

**A BRIEF OVERVIEW OF THE
AGRICULTURAL LABOR SITUATION
IN IDAHO**

by

James R. Nelson, Professor and Head
Dept. Ag. Econ and Rural Sociology
University of Idaho, Moscow, Id. 83843
Phone: 208-885-7635

**A.E. Extension Series No. 90-15
July, 1990**

**A BRIEF OVERVIEW OF THE AGRICULTURAL
LABOR SITUATION IN IDAHO**

Aggregate utilization of farm labor needs in Idaho is remaining fairly constant, or possibly even decreasing slightly. In spite of this, farmers are having real difficulty finding labor which can be hired when and where it's needed to produce and harvest Idaho's crops. There are reasons for this apparent anomaly. Most of these reasons are understood, in general terms, by economists and labor specialists. These reasons will be discussed below. However, much work needs to be done to document and describe Idaho farm labor problems in detailed and specific terms to facilitate addressing these problems.

In the following pages of this paper some general information about Idaho crop agriculture is presented, including information about the various agricultural regions of the state, the commodities generally produced in these regions, and some discussion regarding the use of irrigation in each region. Then estimates of changes in Idaho's agricultural labor, by crop, are presented; and the implications of these changes are discussed. Finally, needs for thorough research to provide real, documented data about Idaho's agricultural labor situation are discussed.

General Information About Idaho Agriculture

Idaho is a very rural state. There is only one metropolitan area in the state. It is Boise, the capital city, located in Ada County in the southwestern part of the state (Figure 1).

Agriculture is critically important to Idaho's economy. The Snake River is critically important to much of Idaho's agriculture. The river flows out of mountains in western Wyoming and traverses southern Idaho from east to west before turning north to flow through Hell's Canyon on Idaho's western border, then turns back west in Nez Perce County to join the Columbia River in the state of Washington. The Snake River Valley in southern Idaho contains much rich, farmable land; and the river provides irrigation water which makes much of this land blossom.

Some of the finest potatoes and sugar beets in the world are grown on irrigated lands along the Snake River across southern Idaho. Considerable acreages of small grains, mostly wheat and barley (including malting barley), are also grown on these irrigated lands. Some additional wheat and barley are grown on fertile non-irrigated lands in the plains adjoining the valley, especially in the eastern part of the state. Substantial acreages of alfalfa, vegetables, tree fruits, dry beans, mint and seed crops also exist in the Snake River Valley and in tributary valleys in south central Idaho and especially in southwestern Idaho.

Other significant crop production areas in Idaho are the Palouse and Camas Prairie areas and the valleys throughout the far northern part of the state. The Palouse and Camas Prairie areas, (mostly Benewah, Latah, Nez Perce, Idaho and Lewis Counties) are among the highest yielding dry land small grain production areas in the world. A major portion of the world's supply of dry peas and lentils is



also produced in these areas. Valleys throughout northern Idaho have numerous small but very productive acreages of fruit (especially berries), seed crops, nursery stock and Christmas trees. Boundary County in far northern Idaho is an important production area for hops used in beer brewing.

Estimated Changes In Farm Labor For Idaho Crops

Reliable, up to date, data on farm labor in Idaho are very limited. Some efforts have been made to estimate Idaho farm labor, by geographic regions, by using labor coefficients from enterprise budgets along with acreage and production information. Enterprise budgets for Idaho agricultural enterprises are available from the University of Idaho Department of Agricultural Economics and Rural Sociology and from other land grant universities. Acreage and production data for Idaho commodities, by county, are available from the USDA Census of Agriculture and from the Idaho State Department of Agriculture. Efforts to use these types of data to estimate agricultural employment by region and by enterprise seem to result in over estimation, probably because such data include substantial unpaid farm family labor and because large farmers are more efficient than indicated by most enterprise budgets. However, use of such data to estimate changes in agricultural employment over time (rather than to estimate total employment) should not greatly over estimate actual changes. This is true since relatively small changes in production of specific enterprises on individual farms will usually involve, almost entirely, changes in hired labor since available family labor will already be fully employed.

Such estimates of changes in Idaho crop labor from 1982 to 1987 are shown in Table 1. In the table, increases in estimated labor are because crop acreages increased, and decreases in estimated labor are because crop acreages decreased.

It is notable that, in general, negative changes occurred for the most extensively produced Idaho crops (small grains) and positive changes occurred for the more intensively produced Idaho crops (potatoes, sugar beets, vegetables and fruits). To a great degree these changes are related to changes in the agricultural economy of Idaho and the nation which have occurred since 1982. In 1982 farmers were experiencing unprecedented high price levels for traditional commodities (especially grains). Very shortly thereafter, however, commodity prices and farm incomes fell precipitously. Many farm operations failed to survive this traumatic time. Managers of the surviving operations sought to constrain their risk through enterprise diversification. This interest in diversification coupled with increasing consumer demands for many vegetable and fruit commodities brought about most of the changes in Idaho crop labor indicated in Table 1. Observation of actions of Idaho farmers and the nation's consumers suggests that the trend toward less grain production and more vegetable and fruit production continues unabated.

The information presented in Table 1 supports the assertion made early in this paper that Idaho agricultural employment is declining, but Idaho farmers are having difficulty hiring the labor they need, when they need it, to produce and harvest their crops. The farm labor released because of decreased production of small grains, corn, hay and dry peas and lentils is mostly machinery labor and is generally hired for most, if not all of the year. Probably most of this released labor has found other employment in the relatively booming non-agricultural economies of Idaho, Washington and Oregon. Labor needed in the production of potatoes, sugar beets, vegetables, fruits, hops and nursery stock tends to be hand labor involved with irrigation and hand planting, harvesting and weeding operations. Also, this labor tends to be very seasonal. It is often very difficult for Idaho farmers to find such labor when and where it is needed.

TABLE 1
Estimated Changes in Idaho Farm Crop Labor From 1982 to 1987

Crops	Labor Change (1982-1987) (1,000 Hours)
Field Corn	- 154
Wheat	- 1,308
Barley	- 1,551
Oats	- 62
Hay	- 301
Potatoes	+ 549
Dry Beans	+ 74
Dry Peas & Lentils	- 26
Sugar Beets	+ 417
Dry Onions	+ 210
Sweet Corn	- 40
Other Vegetables	+ 579
Seed Crops	+ 50
Apples	+ 81
Apricots	+ 17
Cherries	- 6
Grapes	+ 7
Nectarines	0
Peaches	+ 20
Pears	- 3
Plums	+ 7
Berries	+ 1
Mint	+ 64
Hops	- 24
Rape Seed	+ 20
Nursery Crops	+ 28
TOTAL CHANGE	- 1,350

Idaho Agricultural Employment Data Base Research

As has been alluded to several times above, data are not available for Idaho on agricultural employment by enterprise, by location and by season. Furthermore, there is little documented information about the needs for and the use of migrant labor and alien labor in Idaho. Fortunately, efforts are under way which should contribute toward remedying these problems. An agricultural data base project is being conducted by the Idaho State Department of Employment (see attached) which, upon its successful completion, will allow the department to accurately project labor force data for the agricultural sector of Idaho's work force by county and by time of year. This project involves surveying agricultural producers in the state to determine:

- crops which require hired labor,
- tasks performed by hired labor on a crop by crop basis,
- timing of tasks on both crop by crop and county by county bases, and
- labor (man hours per acre) required for each task.

A survey questionnaire has been designed and tested. It will be administered throughout the state in the near future.

Another research effort which promises to provide much good new information about the Idaho agricultural labor situation is the U.S. Commission on Agricultural Labor project which is about to take place to collect information concerning alien and domestic farm laborers in the irrigated potato/sugar beet area of southern Idaho. The commission is currently reviewing proposals related to this project, and data collection work is expected to begin in the Fall of this year.

Idaho's progressive farmers will continue to look for new enterprise opportunities to improve their incomes and the economy of Idaho by using the state's rich agricultural resources to meet consumer demands for high value specialty crops. These efforts will be constrained by labor difficulties. However, few

of these labor difficulties will be insurmountable. The U.S. Commission on Agricultural Workers and other federal and state agencies can greatly serve consumers, agricultural workers and farmers by continuing and increasing support for research to facilitate farm workers and producers getting together to meet consumer needs.

ATTACHMENT

**Information about the Idaho State Department of Employment
Agricultural Database Research Project**

April 6, 1990

Re: Current Status of Ag Database Project

See attached memo - AGRICULTURAL DATABASE PROJECT: A SYNOPSIS

Please see the attached memo for basic background concerning the project. This addendum is to provide an update on the progress of the project.

In mid-March we mailed slightly more than 25,000 survey forms (sample attached) to agricultural producers identified through the Agricultural Stabilization and Conservation Service. As of April 6 we have received approximately 6,500 valid responses, a 26 percent return. In addition we have obtained over 1,000 names and addresses of operators we did not previously have. On April 4 we sent surveys to this group of producers.

As of today's date we have not had the opportunity to tabulate any results. The next step will involve coding the data prior to data entry and cleaning up the database based on the new information we now have. (Eliminating producers no longer active, correcting addresses, adding phone numbers, etc.) Once the data has been coded and the database cleaned up we will begin the data entry and tabulation process.

Some general observations:

The response rate assures statistical validity, especially since we surveyed the universe.

Department of Agriculture estimates indicate approximately 40 percent of producers hire some labor. Forty percent of the valid returns indicate they hire labor.

Of the respondees providing labor data it appears that the data is valid and will provide the information we need.

The vast majority of respondees who hire labor indicated they had problems obtaining labor in 1989. Exactly what the reasons are cannot be determined at this point, however, it does indicate a problem exists and provides a service opportunity for the department.

There have been remarkably few "negative" responses and most respondees indicated yes in response to Section III, question 3 which asks if they would be willing to discuss labor needs with department personnel.

Although there have been some glitches in the process, the project should accomplish what we set out to do. There remains a significant amount of work to do, but we have the information we set out to get.

If you have specific questions please feel free to call at any time.

Phil Bowman

AGRICULTURAL DATABASE PROJECT: A SYNOPSIS

PROJECT GOAL

The ultimate goal of the Agricultural Database Project is to create a system which will allow the Department of Employment to accurately project labor force data for the agricultural sector of Idaho's workforce by county and by time of year. Under current Idaho labor law and Department of Employment reporting methods it is not possible to monitor ag labor employment or to predict future ag labor requirements with an acceptable degree of accuracy.

GENERAL BACKGROUND INFORMATION

To state the obvious: Agriculture is the largest and most diversified sector of Idaho's economy. In 1988, agricultural cash receipts totalled \$2.3 billion. There are approximately 24,000 farms in the state producing in excess of 100 different commodities. Somebody is doing the work. Hired labor accounted for roughly 11 percent of all agricultural expenditures in 1987.

Although there are not as many ag laborers as there used to be before the advent of modern farm practices, they still constitute a significant proportion of the labor force; especially during the growing season and at harvest.

- > In 1982, 15,064 Idaho farms hired labor and paid wages of \$166.367 million.
- > In 1987, 16,118 Idaho farms hired labor and paid wages of \$208.851 million.
- > In 1987, total nonag wages and salaries paid in Idaho were \$5.542 billion.

SOME ASSUMPTIONS

In spite of the ongoing debate concerning the level of need for ag labor in the future - some say mechanization and improved technology will eliminate the need - it seems clear there will be a continued need for ag labor well into the next century. In fact, a strong case can be made, especially in the face of environmental concerns about herbicide and pesticide use, that the need for skilled farm labor will actually increase in coming years.

Although there is some general data available on certain aspects of ag labor, there is virtually none that can be used on a regional or county-by-county basis in Idaho - especially on a time related substructure. The vast majority of information available is cumulative, after-the-fact, lump sum data that is informative but useless for our purposes.

There is currently a shortage of agricultural workers, especially in specific locations and those with specialized skills. (Hops workers in Boundary County, Nursery workers statewide, sheepherders and irrigators in the south) Contrary to the widely held opinion that "an ag laborer is an ag laborer" most of these workers have specific skills and are not

interchangeable parts.

There is a good chance the ag labor shortages will get worse before they get better. There are many reasons this may be true:

- > A long-term effort by many growers to reduce their dependency on labor by increasing mechanization and switching to less labor intensive crops.
- > Increased opportunities for workers to enter other occupations in an expanding economy.
- > A shortage of adequate housing for the migrant segment of ag labor.
- > Lack of planning and cooperation between public and private interests.

THE FACTS MA'AM, JUST THE FACTS

As stated earlier, the purpose of the Agricultural Database Project is to accurately forecast labor force data for the ag labor sector of Idaho's workforce. In order to do this we need to know the facts.

- > How many ag laborers are there?
- > What do they do?
- > Where do they do it?
- > When do they do it?

HOW DO WE FIND OUT?

We ask questions. This is the heart of the project. Asking the right people the right questions. Once this is done it then becomes a matter of tabulating the information and seeing it reaches the people who need it. Below is a general outline of what we have done and plan to do.

After it was determined that the information needed to complete this project was not available from other sources the next step was either to design or steal a method for collecting and manipulating the necessary information. Several research projects and methodologies were studied and we determined the model closest to our requirements was one used by Robert T. Trotter, Department of Anthropology, Northern Arizona University, Flagstaff Arizona.

Trotter used the basic methodology set forth in a 1985 study done for the U.S. Department of Health and Human Services: "Methodology for Designating High Impact Migrant and Seasonal Agricultural Areas." But he made some adjustments to the basic design. The model we used is a further modification of this basic model.

The next thing we did was to attempt to assemble as complete a list as possible of all agricultural producers in the state. This list would become the "universe" from which we would gather the necessary information about labor requirements. With the help of the Agricultural Stabilization and Conservation Service and other resources we have built a basic list we believe to be at least 85 percent complete. Using this basic list we will do a complete statewide survey which will provide accurate data concerning:

- > Crops which require hired labor
- > What tasks are performed by hired labor on a crop-by-crop basis
- > When various tasks are performed, on both a crop-by-crop and county-by-county basis
- > How much labor (man-hours per acre) is required for each task

The survey questionnaire has been designed and tested. Canyon County was used as the test county and the initial results indicate the questionnaire was easy to read and does provide the necessary information we need.

Based on the Canyon County results, the questionnaire was modified slightly and will be sent to the remaining counties in late January or early February. Although the Canyon County response rate of 20 percent was not as high as we would like, it was, considering the time of year and other factors acceptable. We believe that with some publicity and cooperation the statewide response will be higher. We also plan to do a follow-up to nonrespondees on the statewide survey, which was not done on the Canyon County test. Nonrespondees on the Canyon County test will be included in the statewide survey.

Once the survey is complete the data will be tabulated on a county-by-county and statewide basis. This information will then be used, in combination with data from the Department of Agriculture and other sources, to estimate how many farm laborers will be required at any given time in any given county. This methodology will work for most field and row crops, assuming we have accurate data regarding acreage estimates and growing seasons.

However, for some sectors of the agricultural industry, such as cattle, dairy, nursery and others, this method will not work. In these instances we are developing alternative means of estimating labor requirements. This, as always, will require a cooperative effort among various interests. We will eventually combine all the information we are able to generate into a published format that will be available to all parties. As always, any information identifying individual producers is strictly confidential and published data are compilations containing no information that would reveal individual producers.

We seek all the cooperation we can get on this project. If you have any questions or advice concerning this project please call or write:

Phil Bowman
Department of Employment, Research and Analysis
317 Main Street
Boise, Idaho 83735
Phone: (208) 334-6186