This research project estimated migrant and seasonal agricultural workers in four Midwestern States in 1988, using the Public Health Service's definitions of such workers. Researchers collected federal agricultural data and state reports on migrant education programs and crop patterns, and considered other potential data sources. Numerous methodological difficulties led to the decision to consult a network of knowledgeable persons in each state. These people provided data on numbers of workers and dependents, counties involved, crops, length of season, peak times, worker origins, worker ethnicity, and proportion of workers traveling with families. Comparisons of data from all sources produced estimates indicating the number of migrant workers and dependents in each county during a specified peak month. State totals of maximum estimated peak numbers of migrants and dependents are: workers 925, dependents 815 for Iowa; workers 2,890, dependents 3,070 for Kansas; workers 910, dependents 555 for Missouri; and workers 3,250, dependents 1,310 for Nebraska. Most migrants were Hispanics with a home base in Texas. Estimates for seasonal workers were based primarily on the 1978 and 1982 Censuses of Agriculture, and are believed to be similar to 1988 figures. Estimated totals of seasonal workers and estimated maximum number of dependents for each state in 1982 are, respectively, 14,805 and 21,275 for Iowa; 5,949 and 8,549 for Kansas; 8,637 and 12,411 for Missouri; and 6,701 and 9,629 for Nebraska. The size of the migrant and seasonal workforce is expected to remain stable for the next 5-10 years. This report contains 14 tables and maps, lists of data sources and contacts, a set of official definitions, and the survey questionnaire. (SV)
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ACKNOWLEDGEMENTS

This report is made possible by the efforts of many people. We appreciate the support of E. Roberta Ryder, Executive Director of the National Migrant Referral Project, Inc., Austin, Texas and Peter Korsching, Director of the North Central Regional Center for Rural Development, Ames Iowa. Funding from these two agencies along with support from the University of Wisconsin-Madison Graduate School made this project possible.

We want to acknowledge our hard working staff. Mary Hovsepian, Byong-Hee Cho, and Mochammad Sjachrani, graduate students in the Department of Sociology and Rural Sociology, helped us assemble and process data for this report. High-quality maps were produced by Doug Aughey and Mochammad Sjachrani; and Karen Daramola’s word processing skills were indispensible to creating this document.

We are especially grateful to all the people who spent time providing us with information about agricultural workers in their states. A special note of thanks goes to the people who attended our informational meetings in April 1988, who participated in telephone conference calls, and who completed our questionnaires. Their names are listed in Appendices D, F, and I.

We take responsibility for the accuracy of the information presented here, with the hope that it will prove useful to those who serve the agricultural workers of our nation, and also prove beneficial for the migrant and seasonal farmworkers.

Cover photo of migrant workers in central Wisconsin by Carolyn Pflasterer, Wisconsin State Journal, Madison, Wisconsin.
FINAL REPORT

Estimation of Migrant and Seasonal Agricultural Workers in Iowa, Kansas, Missouri and Nebraska

Public Health Service Region VII

Doris P. Slesinger
Eleanor Cautley
Department of Rural Sociology
University of Wisconsin
1450 Linden Drive
Madison, WI 53706
608/262-3097

Submitted to: National Migrant Referral Project, Inc., Austin, TX
October 1988
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I. PURPOSE AND BACKGROUND

The purpose of this research project is to prepare estimates of the migrant and seasonal agricultural worker populations, plus nonworking dependents, for four states: Iowa, Kansas, Missouri and Nebraska. These population estimates contain information about dates of activity and geographic location of workers within each state. These estimates, along with estimates for other states, will be used by the U.S. Public Health Service to plan future health care services for agricultural workers, as well as to allocate some funds for services. To better plan and provide health services for migrant and seasonal agricultural workers, it is necessary to know where workers are usually located, for how long they stay in an area, and whether the workers are accompanied by nonworking dependents such as children and elderly family members.

Funding for this project was received in February, 1988 from the National Migrant Referral Project, Inc., with additional funds provided by the North Central Regional Center for Rural Development in Ames, Iowa. These funds provided for a half-time Research Specialist plus hourly work, travel and office costs. An additional one-third time Research Assistant was funded by the UW-Madison Graduate School for one semester. The project director’s time was contributed without funding.

Since these estimates will be used by the Public Health Service, their definition of migrant workers is used here: persons whose principal employment is in agriculture on a seasonal basis, who establish a temporary abode for purposes of employment, and who have been employed within the past 24 months. This excludes workers in meatpacking and poultry processing because the work is not done on farms. It includes people who hold
non-agricultural jobs as well as agricultural ones, if they define themselves as being principally employed in agriculture.

The Public Health Service definition of seasonal agricultural workers is used as the basis for our estimates of seasonal workers. The definition is very similar to the migrant worker definition, except that seasonal workers do not establish a temporary abode — they live at home while working.

We define dependents of migrant and seasonal workers as nonworking household members. Thus dependents can be children or adults as long as they are not employed. For example, teenagers in migrant worker households who are employed are counted as workers, not dependents.

1988 was an unusual year for migrant agricultural work in two respects: (1) there was a severe drought over large parts of the nation; and (2) the Immigration Reform and Control Act of 1986 was in effect. The drought had varying effects across the Midwest, hitting some areas and crops much harder than others. In general, the effects of the drought on migrant labor in Iowa, Kansas, Missouri and Nebraska were minimal. In some areas, however, work was delayed due to dry conditions, so workers had to wait for up to two weeks before starting work. In other areas, crops ripened very quickly in the heat, which made the harvest season much shorter than normal. Although employment levels in the four states were not greatly affected by the drought, unemployed workers from states where the drought was more severe increased the numbers of job seekers in some areas.

The Immigration Reform and Control Act (IRCA) allows illegal aliens to apply for temporary resident status until November 30, 1988 if they performed farmwork in the U.S. for 90 days during May 1985 through April 1986 (Population Reference Bureau, 1988). These people are designated as SAWs (Special Agricultural Workers). The effect of this amnesty program on worker
populations is not clear; anecdotal evidence suggests that, in some areas, growers became wary of hiring undocumented workers and looked more to the local labor pool for workers. Others suggest that more workers than usual migrated from Mexico to attempt to get legal status, especially single men. Several people reported an increase in black market documents used to prove legal status. The net result is unknown; it appears that overall, the 1988 migrant labor force is basically similar to that of other years with some minor differences due to IRCA.
II. RESEARCH PROJECT

Phase 1. Collection of Data

The initial phase of the project involved collecting available data on migrant and seasonal farmworkers, plus information about organizations serving farmworkers in each of the four states.

We know that no reliable data on numbers of migrant and seasonal farmworkers exist. There are, however, several sources of information that are useful to an estimation effort. These data sources are:

- 1982 Census of Agriculture
- Agricultural Work Force Survey of 1985
- Quarterly Farm Labor Survey
- Bureau of Economic Analysis, Agricultural Employment and Income Data
- State Reports from Migrant Education Programs
- State Department of Agriculture reports on crop patterns and acreage.

We collected reports, descriptions of methodology and samples, and other pertinent information about these and other potential data sources (see list in Appendix A).

The advantages and disadvantages of each data source, plus information on sampling, research design and availability have been well summarized by previous researchers. We recommend two sources for this information:


It is important to emphasize that there is no single data source which can be used to estimate migrant and seasonal workers. Each potential source has problems. Briefly, some do not provide data on "migrant" or "seasonal"
workers specifically. None give county-level estimates. Only the Census of Agriculture counts hired farm laborers by county, but this source does not separate migrant or seasonal workers from other hired farmworkers.

As an example of how difficult this estimation procedure is, we will give some details about one of the most promising sources of migrant population data, collected by the Migrant Education Programs in each state. Most of these programs have effective outreach efforts and the data collected are entered into a centralized national computer data base. There are several serious problems, however, with using Migrant Education data to estimate the migrant workforce.

1) Not all states have a summer school component to their migrant education program. Those that don't are missing large numbers of migrant children who are only in the state the summer months. Thus, any estimate based on these numbers would seriously underestimate the population.

2) The definition of "migrant" used by the education program differs from all other definitions (and especially the Public Health Service definition) in two important ways:

a) agricultural activity is broadly defined to include meat packing (see Appendix G). This expands the size of the migrant population, particularly in states such as Kansas.

b) a "currently migratory child" is defined by moving from one school district to another. The Public Health service definition requires establishing a temporary abode, so the Migrant Education definition includes some additional families, whose children have changed school districts but not their residence.

3) Because the program is focused on school-age children, there is no representation of single workers in the migrant education data -- that is,
workers who are traveling without their families. Nor are older workers, whose children are all adults, or married couples without children included in the data.

4) The migrant education data are classified into "current" and "former" migrant status. The current migrant status includes children whose parents performed migrant work within the past year; former status includes work 1-6 years ago. To estimate workers for the last 2 years (for the PHS definition), one must estimate a proportion of the former migrants (perhaps 20%) to add to the current migrants.

5) The migrant education data provide no information about number of families or number of households, solely number of children. In order to estimate workers, one must have a ratio of enrolled children to workers. Even a crude ratio is not available in most states; only educated guesses exist.

Taking all of the problems above into consideration, in some states the education data can be compared with estimates of workers, if used cautiously. Once we arrived at estimates for this report, we compared education data with our estimates of nonworking migrant dependents. In Kansas, for example, we found that the number of children served by the migrant education program was much larger than the number reported by the migrant health clinic. We were satisfied that differences like this were explained by the factors mentioned above. Because of these limitations, we could not make further use of the education data.

Food Stamp Program data are also suggested as a possible source of information for estimating farm workers. This seems feasible at first because federal law requires that migrant farm workers be exempt from the monthly income reporting that is required of other program recipients. Each state must design a program application procedure to deal with the exemption. There
is no legal requirement, however, that states report how many migrant workers are served by the Food Stamp program. Thus, there is no readily available database containing information about migrant workers. Some states, however, do have information about migrant workers served in the Food Stamp program.

There are serious problems with this type of data. For example, it is impossible to know what proportion of the migrant population applies for Food Stamps. Program coverage varies widely from one county to another, depending on outreach efforts, availability of bilingual staff to assist with applications, and so on. In areas with single rather than family workers, the use of food stamps may be very low. Because of these and other problems, we decided that Food Stamp Program data would not be useful for our estimations.

Other data sources are equally problematic. For example, the migrant health clinics have expanded their definition of migrant family to serve children who are registered for migrant education programs. The parents of these children may be "former" migrants, i.e., did migrant work 2-6 years previously, and thus are no longer eligible for health services. And so, data from the migrant health clinics themselves may not always match the PHS definition of eligibility.

Therefore, we decided to collect information from persons knowledgeable about agricultural workers in each state, such as staff persons in service agencies and migrant health programs, and rely on these informants to assist us in developing a state estimate from these diverse sources.

To learn about organizations serving farmworkers, and thereby find the most knowledgeable persons, we used Wisconsin contacts as a starting place. We obtained names, addresses and phone numbers of people in the Migrant Health Clinics, State Departments of Health, State Job Service offices, Migrant Education Programs, Legal Services offices, State Departments of Agriculture,
U.S.D.A. Extension Service and others. We made many phone calls, each one yielding more contacts. Ellis Barham, Regional Program Consultant for Migrant Health in the Public Health Service office in Kansas City, sent lists of important contacts in each state as well. When new contacts started referring us to people we already knew, we felt we had reached all of the informed persons (see Appendix B for list of contact persons).

Through these contacts, phone calls and reports collected from various agencies, we learned about the crops and agricultural labor activity in each state. We also learned about data available from service providers (see Appendix C for list of information collected).

Phase 2. Informational Meetings

This initial project phase led to and overlapped with the second phase: planning and conducting meetings with knowledgeable persons in the four states. After consulting with Charles Van Anden, then Director of U.S. Public Health Service Region VII, and others, we arranged two meetings:

In Kansas City with people from Kansas and Missouri, April 13, 1988;
In Des Moines with people from Iowa and Nebraska, April 15, 1988.

These meetings had two purposes: to learn more about the situation in each state concerning numbers and location of migrant and seasonal agricultural workers, and to establish a dialogue between ourselves as knowledgeable researchers, and persons informed about the local conditions in each state. We invited 50 people to attend the meetings. We mailed questionnaires to those who anticipated attending, asking them to gather data within their own agency, to complete the questionnaire, and bring it to the meeting.

Altogether, 29 people attended the two meetings. We felt that both meetings were very successful. Meeting face-to-face was beneficial in that we
learned a great deal about the specific problems of estimating farmworkers in each state. An unanticipated benefit of the meetings was that we brought together people from many different agencies who rarely, if ever, have the chance to discuss their mutual interests and concerns. This networking effect may prove to be an important and long lasting outcome of this project.

We also met separately with Ben Duggar of La Jolla Management, Inc., who has evaluated estimates of migrant and seasonal agricultural workers for the Public Health Service. He offered some helpful suggestions and pointed out pitfalls in various estimation methodologies. In a separate meeting with Chuck Van Anden, we discussed the delivery of health care to migrants in Region VII. We met also with Marc Marcano, Executive Director of the Kansas Governor's Migrant Committee, and learned about the political history of services to migrants in Kansas.

Appendix D includes a sample letter of invitation, agendas, and lists of the meeting participants.

We developed a questionnaire to gather specific types of information about migrant and seasonal agricultural workers (see copy in Appendix E). We designed the questions carefully, to make them clear and easy to answer. The questionnaire was pretested by five people working in various Wisconsin agencies serving migrants, and their comments were incorporated to improve the form. In addition to distributing the questionnaire to everyone who planned to attend and who attended the meetings, we sent it to an additional 22 people after the meetings. Altogether, we distributed 50 forms, and received 18 completed questionnaires. The letter and list of respondents are in Appendix F. We telephoned a number of people who didn't respond, in order to get some additional information over the phone.
We prepared maps of the four states for the meetings, using "Atlas" software on a (IBM-compatible) microcomputer. We mapped county-level data on hired farmworkers from the 1982 Census of Agriculture to use as an example at the meetings. This same software has been used to prepare maps of our final estimates for this report. We also compiled a set of official definitions of migrant and seasonal agricultural workers, as used by the primary agencies serving migrants and seasonals: 402 JTPA, Job Service, Migrant Health Project, Migrant Education, and legal/social services. These are reproduced in Appendix G.

During this phase, we created two databases on the microcomputer. One contains selected county-level data from the 1982 Census of Agriculture; the other contains county-level data from the Bureau of Economic Analysis, U.S. Department of Labor. The contents of these two databases are listed in Appendix H.

Phase 3. Preparation of Report

Two different estimation procedures were used -- one for estimating migrant workers and dependents, and another for estimating seasonal workers and dependents. Each procedure will be explained in the sections that follow.

When we completed our estimates of migrant and seasonal populations in the four states, we wrote descriptions of the migrant work force in each state, defining the area, the crops and the season. The areas with migrant workers were mapped for each state. We also calculated estimates of seasonal workers for every county in the four states, and prepared maps of these estimates.

We asked key informants in each state to read our draft report and comment on it via a conference telephone call. The reports were mailed in August and the conference calls, one for each state, took place between August 30 and September 7. Participants are listed in Appendix I. Several people not able
to participate in the calls gave their comments to us individually. After the calls we revised estimates and descriptions which were in error, and then produced this final report.
III. Migrant Workers in Iowa, Kansas, Missouri, and Nebraska

Workers

- None
- 1 - 99
- 100 - 299
- 300 - 999
- 1000 or more
III. ESTIMATES OF MIGRANT AGRICULTURAL WORKERS AND THEIR DEPENDENTS

Definitions

Because migrant workers travel to find work, an estimate of their numbers must also specify a location and a time period for the estimate. We call this time period a "season." In these four states, the migrant work season generally starts in May and goes through October. The crops on which migrants work, and the type of work they do, however, both have a major effect on the duration of the season. For example, migrant workers harvest asparagus during April and May in Kansas, while apples are harvested in September and October. Thus we specify the migrant work season, with beginning and ending months, along with each estimate of numbers of workers.

Our estimates are the peak number of workers employed in each area; this is the greatest number of workers present at one time. We specify a month during which the peak number occurs. Before and after the peak month, the numbers of workers will be lower. There are some workers present during all months of the season specified, and there can be a few workers present at other times.

Within any one state, peak numbers of workers can occur at different times in different areas of the state. For example, in Missouri the Bootheel has a peak of 400-450 workers in August while the Lafayette County area has a peak of 300-350 workers in late September-early October. These peak numbers can be added together, but technically this is not always correct. For Missouri, the August peak probably represents the largest number of workers ever present at one time in the state. When the fall peak occurs, the August workers may have already left the state. We do add up peak numbers shown in Table 1, to attempt an estimate of total workers ever present in each state. These statewide totals, however, should be used with this caution in mind.
The other critical element in our estimates is the county or area where the migrants are located. The area goes hand-in-hand with the season to specify a group of migrants in time and place. We always use county names to specify the location of migrants, but in many instances the workers are present in one particular part of a county. We do not present our estimates at a sub-county level.

We also estimate the number of nonworkers or dependents who are living with the migrant workers. Dependent populations are important in planning services such as health care. Numbers of dependents are derived from the same sources as numbers of workers. Knowledge of the proportions of single and family workers in an area is most helpful in estimating dependents.

Migrant workers are often employed in several locations over the course of a year. The estimates presented here do not attempt to eliminate duplicate counts of workers who find employment at two different locations at two separate times. We do specify the county location, peak numbers, and duration of the season, to make our estimates as specific as possible.

Estimation Procedure

The procedure for estimating migrant workers and their dependents is based on collecting as much reliable data as possible, and then using the data to arrive at estimates of populations. We used data from questionnaires sent to agencies serving migrant workers and to knowledgeable persons in each state, information from a number of informants obtained by telephone, and annual reports and other documents from various agencies. Whenever possible, we asked our informants to estimate the total migrant population in their state, not just the numbers of migrants served by their agency. This was not always possible, making it even more important that we collect data from several sources.
We summarized all data collected on numbers of workers and dependents, counties involved, crops, length of season, peak times, worker states of origin, ethnicity of worker, and proportion of workers who traveled with their families. All of these items provide clues about the composition and size of the migrant work force. Of course, not all sources agree on each point. The disagreement between data sources generally rises from (a) differences in definitions of migrant worker, (b) differences in geographic area served, and (c) differences in extent of outreach efforts.

After collating and summarizing the data available, we defined areas of concentration of migrant workers within the state. Not every county has employers who hire migrant workers — varying crop patterns, changing availability of local labor, and long-standing relationships between employers and workers lead to uneven distribution of migrants across a state. We identified specific counties where migrant workers have been reported. We defined areas as groups of counties having similar crop patterns. We realize that these areas do not always correspond to service or catchment areas for providers of services to migrants. For each area, we summarized the information available about numbers of workers, types of crops, length of season, and so on.

The results are presented in Table 1 and Maps 1-4, and each state is discussed in the following sections. Table 1 presents peak number of workers and dependents for each area of the four states. Maps 1-4 (one for each state) present additional information about peak month and months of the season for all areas. The maps, unshaded counties have no migrant workers. The shading patterns correspond to the peak numbers of workers only, as shown in the key. Each area is numbered, which corresponds to the numbers in the chart below the map, providing detailed information about each area.
The numbers of workers presented here, along with the information about crops, seasons, and dependents, should be viewed as estimates. It is not possible to know the exact numbers of migrants. In addition, every year the number varies due to changes in the crops being planted and variations in the weather. The next sections present our estimates for the four states.

Iowa

First, we will describe the state as a whole. In Iowa, most migrant workers are Hispanic people with their home base in Texas. Some also migrate from Florida, California, and Mexico. There is a smaller group of white (or Anglo) migrants. The majority of migrants travel with family members, including some nonworking dependents. There are only nine migrant camps left in Iowa, so many workers must find their own housing. In addition to those who find employment in Iowa, there are migrants who pass through the state on their way to work in the northern tier of states. Some of these migrants seek services in Iowa during their brief time in the state.

A few migrant workers are present in Iowa during every month of the year. In January through April there is some warehouse work with root crops and seed sorting. However, much of the pre-season work is done by non-migrant farmworkers. Field preparation and planting occurs in April and May. In June through August there is "bean walking" or cultivation and weeding of soybeans, as well as the tomato and green vegetable harvests. Corn detasseling also takes place during mid-summer. It appears that recently the numbers of migrants hired for detasseling is increasing, perhaps due to fewer local teenagers available to work. This increased demand is expected to continue and to involve more counties in migrant work. The peak number of workers occurs in July. Later in the summer the melon and apple harvests begin. Most
harvesting is finished by early October, with the apple harvest going through October. Warehouse work continues through November. Some year-round work is available at turkey farms and meat-packing plants; this is generally temporary work for migrants, and it is not defined as agricultural work by the Public Health Service.

Within Iowa there are six areas of concentration of migrant agricultural workers, involving about 28 counties. The six areas, also identified on Map 1, are:

1. Muscatine area  
2. Mason City area  
3. Sioux City area  
4. Central Iowa  
5. Williamsburg area  
6. Shenandoah area

1) The Muscatine area on the Mississippi River traditionally has the largest group of migrant workers in Iowa. The season begins in early May for tomato planting, peaks in July, and goes until August when the tomato harvest is finished. Some workers stay through September for the late tomato and vegetable harvest. The city of Muscatine is the center of activity because it is the only place offering housing affordable to migrant workers and their families. Some Iowa-based migrants live in Columbus Junction as well. Work is available on the Illinois side of the Mississippi River as well as in Iowa, but most workers live in Iowa and seek services in Iowa.

It is estimated that 70 percent of the migrant worker households in the Muscatine area are families, and 30 percent are singles (workers traveling
without families). The peak number of workers in July is approximately 400. The estimated number of dependents is 600.

2) The Mason City area in north central Iowa includes several counties located at Cerro Gordo county. Several crops involve migrants: cultivating and weeding soybeans, detasseling corn, harvesting green vegetables, weeding and harvesting potatoes, onions and carrots, and picking apples. Soybeans are the largest crop in this area, but work is available every year on other crops as well. There may be more undocumented workers in this area than in other parts of Iowa. The July peak of workers in this area is about 150-200. It is estimated there are an additional 120 nonworking dependents; families working in this area are generally large.

3) The Sioux City area in western Iowa borders Nebraska, and includes migrant activity in areas mostly south of Sioux City. The primary activity is hoeing soybeans in May through August. Some corn detasseling and work in orchards is also done by migrants. The peak number of workers in July is about 200, with another 40-50 dependents.

4) Apples are harvested by migrant workers during August through October in Central Iowa. The Fort Dodge area in Webster county plus Warren and Polk counties are where most of the harvest occurs. There is also some work in harvesting vegetables. The peak workforce in September and October is estimated at 40-50 workers, with almost no dependents.

5) The Williamsburg area contains seed corn operations which hire migrant workers for detasseling. Most of this work occurs during July, and the peak is about 35-40 workers, with another 35-45 nonworking dependents. There is also some bean walking (soybeans).

6) The Shenandoah area has migrant workers this year for the first time in several years. The work done by migrants is in nurseries, apple orchards, and
vegetable farms. The season lasts from May until October with an estimated 65 single workers.

Map 1 displays these areas of migrant activity along with the estimated numbers of workers and dependents, and the months of migrant activity. The numbers are summarized in Table 1.

Kansas

Roughly 90 percent of migrant workers in Kansas are Hispanic with the largest proportion migrating from Texas as home base. Other Hispanics come from Mexico (particularly those who work in eastern Kansas), Colorado, Oklahoma and Florida. The remaining 10 percent of workers are a mix of Black, White and Southeast Asian. A proportion of migrant workers in Kansas, perhaps 20 percent, also have their home base in Kansas. They live in urban Kansas City and Topeka, migrate to work in neighboring states, and also work in agricultural areas of eastern Kansas. There are additional workers passing through Kansas on their way to Nebraska and Colorado. Many of these work only briefly in Kansas or not at all. Employers of migrants no longer provide housing to workers. This adds to the difficulties in estimating the workforce.

The proportion of migrant workers who are singles -- traveling without families -- has been increasing in Kansas, and is now quite large in the Kansas City area. However, there are still more family workers than singles in the rest of the state.

Historically, western Kansas produced a large volume of sugar beets and many migrant workers were employed in beet planting and cultivation. Several sugar beet plants in Colorado and Kansas closed during the late 1970s and early 1980s. Because beets cannot economically be trucked very far for
processing, these plant closings spelled the end of the Kansas sugar beet crop. By 1985, no sugar beets were planted. Farmers replaced sugar beets with a variety of crops, principally sorghum (milo), soybeans, and dry beans. Meat packing has become a very large industry in western Kansas, boosting the need for feed grains. Large numbers of migrant workers continue to come to western Kansas each year, but they are described as being more dispersed than they were when work was available in sugar beets. Areas of concentration of workers are not as apparent as they once were. Some former migrants have settled out in western Kansas.

Migrant workers are spread over large areas of Kansas. The 32 counties involved can be sorted into six groups, which are also identified on Map 2:

1. Goodland area
   Sherman, Thomas and Gove counties
2. Southwest corner
   Greeley, Wichita, Scott, Hamilton, Kearny, Finney, Hodgeman, Stanton, Grant, Haskell, Gray, Ford, Morton, and Seward counties
3. Cloud county area
   Cloud county
4. Central area
   Reno, Harvey, Sedgwick, Saline and Lyon counties
5. Northeast area
   Brown, +chison, Doniphan and Leavenworth counties
6. Topeka-Kansas City area
   Shawnee, Douglas, Johnson, Linn and Wyandotte counties.

1) The Goodland area of northwestern Kansas provides work for migrants in soybeans, pinto beans, sunflowers, and milo. Most of the work is hand cultivating and weeding, or rogueing. There are an estimated 250-350 workers in this area accompanied by 300-500 dependents.

2) The large southwest corner area of Kansas has migrants primarily planting and cultivating milo, soybeans, and sunflowers, detasseling corn, and doing some work in dry beans in the northern part of this area. The work season goes from April to October with the peak in June and July. Some
migrants also work in feedlots and meat packing plants, where the turnover rate is very high due to both poor working conditions and frequent lay-offs. There are an estimated 1,000 to 1,100 workers in the southwest corner with possibly another 1,400 to 1,600 dependents. The cities of Garden City, Ulysses, and Liberal (Finney, Grant, and Seward counties) are the center of this agricultural area.

3) Strawberries and asparagus are grown in Cloud county, where migrant workers harvest these crops during April and May. The estimated number of workers is 140 with about 100 dependents. Growers in this area are interested in expanding their operations, so the demand for migrant labor may increase in the future.

4) Several counties scattered in the central area of Kansas produce a variety of crops -- corn, various vegetables, tomatoes, pumpkins and fruit orchards -- which use migrant labor. Farms in Reno, Harvey and Sedgwick counties produce mostly corn and sorghum with some pumpkins. The work season is from July to October with a peak number of 150-250 workers and perhaps 70 dependents.

5) Migrants work in the northeast area mostly in autumn harvests of apples, pumpkins, and squash. There is a peak of 250-350 workers in late September, with about 100 nonworking dependents. Some agency personnel believe that there is a significant group of undocumented workers without families in this area.

6) The Topeka-Kansas City area has a variety of vegetable crops -- they would be called truck gardens in the eastern U.S. The migrant work season starts in April with preparation of fields and runs through various crop harvests from May to October. More young single men (traveling without families) are employed here than in other areas. The estimated peak work
force is 600-700. There are also 600-700 nonworking dependents. Kansas-based migrants are part of the work force in this area.

The information above is summarized on Map 2 and in Table 1. The greatest number of migrant workers -- 2,300 to 2,800 -- are working in Kansas during June and July. In addition to migrants who work in Kansas, there is a sizeable number who drive through the state on their way to jobs farther north. Some of these migrants use services in Kansas, such as emergency cash for gas or medical services. A small portion will work briefly in the state in order to earn money to continue traveling. The number of migrants passing through Kansas has been estimated at 8,000 to 10,000 people, including workers and nonworkers.

**Missouri**

About two-thirds of the migrants in Missouri are Hispanics, approximately one-fifth are Black, and the remainder are Haitian and white. Most of the Black and Haitian workers are employed in the Bootheel area while the Hispanics work statewide. The Hispanic workers' homebase is Texas, Mexico, or Florida, while the Black workers are mostly from Florida. Some migrant workers live in Missouri as their homebase, mainly in the Bootheel area, and work in Missouri or in nearby states.

There are four areas of concentration of migrant agricultural workers in Missouri, encompassing 18 counties. The four areas shown on Map 3 are:

1. **Bootheel** Dunklin, Pemiscot, New Madrid, Mississippi, Scott, Cape Girardeau and Stoddard counties

2. **Lafayette County area** Lafayette and Saline counties

3. **St. Joseph/Weston area** Buchanan and Platte counties

4. **Southwest Missouri** Jasper, Newton, McDonald, Lawrence, Barry, Stone and Taney counties
1) The Bootheel, as the southeastern corner of Missouri is called, is a delta area of the Mississippi River. It is rich land with a longer growing season than in most of Region VII. Dunklin County is the primary area of migrant worker activity. Migrant workers have been employed year after year in the peach orchards of the Bootheel, but the acreage in peaches has declined in recent years. Generally, the workers are single Hispanic men traveling without their families; a few have families with them. Workers arrive in early May and stay through mid August for the harvest. The peak number of workers in peaches is estimated to be 40-50 in August, with another 10 nonworking dependents.

The melon crop is also grown year after year in the Bootheel area. The acreage planted has increased in recent years. The melon season is much shorter than the peach season: workers arrive around July 4 and leave in August. Melon workers are a mix of Hispanics (traveling with families) primarily from Texas and single Black men (traveling without families) from Florida. The August peak is estimated to be 300-350 workers. The dependent population is estimated at 50-100.

Other crops, primarily vegetables, come and go in the Bootheel. The number of workers in these crops varies widely from year to year. This year, cucumbers have been planted and Hispanic families arrived in May for cultivation; they leave the Bootheel to work in Michigan during the summer, then return in the fall; they will leave after the harvest in October. There are about 150 workers employed picking cucumbers in Dunklin county; these workers are also employed to hoe cotton. They are accompanied by about 75 nonworking dependents. Previous years, other crops such as sweet corn have been tried in the Bootheel. Apparently, some farmers go out of business and
others change their crop patterns. The fluctuations in crop patterns from year to year leads to fluctuations in numbers of workers as well.

The total migrant workforce in the Bootheel is estimated to peak at 400 to 450 workers in August. About 60 percent of the workers are traveling with their families. Nonworking dependents are estimated at 150. The cucumber pickers are not included in these peak numbers because they are not in Missouri during August.

2) The Lafayette County area east of Kansas City has several apple orchards where migrant workers return each year for the harvest season in September and October. The workers are mainly Hispanics, and an estimated two-thirds travel with their families. Their average family size tends to be large. Agencies report a high proportion of undocumented workers in this area -- from one third to one-half of the work force. The effect of the 1986 Immigration Reform and Control Act on future migrant populations in this area is unknown. The estimate of workers in the Lexington area orchards is 300-350, plus approximately 150-200 dependents.

3) Some tobacco and apples are grown in the area near St. Joseph and Weston, and a few migrant workers find fall employment in this area. Very little is known about these workers. Some years there may also be a few jobs in local vineyards. We estimate that there are rarely more than 25 workers.

4) Southwestern Missouri also has some apple orchards in Barry County, where a few migrant workers may be employed. This area of the state has several large poultry production facilities. These are year-round operations, but the work force has a high turnover rate. Some people take jobs in the poultry industry while attempting to get other work, and it seems likely there are some migrant workers in this group. Again, it is very difficult to
estimate this component the migrant work force. Approximately 70-85 workers and 140-200 dependents are estimated to be in this area.

We estimate the peak number of migrants in Missouri to be 400-450 workers in August, followed by a second peak of 375-460 in September. Map 3 and Table 1 display these estimated peaks, and summarize the information presented above. The peak number of nonworking dependents in Missouri at any one time is roughly estimated at 150-200.

Nebraska

Over 90 percent of the migrant workers in Nebraska are Hispanics, with many having their home base in Texas. Others are from Florida, California, Washington and Oregon. The rest of the workforce includes small numbers of white workers and a few American Indians. Most of the workforce (an estimated 85 to 90 percent) are families; the remainder are single workers, traveling without families. The Nebraska Association of Farmworkers estimates the average family size is 5.2 persons.

Migrant workers are concentrated in five areas of Nebraska. As shown on Map 4, they are:

1. The Panhandle Silicon, Scotts Bluff, Banner, Box Butte, Morrill, Cheyenne and Garden counties.
2. Hastings area Adams and Clay counties.
3. Southeast corner Otoe, Nemaha and Richardson counties.
4. Chase/Lincoln area Lincoln, Chase and Perkins counties.
5. Omaha area Douglas and Sarpy counties.

Additional migrant workers are scattered in small numbers across the state, including Buffalo and Polk counties.

1) The Panhandle area of western Nebraska provides work for almost three-fourths of the migrant workers in the state. An estimated 1,900 to
2,400 workers are employed at the peak of the sugar beet thinning in late May through early June and one or two weedings in late June and early July. Some work is also provided by the dry bean crops (such as navy and pinto beans) in this area. Planting in April, weeding in August, and processing are all work done by migrants. The largest number of workers are in Box Butte, Scotts Bluff and Morrill counties; several other counties in the Panhandle also have substantial sugar beet production. Sugar beet farmers are dependent on having a nearby processing plant, as the costs for trucking harvested beets are too high over long distances. Three plants are currently in operation. At this point, production seems stable. Since most workers travel with their families, we estimate approximately 700-1,000 dependents in this area.

2) An estimated 200 to 300 workers are employed during July to detassel seed corn in the Hastings area. There are an additional 100 dependents. After increasing for three years, the numbers here decreased this year.

3) The three southeastern counties of Otoe, Nemaha and Richardson provide migrant employment for harvesting apples during August into October. An estimated 200 to 300 workers are employed here, accompanied by about 100 dependents.

4) In Chase, Lincoln and Perkins counties, approximately 100 to 150 workers are employed for harvesting, sorting and processing potatoes and onions. About 50-60 dependents are with these workers. This work is done during July to October, with seed potato processing in early spring. This area is experiencing increases in the employment of migrants.

5) The Omaha area in eastern Nebraska also had more migrant workers employed in 1988 than in previous years. This increase may be partially due to the decrease in work available in other states because of the drought. It is too soon to tell whether workers will keep returning to the Omaha area.
The work is both cultivating soybeans and harvesting apples, with employment in both Nebraska and Iowa. The season goes from June to September with a peak of about 100 workers and 50 dependents in July.

In addition to the five principal areas of migrant employment, scattered farms in various parts of the state are known to employ small numbers of migrants. The work varies, with some being row crops such as green vegetables. New patterns of employment may be emerging, but concentrated numbers of workers are not noticeable. Part of this changing pattern may be due to the decrease in work available in sugar beets, and perhaps also to declining work in neighboring states.

Overall, Nebraska has about 3,000 migrant agricultural workers, displayed on Map 4 and summarized in Table 1.
IV. Seasonal Workers in Iowa, Kansas, Missouri, and Nebraska

Workers

- 1 - 49
- 50 - 99
- 100 - 149
- 150 or more
IV. ESTIMATES OF SEASONAL AGRICULTURAL WORKERS AND THEIR DEPENDENTS

Seasonal Workers

We will also use the U.S Public Health Service definition for this estimation of seasonal agricultural workers. They are defined as people whose principal employment is in agriculture on a seasonal basis, and who do not establish a temporary abode. As with migrant workers, this definition excludes meatpacking workers and others who do not work on a farm. Technically, it includes people looking for seasonal agricultural work, as well as those who have done such work.

We believe that there are seasonal workers in virtually all agricultural areas of the United States, and that they tend to be a relatively invisible population. Seasonal agricultural workers may be employed only part of the year, or may work in other industries besides agriculture. Seasonal workers are generally local "Anglo" residents plus some settled-out migrant workers. One family may include both seasonal and migrant workers; no data are available on how common this occurrence is. Students or others who use farmwork as a temporary way to supplement their income are not included because their principal employment is not in agriculture. We believe that the number of seasonal workers is not large when compared to the overall agricultural work force, but it is a significant number. Like migrant workers, seasonals play an important role in the agricultural productivity of our nation.

Estimation Procedure

It may be even more difficult to accurately estimate seasonal workers than to estimate migrants. To our knowledge, there are no counts of seasonal farmworkers in the United States. There is one source which provides numbers of hired farmworkers at the county level: the U.S. Census of Agriculture.
Thus, we decided to use this source as a base for our seasonal estimates. Since the Census gathers information from farmers, as employers, there is some double-counting of seasonal workers who have more than one employer per year. However, this is not a serious drawback because the Public Health Service is more interested in counts of workers for each location than they are in unduplicated counts.

The hired workers counted in the Census of Agriculture include many who do not meet the Public Health Service definition of seasonal worker. "Hired workers" in the Census includes paid family members working for the farm owner, year round employees, and many part time workers whose principal employment is not in agriculture. In order to reduce the Census figures to include only seasonal farmworkers, we utilized information from the Agricultural Work Force Survey of 1985 (Oliveira and Cox, 1988). This survey, conducted every two years by the U.S. Bureau of the Census in cooperation with USDA, identifies households with persons in the agricultural workforce in a national sample of households. Their results are presented only for the total U.S. and for 10 farm production regions. From the results for the total U.S., we noted that only 29 percent of the hired farm work force considered farmwork their primary employment in 1985. In addition, about one third of these persons had worked 25 to 199 days on farms during the year. (We interpolated the category of 150-199 days from the larger category of 150-249 days.) These two criteria -- working 25-199 days and primary employment in farmwork -- are a fairly close match to the Public Health Service definition of seasonal farm worker. Workers who meet these criteria are 8.5 percent of the total hired farmwork force.

We selected the range of 25 to 200 days for these reasons: 1) People working less than 25 days are likely to be high school students and others who
do not work during most of the year -- they are not the farmworker population that the Public Health Service wants to reach; 2) People working over 200 days are most likely to be year-round employees. In the Midwest, with a six to eight month growing season, 200 days is a realistic upper limit for seasonal work. We initially chose 150 days as the upper limit, but comments by our knowledgeable informants led us to raise the cutoff point.

We applied the 8.5 percent to the Census of Agriculture numbers of hired farmworkers in each county, in order to estimate the seasonal workers. The results are presented in Tables 2-5 for each state for 1982 and 1978, and are presented for 1982 in Maps 5-8. The number of seasonal workers per county ranges from a low of 7 to a high of 349 in 1982. Statewide totals range from 5,949 in Kansas to 14,805 in Iowa, and are shown in Table 6.

Maps 5-8 present the numbers of seasonal workers estimated for every county in the four states. No county has zero seasonal workers. As shown on the map keys, blank counties have less than 50 workers, while at the other extreme, the most densely cross-hatched counties have 151 or more seasonal workers. The exact numbers of workers in each county for 1982 are listed in the third column of numbers on Tables 2-5.

Estimates for seasonal workers are presented for 1982 because that is the date of the last available Census of Agriculture. We believe that the 1988 seasonal population is about the same as the 1982 estimates. Employment of seasonal workers seems to be closely linked to the strength of the farm economy. During the farm crisis of the 1980s, the number of hired farm workers dropped off as farmers struggled to keep going or went out of business. Now the Midwest is experiencing a more stable period in the farm economy and farm employment has increased again. Observers in the four states believe that the 1988 seasonal work force is similar in size to the 1982 work force.
Dependents of Seasonal Workers

Estimation Procedure

To estimate dependents of seasonal workers, special tabulations from the Agricultural Work Force Survey of 1985 were requested. The published survey report (Oliveira and Cox, 1988) presents no information about the households of seasonal workers, so we requested basic data on household size and an approximation of numbers of dependents per household for households with workers who had worked less than 150 days and whose primary employment was farmwork. Unfortunately, the 150 day cutoff was the closest available grouping to our seasonal worker definition.

The special tabulations showed that, for the whole U.S., there were over 95,000 workers in 1985 who met these seasonal farmwork criteria. These workers lived in 91,000 households which ranged in size from one to more than 10 members. In fact, 9,000 households had only one member, who was by definition a seasonal worker. We calculate that the average household size was 3.5 persons. This number includes seasonal workers, other workers, and dependents. To help estimate dependents, we requested a special tabulation of persons age 0-13 and 65 or older for all of these households. Although this is a rough estimate of dependents, we were unable to obtain further classifications because of small sample size. There was one such dependent per household on average, but over half of the households actually had no dependents. Thus, we estimate that on average, there are 3.5 persons living in a seasonal farmworker's household, one of whom is the farmworker and one of whom is a dependent. The remaining 1.5 persons are most likely non-seasonal agricultural workers or possibly nonworkers aged 14-64.

To estimate the seasonal agricultural worker dependent population, we first calculated that there are about 0.958 households per seasonal worker.
We estimate that the average number of nonworking dependents per household could range between 1.0 and 1.5 persons. Using the estimated number of workers presented in Table 6, we calculated number of households and then multiplied by 1.0 and by 1.5 to estimate a range for number of dependents. Results for 1982 are presented in Table 6.

We must note that even when the 1987 Census of Agriculture is available, it will not provide information to revise these seasonal worker estimates. The questions about numbers of hired farmworkers have been replaced with questions about the total dollar amount paid by the farmer to all hired farm labor. It is unfortunate that our estimation methodology cannot be used with the 1987 Agriculture Census data.
V. CONCLUSIONS AND RECOMMENDATIONS

This project estimated the migrant and seasonal agricultural workforce in four states, using Public Health Service definitions of such workers. As with any such estimation project, results are presented with a string of caveats. The data are not ideal, variations in definitions are troublesome, the validity of these estimates for future years is dependent on stability in the agricultural economy, similar crop and weather patterns, and local labor force patterns remaining the same, and so on.

The difficulties in estimating agricultural workers have been mentioned in this report, and they are numerous. The workforce is very mobile, and traditional patterns of work and travel appear to be breaking down. For the Midwest migrant stream, the interstate highway system is a skeleton upon which migration patterns are built. The patterns become very complex, however, with criss-crossing searches for work as well as more movement between the Texas-based and the two coastal streams. Some informants say that the familiar maps of East, West and Midwest migration streams are no longer valid.

Many employers no longer provide housing to their migrant workers, so the system of locating migrants through camps is often not feasible. Providers of services to migrants generally know where the remaining camps are located, as well as locations of housing used by migrants that is not employer-provided.

In certain areas, while migrating, workers may live in one state while working in another. This happens along the Iowa-Illinois border, for example, where workers reside in Iowa, but work in Illinois. Service providers in some of these areas can serve everyone, while others have to be strict about where their clientele are residing. Estimating workers from records of service providers becomes complicated, depending on whether the place of employment or place of residence is more important.
The many definitions for migrant and seasonal workers now in use are a major complication in data gathering. Each agency that collects data sees the world through different eyes. For example, the Migrant Education Program, using a less restrictive definition, includes many children of meat packing workers who are not counted by other agencies.

The estimation process is made more difficult by a lack of any baseline data. Studies done 10 or even 20 years ago can be helpful in establishing patterns of work, which can be updated with current information. We could not locate baseline data for any of the four states.

Estimations of dependents or nonworkers are more accurate when the mix of single workers and families are known for specific areas. In addition, knowing average family size and average number of workers per family enables more accurate estimates of dependents. Most agency estimates of dependents do not distinguish between working and nonworking dependents. Some agencies, for example, the Department of Labor, collect no information about dependents.

The future outlook for employment of migrant and seasonal workers over the next 5 to 10 years looks stable. Barring any major changes in crops or types of work performed, we do not expect large increases nor decreases in the agricultural workforce for these four states. However, there are a number of trends that may affect this. Many observers have noted that average farm size in increasing, and farmers are moving to larger acreage in labor-intensive crops. Others have noted the high costs of petrochemicals that are used in large production units. Not only the cost, but the increasing concern for contamination in groundwater has made some farmers pause in their plans for expansion. The diminishing supply of teenage workers has also been noted. Reliance on cheap local labor seems to be a thing of the past. These and other factors will help to increase demand for migrant and seasonal workers in the future.
There are opposing forces, however, which will serve to reduce the employment of migrants. As mentioned at the beginning of this report, we are beginning to see effects of the 1986 Immigration Reform and Control Act. In the near future, several effects are expected. As employers become aware of the penalties for hiring illegals, they will become much more careful about hiring only legal workers. This may affect the composition of the migrant workforce in areas such as northern Iowa, where there has been reliance on undocumented workers to increase the migrant workforce. Some informed observers warn that there can easily be increased exploitation of undocumented workers who will have no legal protections. In addition, the traditional migrant workforce is aging as younger workers become educated and leave the stream for other jobs. If the aging trend continues, there will be natural decline in numbers of migrant workers.

Overall, we conclude that the numbers of employed migrants in this mid-western area will not fluctuate very much. Local areas may see changes as farmers go out of business, consolidate acreage, or change to crops that utilize or don't utilize migrant workers.

Recommendations

We have three major recommendations to make concerning future estimation projects and the better delivery of services to agricultural workers. First, we suggest that each state have a yearly face-to-face meeting of all agencies concerned with providing services to migrant and seasonal agricultural workers. These agencies would include (but not be limited to) migrant health programs, migrant education programs, job service, 402-JTPA agencies, legal services, and social services. These meetings would enable information and problem sharing as well as building networks which would prove useful year-round. Agencies represented might find more ways to share scarce
resources, use common intake or record-keeping forms, set up computerized databases, and so on. A joint newsletter or other means of communication would also be helpful.

Second, it is worth considering conducting statewide surveys of migrant and seasonal workers from time to time. Such surveys are very expensive and funding is very difficult to arrange, but they provide invaluable baseline data that can be used for years. In order to do such surveys, impartial, knowledgeable researchers must be given control of the research project. Surveys done by service providers are usually limited in scope, and not conducted in a way that meets acceptable scientific standards.

Finally, we need to work toward more uniform official definitions of migrant and seasonal workers at the federal level. We recognize that various agencies have different needs in terms of defining their clientele, with children served by one, workers by another, and whole families by yet another. But the current situation is confusing and counterproductive, serving to keep various agencies separated and to confuse most impartial observers.
FOOTNOTES

1. This estimate may be somewhat low. Although it is based on information provided to us, one knowledgeable source did not provide an estimate.

2. We appreciate the prompt response to our request by Victor Oliveira, Economic Research Service, USDA.
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Oliveira, Victor J. and F. Jane Cox

Population Reference Bureau

U.S. Bureau of the Census
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TABLES AND MAPS

Table 1: Estimated Peak Number of Migrant Workers and Dependents in Iowa, Kansas, Missouri, and Nebraska, 1988

Table 2: Estimated Seasonal Agricultural Workers in Iowa, by County, 1978, 1982

Table 3: Estimated Seasonal Agricultural Workers in Kansas, by County, 1978, 1982

Table 4: Estimated Seasonal Agricultural Workers in Missouri, by County, 1978, 1982

Table 5: Estimated Seasonal Agricultural Workers in Nebraska, by County, 1978, 1982

Table 6: Estimated Numbers of Seasonal Agricultural Workers and Dependents in Iowa, Kansas, Missouri and Nebraska, 1978, 1982

Map 1: Migrants in Iowa, 1988: Estimated Peak Number of Workers and Dependents and Length of Season for Sub-State Areas

Map 2: Migrants in Kansas, 1988: Estimated Peak Number of Workers and Dependents and Length of Season for Sub-State Areas

Map 3: Migrants in Missouri, 1988: Estimated Peak Number of Workers and Dependents and Length of Season for Sub-State Areas

Map 4: Migrants in Nebraska, 1988: Estimated Peak Number of Workers and Dependents and Length of Season for Sub-State Areas

Map 5: Estimated Seasonal Agricultural Workers in Iowa, 1982

Map 6: Estimated Seasonal Agricultural Workers in Kansas, 1982

Map 7: Estimated Seasonal Agricultural Workers in Missouri, 1982

Map 8: Estimated Seasonal Agricultural Workers in Nebraska, 1982

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53
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Table 1. Estimated Peak Number of Migrant Workers and Dependents in Iowa, Kansas, Missouri and Nebraska, 1988

<table>
<thead>
<tr>
<th>State/Area</th>
<th>Workers</th>
<th>Dependents</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Iowa</strong></td>
<td>860-925</td>
<td>795-815</td>
</tr>
<tr>
<td>1. Muscatine</td>
<td>400</td>
<td>600</td>
</tr>
<tr>
<td>2. Mason City</td>
<td>150-200</td>
<td>120</td>
</tr>
<tr>
<td>3. Sioux City</td>
<td>200</td>
<td>40-50</td>
</tr>
<tr>
<td>4. Central Iowa</td>
<td>40-50</td>
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</tr>
<tr>
<td>5. Williamsburg</td>
<td>35-40</td>
<td>35-45</td>
</tr>
<tr>
<td>6. Shenandoah</td>
<td>65</td>
<td>0</td>
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<tr>
<td><strong>Kansas</strong></td>
<td>2,390-2,890</td>
<td>2,570-3,070</td>
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<tr>
<td>1. Goodland</td>
<td>250-350</td>
<td>300-500</td>
</tr>
<tr>
<td>2. Southwest corner</td>
<td>1,000-1,100</td>
<td>1,400-1,600</td>
</tr>
<tr>
<td>3. Cloud County</td>
<td>140</td>
<td>100</td>
</tr>
<tr>
<td>4. Central</td>
<td>150-250</td>
<td>70</td>
</tr>
<tr>
<td>5. Northeast</td>
<td>250-350</td>
<td>100</td>
</tr>
<tr>
<td>6. Topeka-Kansas City</td>
<td>600-700</td>
<td>600-700</td>
</tr>
<tr>
<td><strong>Missouri</strong></td>
<td>775-910</td>
<td>445-555</td>
</tr>
<tr>
<td>1. Bootheel</td>
<td>400-450</td>
<td>150</td>
</tr>
<tr>
<td>2. Lafayette County area</td>
<td>300-350</td>
<td>150-200</td>
</tr>
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<td>4. Southwest Missouri</td>
<td>70-85</td>
<td>140-200</td>
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<tr>
<td><strong>Nebraska</strong></td>
<td>2,500-3,250</td>
<td>1,000-1,310</td>
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<tr>
<td>1. Panhandle</td>
<td>1,900-2,400</td>
<td>700-1,000</td>
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<tr>
<td>2. Hastings</td>
<td>200-300</td>
<td>100</td>
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<td>3. Southeast corner</td>
<td>200-300</td>
<td>100</td>
</tr>
<tr>
<td>4. Chase/Lincoln</td>
<td>100-150</td>
<td>50-60</td>
</tr>
<tr>
<td>5. Omaha</td>
<td>100</td>
<td>50</td>
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Note: State totals are calculated from summing the estimated peak numbers in each area. Some duplication of counts may be included.
Table 2. Estimated Seasonal Agricultural Workers* in Iowa by County, 1978, 1982.

<table>
<thead>
<tr>
<th>County</th>
<th>Hired Workers 1978</th>
<th>Hired Workers 1982</th>
<th>Estimated Seasonal Workers 1978</th>
<th>Estimated Seasonal Workers 1982</th>
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<tr>
<td>Adair</td>
<td>1106</td>
<td>1515</td>
<td>94</td>
<td>129</td>
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<tr>
<td>Adams</td>
<td>600</td>
<td>1004</td>
<td>54</td>
<td>85</td>
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<td>Allamakee</td>
<td>1277</td>
<td>1769</td>
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<td>159</td>
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<tr>
<td>Appanoose</td>
<td>470</td>
<td>731</td>
<td>60</td>
<td>62</td>
</tr>
<tr>
<td>Audubon</td>
<td>1700</td>
<td>1510</td>
<td>145</td>
<td>120</td>
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<tr>
<td>Benton</td>
<td>2252</td>
<td>2307</td>
<td>154</td>
<td>256</td>
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<tr>
<td>Black Hawk</td>
<td>2626</td>
<td>3192</td>
<td>223</td>
<td>271</td>
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<td>Boone</td>
<td>1547</td>
<td>2658</td>
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<tr>
<td>Bremer</td>
<td>2820</td>
<td>2546</td>
<td>172</td>
<td>216</td>
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<td>Buchanan</td>
<td>2224</td>
<td>2471</td>
<td>149</td>
<td>210</td>
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<tr>
<td>Buena Vista</td>
<td>2811</td>
<td>3799</td>
<td>239</td>
<td>223</td>
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<tr>
<td>Butler</td>
<td>2366</td>
<td>3661</td>
<td>261</td>
<td>260</td>
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<td>Calhoun</td>
<td>2504</td>
<td>2563</td>
<td>213</td>
<td>220</td>
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<tr>
<td>Carroll</td>
<td>2454</td>
<td>2790</td>
<td>209</td>
<td>237</td>
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<tr>
<td>Cass</td>
<td>1167</td>
<td>1559</td>
<td>99</td>
<td>167</td>
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<td>Cedar</td>
<td>1599</td>
<td>2841</td>
<td>136</td>
<td>241</td>
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<tr>
<td>Cerro Gordo</td>
<td>2131</td>
<td>2660</td>
<td>141</td>
<td>209</td>
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<tr>
<td>Cherokee</td>
<td>2455</td>
<td>2591</td>
<td>269</td>
<td>254</td>
</tr>
<tr>
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*Estimated seasonal workers are 8.5% of hired workers. Data on hired workers from 1982 U.S. Census of Agriculture, Table 3.
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*Estimated seasonal workers are 0.5% of hired workers. Data on hired workers from 1982 U.S. Census of Agriculture, Table 9.
Table 4. Estimated Seasonal Agricultural Workers\(^a\) in Missouri by County, 1978, 1982.

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<td>Lewis</td>
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<td>Lincoln</td>
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<td>Linn</td>
<td>602</td>
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<td>51</td>
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\(^a\)Estimated seasonal workers are 0.5% of hired workers. Data on hired workers from 1982 U.S. Census of Agriculture, Table 9.
<table>
<thead>
<tr>
<th>County</th>
<th>Hired Workers 1970</th>
<th>Hired Workers 1978</th>
<th>Estimated Seasonal Workers 1970</th>
<th>Estimated Seasonal Workers 1978</th>
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<td>Adams</td>
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<td>Banner</td>
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<td>418</td>
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<td>1374</td>
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<td>Crawford</td>
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<td>41</td>
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<td>Fillmore</td>
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<td>109</td>
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<td>564</td>
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<td>Garden City</td>
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<td>Goodwin</td>
<td>363</td>
<td>272</td>
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<td>Grant</td>
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<td>Greeley</td>
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<td>Hall</td>
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<td>Hitchcock</td>
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<td>1950</td>
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<td>Hooks</td>
<td>33</td>
<td>70</td>
<td>7</td>
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<td>Howard</td>
<td>579</td>
<td>705</td>
<td>49</td>
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<tr>
<td>Total</td>
<td>74037</td>
<td>94429</td>
<td>6701</td>
<td>7728</td>
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</tbody>
</table>

*Estimated seasonal workers are 0.5% of hired workers. Data on hired workers from 1982 U.S. Census of Agriculture, Table 9.*
Table 6. Estimated Numbers of Seasonal Agricultural Workers and Dependents in Iowa, Kansas, Missouri, and Nebraska, 1978, 1982

<table>
<thead>
<tr>
<th>State</th>
<th>1978 Estimated Seasonal Workers</th>
<th>1982 Estimated Seasonal Workers</th>
<th>Estimated Dependents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iowa</td>
<td>19,088</td>
<td>14,805</td>
<td>14,183-21,275</td>
</tr>
<tr>
<td>Kansas</td>
<td>7,656</td>
<td>5,949</td>
<td>5,699-8,549</td>
</tr>
<tr>
<td>Missouri</td>
<td>10,746</td>
<td>8,637</td>
<td>8,274-12,411</td>
</tr>
<tr>
<td>Nebraska</td>
<td>7,720</td>
<td>6,701</td>
<td>6,420-9,629</td>
</tr>
</tbody>
</table>

Source: Seasonal workers in 1978 and 1982 are 8.5 percent of Census of Agriculture hired farmworkers. Dependents are calculated as described in text.
Map 1. Migrants in Iowa, 1988

Estimated Peak Number of Workers and Dependents and Length of Season for Sub-State Areas

<table>
<thead>
<tr>
<th>Area</th>
<th>Workers</th>
<th>Dependents</th>
<th>Month</th>
<th>Season</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Muscatine</td>
<td>400</td>
<td>600</td>
<td>July</td>
<td>May-Sept.</td>
</tr>
</tbody>
</table>
Map 2. Migrants in Kansas, 1988

Estimated Peak Number of Workers and Dependents and Length of Season for Sub-State Areas

<table>
<thead>
<tr>
<th>Area</th>
<th>Workers</th>
<th>Dependents</th>
<th>Month</th>
<th>Season</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Cloud county</td>
<td>140</td>
<td>100</td>
<td>April-May</td>
<td>March-June</td>
</tr>
</tbody>
</table>
Map 3. Migrants in Missouri, 1988

### Estimated Peak Number of Workers and Dependents and Length of Season for Sub-State Areas

<table>
<thead>
<tr>
<th>Area</th>
<th>Peak Workers</th>
<th>Peak Dependents</th>
<th>Month</th>
<th>Season</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Bootheel</td>
<td>400-450</td>
<td>150</td>
<td>August</td>
<td>April-Nov.</td>
</tr>
</tbody>
</table>
Map 4. Migrants in Nebraska, 1988

<table>
<thead>
<tr>
<th>Area</th>
<th>Workers</th>
<th>Dependents</th>
<th>Month</th>
<th>Season</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Omaha area</td>
<td>100</td>
<td>50</td>
<td>July</td>
<td>June-Sept.</td>
</tr>
</tbody>
</table>
Map 5. Estimated Seasonal Agricultural Workers in Iowa, 1982

Key

- 1 to 49
- 50 to 99
- 100 to 149
- 150 or more
Map 6. Estimated Seasonal Agricultural Workers in Kansas, 1982

Key

- 1 to 49
- 50 to 99
- 100 to 149
- 150 or more
Map 7. Estimated Seasonal Agricultural Workers in Missouri, 1982

Key

1 to 49  50 to 99  100 to 149  150 or more
Map 8. Estimated Seasonal Agricultural Workers in Nebraska, 1982

Key

- 1 to 49
- 50 to 99
- 100 to 149
- 150 or more
APPENDICES

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SOURCES OF DATA

Known data sources:

1) U.S. Dept. of Agriculture; Census of Agriculture, 1982; state and county level data --
   hired farm labor: number of workers
   number of workers worked <150/150+ days
   crops harvested: number of acres

2) U.S. Farm Labor Report; regional (multi-state) quarterly data --
   hired labor
   a) Iowa and Missouri are one region
   b) Kansas, Nebraska, North Dakota and South Dakota are one region

3) U.S. Hired Farm Work Force; regional biannual data (1985 available) --
   counts and ratios of migrant and seasonal farm workers
   a) Iowa, Missouri, Illinois, Indiana, Ohio are one region
   b) Kansas, Nebraska, North Dakota, South Dakota are one region

4) "Migrant and Seasonal Impact Areas" and "Migrant and Seasonal Agricultural Areas" reports; state and county data --
   estimated number of migrant and seasonal farm workers
   map of population estimates, location of health clinics, ag areas
   statewide ag area seasons (dates)

5) Migrant Student Record Transfer System; state data --
   pupils served by migrant education projects
   unduplicated count of pupils by county (note: in Wisconsin, over 20% of the pupils are not assigned to a county)

Other possible data sources:

1) U.S. Cooperative Extension Service
   County ag agents could estimate:
   Acreage planted/harvested per crop
   Labor demands per crop acre
   Proportion of labor demand filled by MSFW
   Peak labor weeks per crop
   Length of season
   Family structure of MSFW

2) State Employment Service Monitor/Advocate, responsible for migrant labor:
   County-level estimates of workforce
   Peak labor weeks
   Names of knowledgeable persons at local level
   Family structure; home base; types of workers

3) State Unemployment Compensation Data:
   Possible state level data in Iowa, Missouri, Nebraska for larger employers (Kansas does not have these data)
4) Migrant Health Clinic Directors and other knowledgeable persons:
   State health directors
   Texas Migrant Council, Colorado Migrant Council, statewide migrant
   advocacy and social service agencies, e.g., United Migrant Opportunity
   Services, Inc.
   Legal action agencies
   Public health departments
   State and County social services staff -- especially WIC and
   food stamp programs
   Governor's Office staff for Hispanic affairs

5) State Departments of Agriculture:
   Crops planted/harvested for counties
   Acreage per crop
   Possible hired farmworker counts
   Length of season and peak for crops

6) Growers and Processor organizations:
   Number of employees
   Production counts by establishment
   Length of season

7) U.S. Dept of Labor, Bureau of Economic Analysis (BEA)
   Agricultural employment data

8. U.S. Social Security Administration data

9. ETA-223 data, U.S. Department of Labor

10. Private and church-affiliated social service agencies
Migrant/Seasonal Agricultural Worker Research Contacts

National and Regional

Ellis Barham
Regional Program Consultant for Migrant Health
U.S. Public Health Service
601 East 12th Street
Kansas City, MO 64050
816/426-5296

Sam Carpenter
Regional Director, Dept. of Labor
Federal Office Bldg., Suite 700
911 Walnut Street
Kansas City, MO 64106
816/426-6411

Eleanor Cautley
Department of Rural Sociology
University of Wisconsin
1450 Linden Drive
Madison, WI 53706
608/262-3097

Dr. Duggar, Sc.D.
La Jolla Management Corp.
5950 Symphony Woods Road
Columbia, MD 21044
301/730-8855

Ms. E. Roberta Ryder
National Migrant Referral Project
Suite 220
2512 South I.H. 35
Austin, TX 78704
512/447-0770

Doris P. Slesinger, Ph.D.
Department of Rural Sociology
University of Wisconsin
1450 Linden Drive
Madison, WI 53706
608/262-1510

Charles Van Anden
U.S. Public Health Service
601 East 12th Street
Kansas City, MO 64050
816/426-5296

4/88
IOWA

Migrant/Seasonal Agricultural Worker Contacts

Juan Cadena
Project Director
Muscatine Migrant Committee
210 W. 2nd Street
Muscatine, IA 52761
319/264-1155

Paul Cahill
Consultant, Bureau of Compensatory and Equity Education
Grimes Office Bldg.
Des Moines, IA 50319
515/281-3944

Elba Cera
PROTEUS
1406 Nebraska Street
Sioux City IA 51105
712/258-3954

Olga Duran
Dept. of Labor
1000 East Grand Avenue
Des Moines, IA 50319
515/281-7028

Jennie Krebs
Project Nurse
Muscatine Migrant Committee
Satellite
1406 Nebraska Street
Sioux City IA 51105
712/258-3954

Alcida Jeffers
Project Nurse
Muscatine Migrant Committee
Satellite
921 Pleasant Street
Des Moines, IA 50309
515/244-2829

John Leaper
PROTEUS, Inc.
P.O. Box 10385
Des Moines, IA 50306
515/244-5694

Ila Lucencia
Spanish Speaking People's Commission
Lucas State Office Bldg.
Des Moines, IA 50319
515/281-4080

Terry Y. Meek
Executive Director
PROTEUS Employment Opportunities, Inc.
P.O. Box 10385
Des Moines, IA 50306
515/244-5694

George Selser
Dept. of Job Service
1000 East Grand Avenue
Des Moines, IA 50319
515/281-5854

James P. Walseth
Legal Services Corp. of Iowa
Suite 400 Paramount Building
305 Second Street., S.E.
Cedar Rapids, IA 52401
319/364-6108
KANSAS
Migrant/Seasonal Agricultural Worker Contacts

Bob Kidd
Rural Services Coordinator
Department of Human Resources
401 Topeka Boulevard
Topeka, KS 66601
913/296-5170

Richard Lopez
Chief Executive Officer
SER Corporation
709 East 21st Street
Wichita, KS 67214
316/264-5372

Marc Marcano
Executive Director
Governor's Migrant Committee
512 West Sixth
Topeka, KS 66603
913/296-3465

Steve McDowell
Director of Maternal, Infant
and Child Health
Kansas Dept. of Health and
Environment
Bureau of Family Health
900 S.W. Jackson
Topeka, KS 66620-0001
913/296-1303

Juan Rocha
Specialist in Migrant Education
Kansas Dept. of Education
120 East 10th Street
Topeka, KS 66612
913/296-4964

Laurie Rossenwasser, Director
Harvest America, Inc.
14th & Wyandotte Avenue
Kansas City, KS 66103
913/342-2121

Penny Schwab
Executive Director
Mexican/American Ministries
224 N. Taylor Ave., Box 766
Garden City, KS 67846
316/275-1766

Lemuel E. Wynn
Administrative Officer
KC/Wyandotte Co. Health Dept.
619 Ann Avenue
Kansas City, KS 66101
913/321-4803 Ext. 431

Nancy Wynn, R.N.
Coordinator for Migrant Health
KC/Wyandotte Co. Health Dept.
619 Ann Avenue
Kansas City, KS 66101
913/321-4803
MISSOURI

Migrant/Seasonal Agricultural Worker Contacts

Nancee Allen
Director
Chapter 1, ECIA
Department of Education
P.O. Box 480
Jefferson City, MO 65102
314/751-3543

Alex Cooper
Director
Delmo Migrant Health Project
P.O. Box 354
Lilbourn, MO 63862
314/688-2241

Mary Lona
Executive Director
Richard Cabot Clinic
1810 Summit
Kansas City, MO 64108
816/471-0900

Donald Shook
Division of Employment Security
421 East Dunklin
P.O. Box 59
Jefferson City, MO 65104
314/751-2169

Don Sievenaler
Rural Missouri, Inc.
1014 Northeast Drive
Jefferson City, MO 65109
314/635-0136

Cyndi Treaster
Project Manager
Migrant Farmworker's Project
920 Southwest Blvd.
Kansas City, MO 64108
816/474-9868
NEBRASKA

Migrant/Seasonal Agricultural Worker Contacts

Betty Alfred
Migrant Education
State Office Bldg., 6th Floor
301 Centennial Mall South
P.O. Box 94987
Lincoln, NE 68509-4987
402/471-2481

Franklin D. Harris, Director
Bureau of Community Health Services
Director, Migrant Health Project
Department of Health
301 Centennial Mall South
P.O. Box 95007
Lincoln, NE 68509-5007
402/471-2101

Barbara Jones
ETS II/Regional Office Manager
Nebraska Assn. of Farmworkers
P.O. Box 7223
Omaha, NE 68107
402/734-4100

Ella Ochoa
Nebraska Assoc. of Farmworkers
200 South Silber
P.O. Box 1459
North Platte, NE 69103-1459
308/534-2630

Keith Richins
Job Service
Department of Labor
1717 Avenue C
P.O. Box 32
Scottsbluff, NE 69361-0032
308/635-3191

Michele Valdez
Employment Training Specialist I
Nebraska Assn. of Farmworkers
P.O. Box 7223
Omaha, NE 68107
402/734-4100
Information/Data Received
Migrant and Seasonal Agricultural Workers

Iowa
August '86 and '87 letters with MSFW counts for Program Year '86 and '85 - from George Selser.
1987 Iowa Ag. Statistics.
Planting to Harvest 1986.

Kansas
Juan Rocha - MSRTS unduplicated counts for 8/86-8/87.
Annual Plan for FY89.
Annual Plan for FY88.
Kansas Farm Facts 1986.
Kansas Crop Calendar 1985.
Kansas WIC data by county
Application for Migrant Health Funds - western Kansas
Newspaper article on Asian refugees

Missouri
1987 Missouri Farm Facts.
1987 Annual Crop Summary.
UM-Lincoln Extension Directory.
Contacts for Agriculture Missouri (commodity groups).
Missouri Div. of Employment Security local offices - Shook.

Nebraska
NAF annual reports - Ella Ochoa.
1986 Nebraska Ag. Statistics.
Nebraska Crops and Weather.
Nebraska Coop Extension Service personnel.
NAF Summary info - Barb Jones.
Scottsbluff and Sidney Intc Bulletin - Job Service, Keith Richins.

Other
PHS Region VII Migrants and Seasonals served 1983-87; cumulative statistics on medical and dental users 1983-86.
BEA County-level data for 4 states.
"The Agricultural Work Force of 1985" by Oliveira and Cox - published data from Dec. 1985 CPS.
Martin and Holt "Migrant Farmworkers: Number and Distribution" 1987 report.
MSRTS Management Reports for Iowa, Kansas, Missouri and Nebraska - from Duggar.
Other (continued)

Migrant Health Matrix from Duggar.
Misc. Job Service brochures.
Migrant and Seasonal Impact areas.
"Region VII Rural Crisis" - Midwest Rural Health Assn.
Also see EC notes on phone calls.
Iowa Dept. of Public Health brochures on Maternal and Child Health/WIC Services.
Map filled in by meeting attendees.
USDA publication on sugar 
Methodology for Designating High Impact Migrant and Seasonal Agricultural Areas (HCR report)
Dear Mr. Walseth:

We appreciate your interest in migrant and seasonal agricultural workers. As mentioned over the telephone, we have received a contract from the National Migrant Referral Project, Inc., to estimate the numbers of migrant and seasonal agricultural workers in Iowa, Kansas, Missouri and Nebraska.

In order to find out about the local conditions within each state, we want to meet with persons who are involved with programs serving farmworkers. We are inviting people working in health, education, employment, legal services and other programs to share information with each other and with us.

KANSAS AND MISSOURI

We will be holding a meeting on Wednesday, April 13, 1988, for people working in the states of Kansas and Missouri. We will meet at the U.S. Public Health Service, Federal Building, 601 East 12th St., Kansas City, MO, in the 5th floor conference room, from 11 am to 3 pm.

IOWA AND NEBRASKA

A second meeting will be on Friday, April 15, 1988, for people working in the states of Iowa and Nebraska. We will meet at the Iowa Job Service building, 1000 E. Grand Avenue, Des Moines, IA, from 10 am to 3 pm.

We will be sending you further details in a few weeks, including parking information and the meeting agenda. We will also send suggestions about information we hope you will be able to bring to the meeting.

Please reserve the date. We will assume you are coming to one of these meetings unless you notify us. Feel free to contact us for further information. Also, please feel free to share this invitation with others who might be interested. We look forward very much to meeting you.

Sincerely,

Doris P. Sleisinger, Ph.D.
Project Director
Professor of Rural Sociology

Eleanor Cautley
Research Specialist
(608/262-3097)
MEMORANDUM

TO: Participants in Meeting on Migrant and Seasonal Agricultural Workers, April 13, Kansas City, Federal Building, 601 East 12th Street, 5th Floor conference room

FROM: Doris E. Lesinger and Eleanor Cautley

DATE: April 6, 1988

RE: Agenda

11:00-12:30
Welcome
Introductions
Contribution from each participant: agency represented, services provided, personal and agency history of work with migrants, approximate number served per year, geographic area of service, personal perspective on historical trends in migrant employment.

12:30-1:00
Lunch: pick up food in cafeteria and return to meeting.

1:00-2:00
Presentation by Doris E. Lesinger and Eleanor Cautley.
Description of project and goals.
Methodology: data sources and estimates.

2:00-3:00
Discussion
Topics covered during the meeting plus issues raised by questionnaire. For example:
- Definition of migrant vs. seasonal
- Peak vs. average vs. cumulative count
- Monthly variations
- Unduplicated counts
- Persons per family; dependent counts
- Future outlook.

Don't forget to bring your completed questionnaire plus any relevant reports, maps of service areas, and other materials.

ked
MEMORANDUM

TO: Participants in Meeting on Migrant and Seasonal Agricultural Workers, April 15, Des Moines, Job Service Building, 1000 East Grand Avenue, 1st Floor Staff Development Room

FROM: Doris P. Slesinger and Eleanor Cautley

DATE: April 6, 1988

RE: Agenda

Welcome

10:00-11:30
Introductions
Contribution from each participant: agency represented, services provided, personal and agency history of work with migrants, approximate number served per year, geographic area of service, personal perspective on historical trends in migrant employment.

11:30-12:30
Lunch: on your own

12:30-1:30
Presentation by Doris Slesinger and Eleanor Cautley. Description of project and goals. Methodology: data sources and estimates.

1:30-3:00
Discussion
Topics covered during the meeting plus issues raised by questionnaire. For example:
- Definition of migrant vs. seasonal
- Peak vs. average vs. cumulative count
- Monthly variations
- Unduplicated counts
- Persons per family; dependent counts
- Future outlook

Don't forget to bring your completed questionnaire plus any relevant reports, maps of service areas, and other materials.

ked
I. Prior Research in Wisconsin
   A. Sample survey of migrant agricultural workers
   B. Survey of employers of migrant workers
   C. Research on MSRTS data

II. Current Research Project
   A. Funded by National Migrant Referral Project, Inc.
   B. Estimates will be used by U.S. Public Health Service
   C. Final report will include maps which will show estimates of migrant and seasonal agricultural workers and dependents by county
   D. Feedback requested on draft of final report

III. Methodology for Research Project
   A. Definitions and data from informants
   B. Potential data sources
   C. Compile all data in spreadsheet and produce ranges

IV. Discussion of Issues Raised
   A. Definitions
   B. Peak vs average vs cumulative
   C. Monthly variation
   D. Unduplicated counts
   E. Persons per family; dependents
   F. Ethnic heritage
   G. Intra vs interstate
   H. Type of employment
   I. Future outlook
Research on Migrant and Seasonal Agricultural Workers in Four States

MEETING PARTICIPANTS
Kansas City, MO - April 13, 1988

Ellis Barham
Regional Program Consultant for Migrant Health
U.S. Public Health Service
601 East 12th Street
Kansas City, MO 64050
816/426-5796

Sam Carpenter
Regional Director, Dept. of Labor
Federal Office Bldg., Suite 700
911 Walnut Street
Kansas City, MO 64106
816/426-6411

Denise Carter
Rural Missouri, Inc.
1014 Northeast Drive
Jefferson City, MO 65109
314/635-0136

Eleanor Cautley
Department of Rural Sociology
University of Wisconsin
1450 Linden Drive
Madison, WI 53706
608/262-3097

Alex Cooper
Director
Delmo Migrant Health Project
P.O. Box 354
Lilbourn, MO 63862
314/688-2241

Ben Duggar, Sc.D.
La Jolla Management Corp.
5950 Symphony Woods Road
Columbia, MD 21044
301/730-8855

Bob Kidd
Rural Services Coordinator
Department of Human Resources
401 Topeka Boulevard
Topeka, KS 66601
913/296-5370

Mary Lona
Executive Director
Richard Cabot Clinic
1810 Summit
Kansas City, MO 64108
816/471-0900

Ross P. Marine
Midwest Rural Health Associates, Inc.
301 E. Armour Blvd., Suite 420
Kansas City, MO 64111
816/756-3140

Steve McDowell
Director of Maternal, Infant and Child Health
Kansas Dept. of Health and Environment
Bureau of Family Health
900 S.W. Jackson
Topeka, KS 66620-0001
913/296-1303

Laurie Rossenwasser, Director
Harvest America, Inc.
14th & Wyandotte Avenue
Kansas City, KS 66103
913/342-2121

Donald Shook
Division of Employment Security
421 East Dunklin
P.O. Box 59
Jefferson City, MO 65104
314/751-2169

Doris P. Slesinger, Ph.D.
Department of Rural Sociology
University of Wisconsin
1450 Linden Drive
Madison, WI 53706
608/262-1510

Leciel E. Wynn
Administrative Officer
KC/Wyandotte Co. Health Dept.
619 Ann Avenue
Kansas City, KS 66101
913/321-4803 Ext. 431

Nancy Wynn, R.N.
Coordinator for Migrant Health
KC/Wyandotte Co. Health Dept.
619 Ann Avenue
Kansas City, KS 66101
913/321-480.
MEETING PARTICIPANTS
Des Moines, IA - April 15, 1983

Ellis Barham
Regional Program Consultant for Migrant Health
U.S. Public Health Service
601 East 12th Street
Kansas City, MO 64106
816/426-5296

Victor Barrera
PROTEUS, Inc.
P.O. Box 10385
Des Moines, IA 50306
515/244-5694

Juan Cadena
Project Director
Muscatine Migrant Committee
210 W. 2nd Street
Muscatine, IA 52761
319/264-1155

Paul Cahill
Consultant, Bureau of Compensatory and Equity Education
Grimes Office Bldg.
Des Moines, IA 50319
515/281-3944

Eleanor Cautley
Department of Rural Sociology
University of Wisconsin
1450 Linden Drive
Madison, WI 53706
608/262-3097

Elba Cera
PROTEUS
1406 Nebraska Street
Sioux City IA 51105
712/258-3954

Olga Duran
Dept. of Labor
1000 East Grand Avenue
Des Moines, IA 50319
515/281-7028

Barbara Jones
ETS II/Regional Office Manager
Nebraska Assn. of Farmworkers
P.O. Box 7223
Omaha, NE 68107
402/734-4100

Jennie Krebs
Project Nurse
Muscatine Migrant Committee Satellite
1406 Nebraska Street
Sioux City IA 51105
712/258-3954

John Leeper
PROTEUS, Inc.
P.O. Box 10385
Des Moines, IA 50306
515/244-5694

Cliff Muilenberg
Iowa Division of Labor
1670 East Grand Avenue
Des Moines, IA 50319
515/281-3606

Izia Piasencia
Spanish Speaking People's Commission
Lucas State Office Bldg.
Des Moines, IA 50319
515/281-4080

Jim Ramos
PROTEUS, Inc.
P.O. Box 10385
Des Moines, IA 50306
515/244-5694

George Selser
Dept. of Job Service
1000 East Grand Avenue
Des Moines, IA 50319
515/281-5854

Jerry Skeers
Iowa Division of Labor
1000 East Grand Avenue
Des Moines, IA 50319
515/281-3606

Doris P. Slesinger, Ph.D.
Department of Rural Sociology
University of Wisconsin
1450 Linden Drive
Madison, WI 53706
608/262-1510
Michele Valdez
Employment Training Specialist I
Nebraska Assn. of Farmworkers
P.O. Box 7223
Omaha, NE 68107
402/734-4100

Estella Valenzuela
Muscatine Migrant Committee
210 W. 2nd Street
Muscatine, IA 52761
319/264-1155

James J. Walseth
Legal Services Corp. of Iowa
Suite 400 Paramount Building
305 Second Street, S.E.
Cedar Rapids, IA 52401
319/364-6108
QUESTIONNAIRE

Migrant and Seasonal Agricultural Workers in
Iowa, Kansas, Missouri and Nebraska

We are surveying persons knowledgeable about migrant and seasonal agricultural workers in your state, in order to develop better estimates of the worker and dependent populations. We would appreciate your taking the time to fill in this questionnaire. Feel free to expand on your answers on the back of these pages.

Please feel free to duplicate this questionnaire for others who can provide information.

Name ___________________________ Date ________________

Organization __________________________________________

Mailing address __________________________________________

City ______________ State __________ Zip ________

Telephone (____)____________________

Please check here if you would like to receive a copy of the final report from this research project: ______

Please return to Eleanor Cautley at address above.
Please fill in as much information as you can with confidence. If appropriate, fill in a range of numbers for your answer. We don't expect you to be able to answer all questions. Please mark questions that you cannot answer with "No Information" or "NI."

1. What services does your organization provide to migrant and/or seasonal agricultural workers?

2. We are all aware that there are many definitions of migrant and seasonal agricultural workers. We would like to have the definition that you use in your work. If there is an "official" definition (or definitions) in a manual, please Xerox and attach. (Or use back for more room.)

   Migrant Definition:

   Seasonal Definition:

SKIP TO QUESTION 5 (NEXT PAGE) IF YOU HAVE FILLED IN OR ATTACHED A DEFINITION.

3. Does your definition of MIGRANT agricultural worker include: (Check each item)

   Agricultural work is principal employment
   Performs agricultural work on seasonal, not year-round basis
   If not currently in migrant employment, must have performed migrant work within a specified time period
      If yes, must have been within ___ months
   Establishes temporary residence for agricultural employment
   Permanent residence and temporary residence must be in:
      different states
      different counties
      different school districts
   Includes nonworking dependents traveling with worker
   Other criteria (please list):

4. Does your definition of SEASONAL agricultural worker include: (Check each item)

   Agricultural work is principal employment
   Performs agricultural work on a seasonal basis
      If yes, must work in agriculture less than ___ days/year
   If not currently in agricultural employment, must have performed agricultural work within a specified time period
      If yes, must have been within ___ months
   Resides in state where seasonal employment occurs
   Includes nonworking dependents
   Other criteria (please list):
5. For each month in 1987, give us your best estimates of the TOTAL numbers of migrant and seasonal agricultural workers in your state or area (use range of numbers if necessary). Please mark a number in every box. If you have no information, write "NI" in the box. We assume you are using the definition you have stated on page 2. If there are exceptions, please note on chart below.

<table>
<thead>
<tr>
<th>Month</th>
<th>Total Number of Migrants Each Month</th>
<th>Total Number of (Non-Migrant) Seasonals</th>
<th>Area Covered (County Names or State)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feb</td>
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<td></td>
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<td>Nov</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Dec</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. What is the source of the numbers above? (Check all that apply.)
   - Your own personal observations
   - Talking with other knowledgeable people
   - From a survey (please describe on back of this page)
   - Official reports
   - Other (please describe)

7. Most of the time, monthly estimates cannot be added to yield a yearly total, since workers counted in one month may (or may not) be counted in subsequent months.

   If you have developed a method for obtaining a meaningful annual estimate which avoids duplication, and counts every agricultural worker only once, please outline your method here and provide your annual estimate.
We have some additional questions concerning migrant workers only.

8. For the ethnic heritage groups listed below, please estimate the percent of migrants in your area within each group.

   Mexican-American  
   Black American  
   Haitian  
   Filipino  
   White / Anglo  
   Southeast Asian  
   Other (list)  

   __%  
   __%  
   __%  
   __%  
   __%  
   __%  

   Total: 100%

9. List the states of origin (permanent residence) of the migrants in your area. Of the total migrants in your area, what percent come from each state listed?

   NOTE: It is possible to have migrants who originate in your own state; please include these if you can.

   State  
   Percent who originate in that state  
   __%  
   __%  
   __%  
   __%  
   __%  

   Total: 100%

10. Please describe the migrant season in recent years in your area with approximate dates and major crops or activities.

   Dates of Migrant Activity  
   Crop or Activity  
   County Names  
   Activity similar from Year to Year?  
   Yes (✓)  
   No (✓)  

   4/5/88

THANK YOU VERY MUCH FOR YOUR ASSISTANCE.

Please return to Eleanor Cautley at address on Page 1.
May 2, 1988

ATTN: WIC Director
Hawkeye Area Community Action Program
320 11th Street
Cedar Rapids, IA 52406

Dear Director:

We are conducting research to estimate the numbers of migrant and seasonal agricultural workers in four states: Iowa, Kansas, Missouri, and Nebraska. This research is part of a national effort by the U.S. Public Health Service to obtain current information on agricultural workers. Our results will be a part of the data assembled to plan health care services for agricultural workers and their dependents.

We have developed a questionnaire to gather information from people who are knowledgeable about migrant and seasonal agricultural workers in these four states. We need to gather information from a variety of agencies and sources in order to understand the whole picture. Would you please fill in this questionnaire and return it to us by May 10.

Thank you in advance for taking the time to answer our questions. We appreciate your assistance with this important research effort.

Sincerely,

Doris P. Slesinger
Project Director
Professor of Rural Sociology

Eleanor Cautley
Research Specialist
<table>
<thead>
<tr>
<th>ID</th>
<th>State</th>
<th>Name</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Iowa</td>
<td>John Leeper</td>
<td>PROTEUS (402)</td>
</tr>
<tr>
<td>2</td>
<td>Iowa</td>
<td>Jennie Krebs</td>
<td>Muscatine Migrant Committee-Sioux City (health)</td>
</tr>
<tr>
<td>3</td>
<td>Iowa</td>
<td>George Selser</td>
<td>Dept. of Employment Services</td>
</tr>
<tr>
<td>4</td>
<td>Iowa</td>
<td>Juan Cadena</td>
<td>Muscatine Migrant Committee-Muscatine (health)</td>
</tr>
<tr>
<td>5</td>
<td>Iowa</td>
<td>Paul Cahill</td>
<td>Dept. of Education</td>
</tr>
<tr>
<td>6</td>
<td>Kansas</td>
<td>Nancy Wym.</td>
<td>KC-Wyandotte Co. Health Dept.</td>
</tr>
<tr>
<td>7</td>
<td>Missouri</td>
<td>Donald Shook</td>
<td>Div. of Employment Security</td>
</tr>
<tr>
<td>8</td>
<td>Missouri</td>
<td>Mary Lona</td>
<td>Richard Cabot Clinic - KC</td>
</tr>
<tr>
<td>9</td>
<td>Missouri</td>
<td>Cyndi Treaster</td>
<td>Migrant Farmworkers Project</td>
</tr>
<tr>
<td>10</td>
<td>Nebraska</td>
<td>Barb Jones</td>
<td>Nebraska Assn. of Farmworkers</td>
</tr>
<tr>
<td>11</td>
<td>Nebraska</td>
<td>Franklin Harris</td>
<td>Dept. of Health</td>
</tr>
<tr>
<td>12</td>
<td>Kansas</td>
<td>Penney Schwab</td>
<td>Mex-American Ministries</td>
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<tr>
<td>13</td>
<td>Missouri</td>
<td>Keith Hill (?)</td>
<td>Southeast Migrant Education Center</td>
</tr>
<tr>
<td>14</td>
<td>Kansas</td>
<td>Bob Kidd</td>
<td>Dept. of Human Resources</td>
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<tr>
<td>15</td>
<td>Iowa</td>
<td>Ana Kephart</td>
<td>Muscatine Migrant Committee-Mason City</td>
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<td>16</td>
<td>Iowa</td>
<td>Debra Kyler</td>
<td>WIC - Waterloo (no info)</td>
</tr>
<tr>
<td>17</td>
<td>Nebraska</td>
<td>Mary Jo Olds</td>
<td>Community Action-Alliance</td>
</tr>
<tr>
<td>18</td>
<td>Missouri</td>
<td>Tony Woodrum</td>
<td>Southwest Missouri Migrant Education</td>
</tr>
</tbody>
</table>

Revised 6/14/88
DEFINITIONS
Migrant and Seasonal Agricultural Workers Research
Compiled by E. Cautley

APPENDIX G

I. 402 JTPA Agencies
II. Job Service
III. Migrant Health Projects
IV. Education/MSRTS
V. Legal/Social Services

I. 402 JTPA Agencies

FROM: John Leeper, PROTEUS, Des Moines, IA.
SOURCE: Federal Register, Vol. 48, No. 204, 1/20/83.

Farmwork shall mean, for eligibility purposes, work performed for wages in agricultural production or agricultural services as defined in the most recent edition of the Standard Industrial Classification (SIC) Code definitions included in industries 01-Agricultural Production-Crops; 02-Agricultural Production-Livestock excluding 027-Animal Specialties; 07-Agricultural Services excluding 074-Veterinary Services, 0752-Animal Specialties, Services, and 078-Landscape and Horticultural Services.

Migrant farmworker shall mean a seasonal farmworker who performs or has performed farmwork during the eligibility determination period (any consecutive 12-month period within the 24-month period preceding application for enrollment) which requires travel such that he worker is unable to return to his/her domicile (permanent place of residence) within the same day.

Seasonal farmworker shall mean a person who during the eligibility determination period (any consecutive 12-month period within the 24-month period preceding application for enrollment) was employed at least 25 days in farmwork or earned at least $400 in farmwork; and who has been primarily employed in farmwork on a seasonal basis, without a constant year round salary.

Section 402 programs shall mean the Migrant and Seasonal Farmworker Program, under Section 402 of Title IV of the Job Training Partnership Act.

FROM: Barb Jones, Nebraska Association of Farmworkers, Omaha, NE.
SOURCE: Unknown (written by Jones).

Migrant Definition: A seasonal farmworker which during the eligibility period performs farmwork which requires travel such that the worker is unable to return to permanent residence within the same day.

Seasonal Definition: A person who during the qualifying period was employed at least 25 days in farmwork or earned at least $400 in farmwork and who has been employed in farmwork on a seasonal basis w/o year round salary.
11. Job Service

FROM: Donald Shook, Missouri Division of Employment Security, Jefferson City, MO.
SOURCE: State of Missouri, Division of Employment Security, Migrant and Seasonal Farmworkers Desk Aid 6-84.

Seasonal: During the preceding 12 months worked at least 25 or more days or parts of days in Farmwork, earned at least half of earned income from Farmwork and was not employed in Farmwork year round by the same employer. Full-time students are excluded.

Migrant: During the preceding 12 months worked at least 25 or more days or parts of days in Farmwork, earned at least half of earned income from Farmwork, was not employed in Farmwork year round by the same employer and who had to travel to do the Farmwork so that was unable to return to permanent place of residence within the same day. Full-time students traveling in organized groups rather than with their families are excluded.

Migrant Food Processing Worker: During the preceding 12 months worked at least 25 or more days or parts of days in food processing (SIC) Classifications 201, 2033, 2035, and 2037, earned at least half of earned income from food processing work and not employed in food processing year round by the same employer. Unable to return to residence in the same day. Migrant food processing workers who are full-time students but who travel in organized groups rather than with their families are excluded.

FROM: George Selser, Iowa Dept. of Employment Services, Des Moines, IA.

Code 1-Seasonal Farmworker. A person who during the preceding 12 months worked at least an aggregate of 25 or more days or parts of days in which some work was performed in farmwork, earned at least half of his/her earned income from farmwork, and was not employed in farmwork year round by the same employer. For the purposes of this definition only, a farm labor contractor is not considered an employer. Non-migrant individuals who are full-time students are excluded.

"Farmwork" means work performed for wages in agricultural production or agricultural services in establishments included in industries 01-Agricultural Production-Crops; 02-Agricultural Production-Livestock excluding 027-Animal Specialities; 07-Agricultural Services excluding 074-Veterinary Services, 0752, Animal Specialty Services, and 078-Landscape and Horticultural Services, as defined in the most recent edition of the Standard Industrial Classification (SIC) Manual.
Code 2—Migrant Farmworker. A seasonal farmworker (see definition above) who had to travel to do the farmwork so that he/she was unable to return to his/her permanent residence within the same day. Full-time students traveling in organized groups rather than with their families are excluded.

Code 3—Migrant Food Processing Worker. A person who during the preceding 12 months has worked at least an aggregate of 25 or more days or parts of days in which some work was performed in food processing (as classified in the 1972 Standard Industrial Classification (SIC) definitions 201, 2033, 2035, and 2037, for food processing establishment), earned at least half of his/her earned income from food processing work and was not employed in food processing work year round by the same employer, provided that the food processing required travel such that the worker was unable to return to his/her permanent residence in the same day. Migrant food processing workers who are full-time students but who travel in organized groups rather than with their families are excluded.

NOTE: Codes 2 and 3 take precedence over code 1.
III. Migrant Health Projects

FROM: Ellis Barham, Regional Program Consultant for Migrant Health, U.S. Public Health Service Region VII, Kansas City, MO.
SOURCE: Unknown manual, pages 33-34, Table 2-A.

DEFINITIONS

Migratory Agricultural Workers and Family Members: These users are defined in Section 329 of the Public Health Service Act as individuals whose principal employment is in agriculture on a seasonal basis (as opposed to year-round employment) and who establish a temporary abode for the purposes of such employment. Migrant agricultural workers are usually hired laborers who are paid piecework, hourly or daily wages. The definition includes those individuals who have been so employed within the past 24 months and their dependent family members. The family members may or may not move with the worker and establish a temporary place of abode. (Agriculture means farming of the land in all its branches, including cultivation, tillage, growing, harvesting, preparation and processing for market or storage.)

Seasonal Agricultural Workers and Family Member: These users are defined in Section 329 of the Public Health Service Act as individuals whose principal employment is in agriculture on a seasonal basis (as opposed to year-round employment) and who, for purposes of employment, do not establish a temporary place of abode. Seasonal agricultural workers are usually hired laborers who are paid piecework, hourly or daily wages. Eligibility for services includes dependent family members of seasonal agricultural workers. (Agriculture means farming of the land in its branches, including cultivation, tillage, growing, harvesting, preparation and processing for market or storage.)

Both migratory agricultural workers and seasonal agricultural workers have agriculture on a seasonal basis as their principal employment. Migratory agricultural workers do not necessarily work in agriculture in the area of their permanent address or may not have a permanent address. For at least part of the year, they travel to a work area and live temporarily in the area while working there. Seasonal agricultural workers work in the area of their permanent address and do not move temporarily to a work area.

In order to identify users who meet the criteria for migrant and seasonal agricultural workers and dependent family members, projects may want to ask users a set of questions such as those listed below.
Over the past 24 months, have you or the family member upon whom you are dependent:

- been hired to do agricultural (farm) work?
  - Migrant: Yes  Seasonal: Yes

- done agricultural (farm) work year-round, or on a seasonal basis?
  - Migrant: Seasonal  Seasonal: Seasonal

- derived the greatest portion of your work-related income or employment from agricultural (farm) work?
  - Migrant: Yes  Seasonal: Yes

- moved (established a temporary residence) in order to do agricultural (farm) work?
  - Migrant: Yes  Seasonal: No

FROM: Juan Cadena, Muscatine Migrant Committee, Muscatine, IA.

Same as Ellis Barham above, but not as complete.

FROM: Jennie Krebs, Muscatine Migrant Committee, Sioux City, IA.
SOURCE: Unknown manual (same as Barham).

Seasonal Agricultural Workers and Family Members: These users are defined in P.L. 94-63 as individuals whose principal employment is in agriculture on a seasonal basis (as opposed to year-round employment) and who for purposes of employment do not establish a temporary place of abode. Seasonal agricultural workers are usually hired laborers who are paid piecework, hourly or daily wages. Eligibility for services includes dependent family members of seasonal agricultural workers. (Agriculture means farming of the land in all its branches, including cultivation, tillage, growing, harvesting, preparation and processing for market or storage.)

Both migratory agricultural workers and seasonal agricultural workers have agriculture on a seasonal basis as their principal employment. Migratory agricultural workers do not necessarily work in agriculture in the area of their permanent address (or may not have a permanent address). For at least part of the year, they travel to a work area and live temporarily in the area while working there. Seasonal agricultural workers work in the area of their permanent address and do not move temporarily to a work area.
Migratory Agricultural Workers and Family Members: These users are defined in P.L. 94-63 as individuals whose principal employment is in agriculture on a seasonal basis (as opposed to year-round employment) and who establish for the purpose of such employment a temporary abode. Migrant agricultural workers are usually hired laborers who are paid piecework, hourly or daily wages. The definition includes those individuals who have been so employed within the past twenty-four months. Eligibility for services includes dependent family members of migratory agricultural workers. The family members may or may not move with the worker and establish a temporary place of abode. (Agriculture means farming of the land in all its branches, including cultivation, tillage, growing, harvesting, preparation and processing for market or storage.)

FROM: Nancy Wynn, R.N., Kansas City - Wyandotte County Health Dept., Kansas City, KS.

Same as Jennie Krebs above, and part of Ellis Barham also.

FROM: Mary Lona, Richard Cabot Clinic, Kansas City, MO.
SOURCE: Unknown (written by Lona).

Migrant Definition: These people travel from place to place throughout the country, follow west seasons.

Seasonal Definition: People who live locally and work the harvest at certain times of year.

FROM: Franklin Harris, Nebraska Dept. of Health, Migrant Health Project, Lincoln, NE.
SOURCE: Federal regulations.

Migrant Definition: Defined by federal regulations; Federal Register part 56.102 (h) + BCRR definition.

Seasonal Definition: Defined by Federal regulations; Federal Register part 56.102 (m) + BCRR definition.
IV. Education/MSRTS

FROM: Paul Cahill, Iowa Dept. of Education, Des Moines, IA.
SOURCE: Portion of Federal Register. (Section 201.3)

"Agricultural activity" means -
(1) Any activity directly related to the production or processing of crops, dairy products, poultry, or livestock for initial commercial sale or as a principal means of personal subsistence; 
(2) Any activity directly related to the cultivation or harvesting of trees; or
(3) Any activity directly related to fish farms.

"Currently migratory child" means a child -
(1) Whose parent or guardian is a migratory agricultural worker or a migratory fisher; and
(2) Who has moved within the past 12 months from one school district to another - or, in a State that is comprised of a single school district, has moved from one school administrative area to another - to enable the child, the child's guardian, or a member of the child's immediate family to obtain temporary or seasonal employment in an agricultural or fishing activity. This definition includes a child who has been eligible to be served under the requirements in the preceding sentence, and who, without the parent or guardian, has continued to migrate annually to enable him or her to secure temporary or seasonal employment in an agricultural or fishing activity. This definition also includes children of migratory fishermen, if those children reside in a school district of more than 18,000 square miles and migrate a distance of 20 miles or more to temporary residences to engage in fishing activity.

"Formerly migratory child" means a child who -
(1) Was eligible to be counted as served as a currently migratory child within the past five years, but is not now a currently migratory child; 
(2) Resides in the area served by the agency carrying out a Chapter 1 migrant education program or project; and 
(3) Has the concurrence of his or her parent or guardian to continue to be considered a migratory child.

V. Legal/Social Services

FROM: Cyndi Treaster, Migrant Farmworkers Project, Kansas City, Mo.
SOURCE: Project materials.

Eligibility: Any farmworker who, due to farm employment, must sleep overnight at a location other than his/her home.
DATA BASES FROM U.S.D.A. AND B.E.A.

Data entered from 1982 Census of Agriculture

For every county in Iowa, Kansas, Missouri and Nebraska:

Table 1.
Total cropland acres 1982
Harvested cropland farms 1982
Harvested cropland acres 1982

Table 6.
Contract labor farms 1982

Table 9.
Hired farm labor farms 1982
Hired farm labor workers 1982
Less than 150 days workers 1982

Table E.
Land in farms, total acres 1982
Relative standard error of estimate (%)
Harvested cropland acres 1982
Relative standard error of estimate (%)
Hired farm labor expenses ($) 1982
Relative standard error of estimate (%)

Data entered from Bureau of Economic Analysis

For every county in Iowa, Kansas, Missouri and Nebraska:

Table CA25, Full Time and Part Time Employees by Major Industry for each year 1981-1986.
Full and part time wage and salary farm employment (total farm employment - farm proprietors)
Participants in Conference Telephone Calls

**Missouri, August 30**

Donald Shook  
Division of Employment Security  
Jefferson City, MO  
314/751-2169

Ken Lueckenotte  
Rural Missouri, Inc.  
Jefferson City, MO  
314/635-0136

Cyndi Treaster  
Migrant Farmworker's Project  
Kansas City, MO  
816/474-9868

Bobbi Ryder  
National Migrant Referral Project, Inc.  
Austin, TX  
512/447-0770

Ellis Barham  
U.S. Public Health Service  
Kansas City, MO  
916/426-5296

Ross Marina  
Midwest Rural Health Associates, Inc.  
Kansas City, MO  
816/756-3144

**Kansas, August 31**

Bob Kidd  
Department of Human Resources  
Topeka, KS  
913/294-5170

Steve Ramirez  
Governor's Migrant Committee  
Topeka, KS  
913/296-3465

Steve McDowell  
Dept. of Health and Environment  
Topeka, KS  
913/296-1303
Participants in Conference Telephone Calls
page 2

Laurie Rossenwasser
Harvest America, Inc.
Garden City, KS
913/342-2121

Penny Schwab
United Methodist Western Kansas
Mexican-American Ministries
Garden City, KS
316/275-1766

Nancy Wynn
Kansas City-Wyandotte County
Health Department
Kansas City, KS
913/321-4803

Ben Duggar
La Jolla Management
Columbia, MD
301/730-8855

Nebraska, September 1

Betty Alfred
Department of Education
Lincoln, NE
402/471-3446

Franklin D. Harris
Department of Health
Lincoln, NE
402/471-3711

Barbara Jones
Nebraska Association of Farmworkers
Omaha, NE
402/734-4100

Iowa, September 7

Juan Cadena
Muscatine Migrant Committee
Muscatine, IA
319/264-1155

Elba Cera
PROTEUS, Inc.
Sioux City, IA
712/258-0094
Participants in Conference Telephone Calls

Jennie Krebs
Muscatine Migrant Committee
Sioux City, IA
712/258-3954

Jim Ramos
PROTEUS, Inc.
Des Moines, IA
515/244-5694

James P. Walseth
Legal Services Corp.
Cedar Rapids, IA
319/364-6108