

# Arborists



## Occupational Brief Title Codes:

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## Occupational Subtitles:

- Utility Arborists

## Work Classification Based Related

### D.O.T. Occupations:

- Lawn-Service Workers
- Plant-Care Workers
- Tree Pruners
- Tree Trimmers
- Weed Inspectors

## Interests Based Related

### G.O.E. Occupations:

- Bonsai Culturists
- Landscape Contractors
- Landscape Gardeners
- Nursery Managers

## Skills Based Related

### O\*NET Occupations:

- Cleaners of Vehicles and Equipment
- Farmworkers, Farm and Ranch Animals
- Hunters and Trappers
- Landscaping and Groundskeeping Workers

## Noteworthy Quote:

*“Working with trees is a fascinating and fulfilling career that offers challenging work with interesting science. Positions offer outdoor work, require physical fitness and agility, and the field has many advancement and growth opportunities. As populations continue the trend of moving to urban areas, trees gain acknowledgment of their importance to the environment. Arborists continue to become more important to select, locate, and care for trees.”*

**)Gordan Mann, Board Member of the Society of Municipal Arborists, Public Works Superintendent, Redwood City Public Works, Redwood City, California**

**Arborists** (ar-bor-ists) are experts in the care and management of trees and woody plants. They plant and care for trees that grow in residential, commercial, and public landscapes.

As the world population becomes increasingly urban, the need for tree care professionals has become more critical. Trees make urban and suburban areas better places to live and work. They filter pollution, shade homes, reduce glare, muffle noise, block unpleasant views, reduce soil erosion, and may even reduce crime. Trees mark property lines and furnish a habitat for birds and other animals. Trees enhance the appearance and value of homes and property.

Arborists practice arboriculture, which is the care, maintenance, and preservation of trees and other woody plants. Arborists keep trees healthy and attractive, and manage them to avoid endangering people, roads, sidewalks, and nearby buildings. Arborists also help select trees that are appropriate for specific locations, and advocate for more space for trees.

## Work Performed

Arborists perform a wide variety of services. They plant trees and prune them to improve their health, form, and aesthetics. They may cable and brace limbs that need support. They remove trees that are decayed, diseased, overgrown, or that may pose a risk to people or infrastructure. Arborists diagnose tree diseases, identify insect damage, and show homeowners and property developers how to keep trees healthy. They also perform risk assessments, tree appraisal, and inventory trees in cities, parks, and commercial developments to develop management plans.

Arborists work in several different sectors of the tree care industry. The largest sector is commercial tree care. **Commercial arborists** work for homeowners, power companies, and government agencies. They prune, cable, fertilize, plant, and remove



*Arborists are experts in the care and management of trees and woody plants.*

*Photo by International Society of Arboriculture*

trees on residential, commercial, and public properties. They may also treat trees to prevent and control insect infestations and diseases. Commercial arborists help planners and developers to protect trees on construction sites, and in some instances, may serve as expert witnesses in court cases.

The municipal sector, or urban forestry, manages the trees on city or other public properties. **Municipal arborists** work with trees and woody plants along streets, in parks, and on the grounds of public buildings. During construction and development, they decide which trees are worth preserving and which will need to be removed. They educate the public, review plans for landscape projects, hold training programs for employees, and prepare budgets. Municipal arborists advise elected officials, municipal management, municipal staff, and city boards on tree issues. They are often managers of city tree crews and assist or prepare disaster preparedness plans, as well as post disaster relief and clean-up plans. Municipal arborists prepare reports for insurance claims, oversee Tree Grant applications, and assist city attorneys in court cases involving trees.

**Utility arborists** ensure continuity of electric power to citizens by pruning trees clear of transmission and distribution lines. They prune trees to reduce hazards, provide clearance, and avoid interference with power lines. They continually test new line clearance and vegetation control methods and review wildlife management programs. They teach customers about the need for proper tree maintenance near utility lines. They also advise customers on tree species that are suitable for planting near power lines. Utility arborists manage trees in railroad right-of-ways to prevent interference with travel.

Some arborists work as consultants, offering advice, writing reports, and giving legal testimony on issues of casualty loss, tree appraisal, diagnostics, and even forensics. These arborists may be contracted by homeowners, insurance companies, lawyers, planners, developers, landscape architects, among others.

Arborists may use pruning tools or hand saws to remove small branches. Tree workers use chain saws to cut off large branches and to remove entire trees. Workers sometimes utilize sophisticated rigging systems consisting of ropes, pulleys and other devices to dismantle large trees without damaging any surrounding structures.

**Tree climbers** use specially designed gear such as ropes, saddles, and safety equipment that allows them to move about safely and guards against falling. Arborists may also work from an aerial lift when pruning trees or installing cables and braces. Some arborists work with truck-mounted cranes.

Arborists are also concerned with treating and preventing damage caused by disease and insects. Some trees may be very susceptible to disease and insect infestations due to their location. Arborists identify insects and diseases that negatively affect trees and select appropriate treatments accordingly. Arborists may use biological control measures, such as the release of natural insect predators, or they may use chemical control techniques using dusts or sprays. Many tree specialists have adopted a holistic approach known as Plant Health Care (PHC). PHC requires a thorough understanding of tree biology, identification, diagnostics, and ecology. The goal is to

select tree species to fit their planned environment, and to maintain tree health to prevent problems such as insect infestation, diseases, or abiotic disorders. To ensure this goal, arborists may need to work with landscape contractors to plant the right tree in the right place, so that they will require less maintenance in the future.

Arborists manage tree risk to keep it at acceptable levels according to tree location, function, and use. To illustrate, arborists may install cables and braces to prevent tree branches from splitting and breaking. They may install lightning protection systems in large, valuable trees on golf courses and in parks. Arborists may test the soil around new or established trees to determine the tree's nutrient needs.

### **Working Conditions**

Arborists spend most of their time outdoors and work year-round. The best time to plant, prune, and do other work varies with the season and the region of the country. Arborists take care of trees damaged by ice storms, blizzards, floods, or tropical storms. Tree workers may face bad weather to unblock roads and clean up storm affected areas. The work can be physically demanding. Often heavy and noisy equipment such as chippers, aerial lifts, cranes, and stump grinders are used. Although tools and equipment make many tasks easier, the work is still strenuous and potentially dangerous.

Tree climbers and aerial lift operators often work at heights of forty to fifty feet above the ground and risk injury or death if they are not properly trained or fail to use safe work practices. Personal protective equipment such as climbing saddles, ropes, hard hats, and other gear is available to help guard against injury. However, it is still the responsibility of each company and each worker to follow established procedures and safety regulations.

### **Hours and Earnings**

Because the arboriculture profession is so diverse, pay scales and hours vary. Although employers try to maintain a regular work schedule, emergencies and seasonal rushes make overtime common. Owners of small companies tend to work long hours calling on prospective customers, serving as crew leaders, and doing paperwork in the evenings.

According to the Bureau of Labor Statistics, in May 2004, arborists earned an average of \$28,330 a year. Earnings ranged from a high of more than \$42,410 a year to a low of less than \$17,620 a year. Wages in the tree care industry vary with the geographic location, employer, and the skills and responsibilities of the employee. Tree care professionals in higher level managerial positions may start at about \$35,000 a year and can earn upwards of \$75,000 per year.

Most tree care firms offer full-time workers medical insurance, life insurance, paid vacations, paid holidays, and paid sick time.

### **Education and Training**

The educational requirements for arborists depend on the work performed. Most employers prefer applicants to have at least a high school diploma. High school students

should take biology courses. Those who plan to advance should take courses in botany, chemistry, agronomy, plant science, entomology, arboriculture, horticulture, or forestry at a vocational school, college, or university. Many colleges also offer programs in arboriculture or related fields such as nursery stock production, grounds maintenance, turf management, landscape design, pest management, and natural resources.

Tree care companies offer on-the-job training programs that last from one month to three years. Trainees start as ground workers. They clear brush, operate chippers, load and unload trucks, clean up debris, handle ropes, and help tree climbers. Tree climbing is a physically demanding and potentially dangerous profession; comprehensive training and experience is extremely important. Companies may sponsor workshops to keep workers up-to-date with safe work practices, new techniques, and new products.

Many people learn about tree care from home-study courses, books on arboriculture, and literature from tree care firms. The International Society of Arboriculture (ISA) offers many publications including training videos and CD-ROM's that can help arborists and tree workers increase their knowledge of tree care and safe work practices. The Tree Care Industry Association (TCIA) offers home study programs for new workers as well as those with experience in the field.

Arborists in higher level positions usually have a college degree in arboriculture, urban forestry, horticulture, plant pathology, or a related program. Many also have work experience practicing arboriculture in the field. Tree climbers are always in high demand. Arborists working in management roles are likely to spend more time using computers than other tree care workers.

### **Licensing, Certification, and Professional Societies**

Some states have voluntary certification programs. A few states have either a title law or contractors' license for arborists. Some states may require a license to practice as well as certification. Many professional societies require Continuing Education Units (CEU's) to maintain their certification endorsements. In all states, a license is required to apply pesticide. Federal and state laws require that arborists know how to handle, mix, and apply the chemicals they use. In addition, arborists that drive large tree care trucks must have a commercial driver's license (CDL).

The International Society of Arboriculture (ISA) has more than 18,000 professional members who work in government, commercial, municipal, and utility arboriculture. This organization distributes information to educate both the public and tree care professionals on the care and preservation of shade and ornamental trees. ISA publishes arboricultural research studies on *Arboriculture & Urban Forestry* (formerly *Journal of Arboriculture*). ISA offers different certification programs for the various fields of arboriculture. Certification programs include ISA Certified Arborist, Utility Specialist, Municipal Specialist, ISA Certified Tree Care Worker (Climber Specialist), and ISA Board-Certified Master Arborist.

The Tree Care Industry Association (TCIA), formerly the National Arborist Association (NAA), has a membership of about 2,000 commercial tree care firms and affiliated companies. This group works to educate the public about the importance of shade and ornamental trees and to inform its membership about federal regulations and the latest arboricultural practices and products. It offers an accreditation program for companies that follow best business practices.

Other key organizations include the American Society of Consulting Arborists (ASCA), the Society of Municipal Arborists (SMA), the Utility Arborist Association (UAA), and the Society of Commercial Arboriculture (SCA). Each association sponsors workshops and distributes publications to keep members informed of relevant professional issues.

### **Personal Qualifications**

Some arboricultural work requires strenuous physical activity. Tree climbers must have a good sense of balance, steady nerves, and good judgment. They must recognize the importance of safe work practices. Arborists must like to interact with nature as well as people. They must have an appreciation for trees and their value to the environment. In addition, arborists often interact with the public, so strong communication skills are an advantage.

Occupations can be adapted for workers with disabilities. Persons should contact their school or employment counselors, their state office of vocational rehabilitation, or their state department of labor to explore fully their individual needs and requirements as well as the requirements of the occupation.

### **Where Employed**

There are at least 100,000 arborists at work throughout the United States. The largest employer is the commercial tree service industry. Other industries that are aware of the value of attractive landscaping hire arborists or grounds managers to care for trees and shrubs on their property. Power companies employ tree experts to clear tree growth around poles, guy wires, power lines, and telephone lines. City and county highway departments and public parks departments employ arborists to plant and care for trees and shrubs along roadsides. Cities employ arborists to care for trees along streets and in parks. Arborists also work for colleges, universities, golf courses and other commercial or private recreational facilities, private homeowners, landscape contractors, and landscape nurseries.

### **Employment Outlook**

Arborists will continue to find tree care a promising field. Employers in all sectors are typically understaffed and the demand for workers is high. Low salaries for starting workers in combination with physically demanding work often discourages many potential employees. However, as computers and new machinery enter the profession, the need for skilled, educated professionals is growing rapidly.

More homeowners, businesses, and municipalities are recognizing the value of individual trees and trees' contributions to the environment. A growing commitment to environmental planning and historic preservation will also improve the

job market for these workers. The outlook should be especially good for city arborists and urban foresters. Since the industry is still made up primarily of small, locally owned firms, opportunities exist for entrepreneurs who wish to start their own businesses.

### Entry Methods

The most direct way to start in this work is to apply to tree care companies. City and county highway and parks departments also hire crews to maintain trees and shrubs. Some municipal employers require civil service tests for tree climbers or tree service crew leaders.

University forestry, arboriculture, and horticulture departments may supply leads on jobs. The placement office at technical schools and two-year colleges may help graduates find jobs. Employers and professional associations offer student job fairs where employers can recruit graduating students. State employment offices may also have information about this line of work, and may be able to help those looking for state or federal civil service jobs. Professional newsletters and magazines list openings in their trade publications and online.

### Advancement

Skilled workers who have supervisory skills may become crew leaders, general foremen, or division managers. Some arborists become consulting arborists and serve tree care firms, industry, cities, nurseries, or gardening groups. They appraise the dollar value of large trees, diagnose tree health problems, evaluate tree hazard potential, and offer advice on tree care. Arborists with enough money, business skills, and experience may start their own business. Individuals who want to become park supervisors or managers of large private tree care companies will find it helpful to have a college degree in arboriculture, horticulture, or forestry.

### For Further Research

**American Society of Consulting Arborists**, 15245 Shady Grove Road, Suite 130, Rockville, MD 20850-6240. Web site: [www.asca-consultants.org](http://www.asca-consultants.org)

**International Society of Arboriculture**, P.O. Box 3129, Champaign, IL 61826-3129. Web site: [www.isa-arbor.com](http://www.isa-arbor.com)

**Society of Commercial Arboriculture**, P.O. Box 3129, Champaign, IL 61826-3129. Web site: <http://sca.isa-arbor.com>

**Society of Municipal Arborists**, P.O. Box 641, Watkinsville, GA 30677-0015. Web site: [www.urban-forestry.com](http://www.urban-forestry.com)

**Tree Care Industry Association**, 3 Perimeter Road, Unit 1, Manchester, NH 03103-3336. Website: [www.treecareindustry.org](http://www.treecareindustry.org)

**Tree Foundation of Kern**, P.O. Box 2871, Bakersfield, CA 93303-2871. Web site: [www.urbanforest.org](http://www.urbanforest.org)

*50 Careers in Trees*. Free online. Web site: [www.urbanforest.org/treecareers](http://www.urbanforest.org/treecareers)

**Utility Arborists Association**, P.O. Box 3129, Champaign, IL 61826-3129. Web site: [www.utilityarborist.org](http://www.utilityarborist.org)

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