws, providing the tree surgeon with a powerful lightweight versatile tool that the first producer in 1926 could not have envisaged.

The majority of tree climbing prior to 1967 was 'free climbing', that is without safety equipment. BS 1397 Industrial Safety Harnesses recommended the use of a safety system involving a nylon life line and waist belt type harness. Revisions to the

harness and the name given to them have resulted in tree surgeons being required to wear a working position waist belt with leg straps. Safety equipment in this country in the late 20<sup>th</sup> century has developed more rapidly than at any other time due in part to the introduction of National and World Climbing Championships.

In 1976, at a time when flush cutting, painting wounds, drilling holes in trees to install braces and draining cavities was considered to be best practice. Full-time courses in arboriculture were unobtainable, the subject existed as an addition to Horticulture at most colleges and if you described your vocation as an arboriculturist then that needed a further definition for it to be understood. The easy explanation was to state tree surgeon at which the vast majority of people then understood that you cut down, lopped and topped trees as a job. Shigo, Mattheck, Boddy, Raynor, and Schwarze were unheard of and subsidence due to the near presence of trees wouldn't be considered a problem until after the drought of 1976. The Arboricultural syllabi of the day included nothing or very little on woodland management, personnel management, finance, public relations, communication skills, ecology, environmental management, root morphology, tree biology, urban forestry, mortgage reports, subsidence investigation and use of information technology.

In my opinion, tree surgery is a very small part of the definition of arboriculture. The phrase does not in any way explain the work of an arboriculturist, or the extent of the skills and depth of knowledge required across a very broad range of subject areas in order to manage and maintain trees today. The modern tree surgeon has kept pace with new technology allowing them to ascend into tree crowns and work with out damaging living tissues of the tree. New techniques, equipment and personal protective equipment ensures that the climber is working to high safety standards whilst being effective and efficient. Today's tree surgeon is also encouraged to participate in lifelong learning programmes which require constant accreditation of Continued Educational Units (CEU) in order that they remain recognized as carrying out current best practice. One such qualification is called the certified arborist qualification available through the International Society of Arboriculture.

The professional arboriculturist can offer the client a wide range of advisory and skills based services having gained knowledge of and been examined in the following areas;

*Arboricultural history, taxonomy, genetics and plant breeding, soils and plant nutrition, ecology and climate, pests and diseases of woody plants, other injurious agents of woody plants, plant protection and tree health management, propagation techniques, nurseries, landscape design and plant utilization, planting, roots, pruning, repair and prevention of damage, nutrition, felling and extraction, health and safety, statute and common law, tree inspections and surveys, trees and development sites, subsidence assessment and investigation, woodland management, arboretum management, veteran tree management, mechanical equipment, office management, financial control and technical aspects of management.*

The professional can also offer expert witness testimony (a qualification is available through Bond and Solon/Cardiff University) and will be proficient in information technology use, communication and presentation skills. Above all, the professional of the 21<sup>st</sup> century will continue to take part in lifelong learning programmes and to

achieve Continued Professional Development Units (CPD) as required by a category of Fellow or Member of the association/institute to which they belong. The inclusion of CPD units in maintaining a category of membership to a professional body is an important method of ensuring that the professional remains current, and therefore, advises clients on the most appropriate techniques for maintaining safe and healthy trees. Chartered status is available for the arboriculturist in the form of Forester (arboricultural route) and Environmentalist (Society of Environmentalists) through the Institute of Chartered Foresters (ICF) and the AA.

Trees are more valuable today than ever before and their sustainability in the landscape must be assured for the future of all life on the planet. The wealth of the tree population in this country is in the hands of a few. Dedicated people who look after this resource are determined to establish a profession known as Arboriculture. As with all things new it will take time to establish the profession amongst the already established and well recognized bodies. Forestry and arboriculture in the future must exclude historical argument and recognize the valuable contribution that each profession can make to the cultivation of trees. The two professions do have distinct main objectives; areas of common concern should take a unified approach.

Managers of trees that are not grown to be harvested require the services of a professional arboriculturist who has had a broad range of training and who has been assessed and measured against national criteria. One who can offer the broad range of current advice and experience that is expected and demanded of a professional status.

All too readily tree surgeons and arborists are accused in the media of cutting down trees at the first hint of trouble. In my experience they are first and foremost tree lovers and generally do not cut them down needlessly. Modern decay detection and measuring equipment can assist us in our judgements, tolerance on behalf of the tree owner and acceptance of veteran trees and the values to wildlife that they hold will in the future reduce the numbers cut down before their time. Deadwood is no longer seen as firewood to be removed from trees for aesthetic reason or to burn. Protected species such as Bats now influence their thinking and planning of operations.

Arboriculture as a description of a profession is not widely recognized by those outside of it, many LA officers might now work for an Urban Forestry department. Is this a different subject or are they one in the same? Whatever the title, tree management requires a much different definition than even 20 years ago. My offering goes like this:

*“the planning, planting, care and management of trees for their present and potential contribution to the physiological, sociological, economic and ecological values to benefit society where the primary aim is not timber production. This may include Community Woodlands, Community Forests and the National Forest”*

Whatever the definition, today’s students of arboriculture study a very wide range of material during their education and will form part of a multi-disciplined team in the work place. I hope they will have the vision that our Victorian ancestors had when they planted the trees we enjoy so much now.

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