Wages in Forestry and Logging

BY ELIZABETH DIETZ

The Occupational Compensation Surveys (OCS) provide cross-industry occupational wage data on about 50 occupations. But they also collect data on wages for occupations *specific* to forestry and logging industries. How did this apparent anomaly come about? In the mid-1980's, the Federal Government asked private contractors to bid on reforestation work for the U.S. Forest Service and the Department of the Interior. The Service Contract Act (SCA) states that all private establishments providing services to the Federal Government must pay their employees prevailing locality wages and related benefits.[1] The Employment Standards Administration (ESA), which administers the SCA, asked the Bureau of Labor Statistics to conduct surveys to gauge wages and benefits in these industries.

Average wages

In response to the ESA request, forestry and logging wage surveys were conducted for Washington, Oregon, Idaho, and Montana in the mid-1980s, followed by surveys in Arkansas and Mississippi in the early 1990s. These surveys have continued on a biannual basis. All wage information relates to non-supervisory production workers only. Because the Service Contract Act applies only to non-exempt workers covered by the overtime provisions of the Fair Labor Standards Act, the jobs surveyed were primarily manual labor occupations.

The most recent BLS forestry and logging data are from the northwestern States of Montana (May 1994), Idaho (July 1994), Oregon (March 1994), and Washington (July 1994). These surveys covered forestry or logging operations employing 10 workers or more[2] (industries 08 and 2411, respectively, as defined in the 1987 edition of the *Standard Industrial Classification Manual*). Christmas tree farms, contractors engaged in estimating or trucking timber but who perform no cutting operations, and sawmills were excluded for the surveys. As with the Arkansas and Mississippi surveys, all wage information relates to non-supervisory production workers only. Table 1 summarizes the data from the States surveyed in 1993 and 1994.

Pay rates ranged widely among occupations. Skilled workers such as loader and skidder operators, choker setters, and fallers/buckers operating heavy equipment generally earned more than workers in jobs requiring less skill, such as tree planters, slash pilers/burners, and general forestry laborers.

Any forestry or logging job that requires a worker to be in the forest carries some risk with it, and higher pay may compensate for the amount of risk involved. For example, in Idaho fallers and buckers, who use chain saws and mechanical felling equipment to cut down trees, earned an average of $19.90 per hour, whereas general forestry laborers, who sow seeds and thin vegetation around seedlings, earned an average of $9.04. Forestry technicians, who perform work requiring more skill than, for example, general forestry laborers, but who encounter less risk on the job than fallers and buckers, earned in the mid-range of average hourly rates, from $9.98 in Mississippi to $13.69 in Oregon.

Pay rates also ranged widely by State and region. Heavy equipment operators earned from $13 to almost $16 per hour in the Northwest, yet averaged only $8.59 per hour in Mississippi. Forestry technicians earned from $10.27 per hour in Idaho to $13.69 in Oregon, but earned only $9.98 per hour in Mississippi. And tree planters earned around $11 per hour in Oregon, Washington, and Idaho, while earning only $8.16 and $7.53 per hour, in Arkansas and Mississippi, respectively.

Industry background

Logging has been a way of life in America since the time of the earliest European settlers. Timber was harvested as needed with little regard for future growth. By the beginning of the 20th century, vast areas of forest had been cut, and at this time professional foresters trained in Europe began practicing forest management and restoration

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Table 1. Hourly wage rates for forestry occupations by State, 1993 and 1994

Occupation	Oregon (1994)	Washington (1994)	Montana (1994)	Idaho (1994)	Arkansas (1994)	Mississippi (1993)
Brush/precommercial thinners	$11.21	$12.28	—	—	—	—
Choker setters	11.39	12.63	$14.52	$15.98	—	—
Fallers/buckers	18.42	17.78	19.57	19.90	—	—
Fire lookouts	8.11	—	—	—	—	—
Forestry/logging heavy equipment operators	13.02	14.79	14.20	15.83	—	$8.59
Tractor operators, site preparation	—	—	—	—	—	9.00
Loader operators	13.73	15.20	14.53	14.64	—	—
Skidder operators	12.18	15.02	14.31	15.84	—	—
Forestry technicians	13.69	11.01	—	10.27	$11.34	9.98
Forestry truckdrivers	10.26	12.47	14.90	11.84	—	—
Heavy truck	11.83	12.87	—	—	—	—
Tractor-trailer	10.93	12.39	14.84	11.89	—	—
General forestry laborers	7.93	—	7.63	9.04	—	—
Slash pilers/burners	6.57	—	—	—	—	—
Tree planters	10.55	10.93	—	11.03	8.16	7.53
Tree planters (mechanical)	—	—	—	—	—	5.29

techniques in the United States.[3]

Today forestry and logging are done in tandem; foresters assess the best areas for loggers to cut based on long-range economic and environmental considerations and restore the forests that have been cut. Although the work of foresters and loggers complement one another, there are distinct occupational differences between the two industries.

Forestry workers help develop, maintain, and protect forests by planting tree seedlings, fighting insects and diseases that attack trees, cutting brush and diseased trees, gathering data of various land tracks for size, content, and condition of trees, and using methods to control soil erosion. Foresters who work for private industry gain permission to inventory timber from private landowners, assess the value of the timber on each parcel of land, negotiate the purchase of the timber, subcontract to logging firms to cut the timber, aid in road layout, and make sure logging operations conform with landowners' specifications as well as Federal, State, and local environmental regulations. Foresters who work for Federal and State governments manage public parks and forests as well as consult with private landowners to protect private forest lands.[4] They also may maintain camp trails, roads, and campgrounds. Forestry workers may be college-educated professionals who gather and analyze data and manage forestry operations to conform to environmental regulations, or they may be less skilled and perform more labor-intensive work such as marking trees, cutting brush, or planting trees under a design laid out by a professional forester.

Logging is carried out by a variety of workers. Loggers cut down trees with chain saws or other mechanical cutting equipment, trim tree tops and branches, and cut logs into specified lengths. Loggers also operate heavy machinery to transport logs from cutting to loading sites. The nature of the work varies by the terrain. In mountainous areas, logs may be transported by cable systems or helicopters from steep-grade cutting areas to lower-grade loading sites. In flat terrain, logs are skidded along the ground to loading sites. The difference in the nature of the logging operation means that the occupational mix of the work crews is also different. Over recent years, logging has become more dependent on machinery, but the work is nevertheless highly labor-intensive. Most of the training required for logging is provided on the job.

There are also differences between the organization of the forestry and logging industries. The Bureau of Labor Statistics *Occupational Outlook Handbook* reported that forestry and logging workers held about 124,000 jobs in 1994. Of these, there were 42,000 forest and conservation workers. Eight thousand were employed by the U.S. Department of Agriculture's Forest Service; 8,500 worked for State governments; and 5,800 worked for local governments. The remaining 20,000 foresters work for companies that operate timber tracts, tree farms, and nurseries.[5] According to the Society of American Foresters' membership statistics, about 7 percent of their 18,000 members are employed by colleges or universities, 14 percent by the Federal Government, 11 percent by State and local governments, and 20 percent by private industry. Eleven percent are private consultants, 14 percent are students, and 14 percent, retired. The balance of the Society's membership are self-employed (other than consultants), work for a foreign government, are unemployed, belong to another association, or did not indicate an employer.

There are only about 50 large U.S. companies which buy pulpwood to make into paper products, and there are many small sawmill operators who buy logs to make into building materials. These firms contract out the services of

some 37,000 small logging contractors,[6] who may employ anywhere from 1 to 20 employees. A typical crew consists of four to six workers. The overwhelming majority of logging is carried out by these small, independent contractors, which are, for the most part, nonunionized.[7] Of the 124,000 forestry and logging workers who held jobs in 1994, 82,000 were logging workers. Of these, 29,000 were fallers and buckers (see glossary appendix), 20,000 were logging tractor operators, 16,000 were log handling equipment operators, and 17,000 worked in all other timber cutting and related logging occupations. One of every 4 logging workers is self-employed. Although logging operations are found in most States, Washington and Oregon account for about 20 percent of all loggers.[8]

Forestry can be seasonal work depending on what part of the country is being forested. In southern regions, forestry can be performed year-round, but in northern areas, labor-intensive operations such as tree planting and thinning are put "on-hold" for the winter months. However, forestry occupations such as planning and office work continue year-round in all regions. Logging, on the other hand, is performed during all seasons and curtailed only by the most severe weather. Crews may be employed year-round, although seasonal demand varies slightly by region and employment is generally highest in the summer and lowest in the winter.

Forestry and logging work continually changes location during planting, thinning, and logging operations. The forestry industry tends to employ migratory workers for its less-skilled, labor-intensive operations. Loggers, however, tend to be more permanently associated with their employers, sometimes commuting long distances as their work sites change location.

Given the differences in the nature of forestry and logging, these two endeavors are categorized as two separate industries by Standard Industrial Classification (SIC) codes.[9] Under this classification system, forestry is considered an agricultural industry and logging, a manufacturing industry.[10]

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[1] McNamara-O'Hara Service Contract Act of 1965 (41 United States Code 351).

[2] Except for forestry surveys in Idaho and Montana, which required four or more workers per establishment.

[3] The Society of American Foresters: About Forestry, online, http://www.safnet.org/for/main.html, The Society of American Foresters, Bethesda, Maryland, 1996.

[4] Tripod Occupational Listings, http://www.tripod.com/work/hot_jobs/gallery/foresters.html, 1996.

[5] *Occupational Outlook Handbook, 1996-97*, Bulletin 2470, Bureau of Labor Statistics, Washington, DC (1996), p. 338.

[6] According to a 1996 poll by the American Pulpwood Association, Rockville, Maryland.

[7] For a recent history of unionization in the logging sector and decisions by the National Labor Relations Board on recognition of logging contractors' approval for union certification, see *How to Stay at Peace With Your Government*, American Pulpwood Association, Hatton-Brown Publishers (1993), pp. 89-119.

[8] *Occupational Outlook Handbook, 1996-97, p. 338.*

[9] Forestry is SIC code 08, and logging is SIC code 2411.

[10] Under the new North American Industry Classification System, forestry and logging will both be classified as an agricultural industry (Forestry and Logging, code 113).