# METHODOLOGICAL INVESTIGATION TO DETERMINE MORE EFFICIENT PROCEDURES FOR DEFINING AND ENUMERATING FARM OPERATORS 


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Objective of the Study: This methodological investigation was undertaken to improve area frame estimates of number of farms and characteristics associated with the entire farm. To be somewhat more specific, the objectives of the survey were -

1. To better determine farm operators, both by definition and questionnaire design.
2. Attempt to explain a major portion of the difference between the open and closed cattle estimates in the enumerative survey.
3. To improve the level of farm labor estimates from the enumerative survey.
4. To gain an insight in how one might sample the area frame to obtain data for firms servicing agriculture (agricultural services).

Background: Under current procedures the area frame is basically divided into two types of land area--open country and non-open country. In states utilizing the area frame based on land-use classification, the non-open country or city stratum has only limited agriculture within the stratum, while in states utilizing the Master Sample frame, somewhat more but still limited amounts of agricultural activity occur within the stratum. In all states sampling rates for the non-open country stratum are quite low, generally ranging from five to fifteen segments per state.
$\because$. SRS enmeration procedures for non-open country segments are at best only a token attempt to obtain data. In states where substantial numbers of farm operators liỵe withịn the non-open country stratum, the sampling rate would have to be increased appreciably to adequately represent this sector of agriculture for estimates of farm numbers and characteristics associated with the entire farm. Also, operational procedures for insuring proper enumeration
would have to be refined. This would be quite costly and thus statistically inefficient, particularly for state estimates.

For some time it has been apparent that current area sampling procedures.for defining and enumerating resident farm operators are not adequate in states where there is a significant proportion of non-resident farm operators, and particularly so in areas where relatively large numbers of farm operators live in the non-open country (NOC) or city stratum of the area frame. The problem was high-lighted in California and Florida where estimates from the June 1967 Enumerative Survey for number of farms were substantially below current estimated levels. Results from the list sample used for farm labor in June 1967 support the premise that estimates from the area sample for numbers of farms and for characteristics associated with the entire farm, such as number of hired workers, were at unreasonably low levels for both California and Florida. Also, with farm tenure becoming quite complex, the enumerator can no longer be allowed the degree of freedom in defining the farm operator that he currently enjoys, particularly with the advent of multiple-frame sampling and its associated problems of overlap definition.

Currently the enumerator is merely instructed by a short statement in the manual that the operator is the "man who makes the day to day decisions." . From this point the enumerator must determine the operator's identity and complete the questionnaire with no documentation as to whether the person interviewed actually qualifies as the operator.
Areas Selected and Their Characteristics: Since the problem which the study was designed to answer occurs in states that are highly populated, have large numbers of farm operators who live in the city, and a great deal of specialization, California and Florida were selected as states in which the study was
to be conducted. Both California and Florida were contacted and asked to recommend an area within the state in which to conduct the investigation. Desirable characteristics of the areas to be selected were outlined as follows:

1. A high proportion of the farm operators residing in cities.
2. Estimated number of farms from the June Enumerative Survey substantially below the expected level.
3. Sizeable difference between the open and closed estimates for cattle.
4. Number of hired workers substantially below the expected level. As a result, California, in collaboration with Washington personnel, recomended June Survey districts 15 and 17 , which can be referred to as the San Francisco Bay area. Florida recomended districts 30 and 74, which lie just south of Orlando. Both areas are shown on the outline maps in the Appendix.

Characteristics of the areas selected for conduct of this study are shown in the tables below.

| State and County. | 1964 Census of Agriculture |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { : No. : } \\ & \text { : all : } \\ & \text { : farms: } \end{aligned}$ | $\begin{array}{r} \text { No. : } \\ \text { cattle: } \\ \text { farms: } \end{array}$ | All cattle | $\begin{aligned} & \text { :No.milk } \\ & : \text { cow } \\ & : \text { farms } \end{aligned}$ | : Nilk | Land in $: \quad$ farms | :Residence :on farm :operated | :Regula :worker : $1 /$ |
| CALIFORNIA |  |  |  |  |  |  |  |  |
| Alameda. | : 908 | 364. | 37,056 | 53 | 2,156 | 309,843 | 660 | 2,66 |
| Contra Costa | :1,340 | 323 | 59,659 | 265 | 19,320 | 303,399 | 1,052 | 92 |
| Marin | : 289 | 218 | 39,875 | 145 | 20,814 | 172,886 | 249 | 35. |
| San Benito | : 652 | 269 | 49,876 | 229 | 18,728 | 779,007 | 527 | 78 |
| Santa Clara | :2,632 | 473 | 51,568 | 355 | 24,141 | 458,403 | 2,041 | 3,440 |
| . Santa Cruz | :. 822 | . 212 | 8,980 | 146 | 3,424 | 103,572 | 635 | 3,38 |
| San Mateo | 336 | 107 | 8,735 | 91 | 4,498 | 83,273 | 206 | 1,07: |
| Total | :6,979 | 1,966 | 255,749 | 1,284 | 93,081 | 2,210,383 | 5,370 | 12,63: |
|  |  |  |  |  |  |  |  |  |
| Hillsboro | :3,398 | 1,146 | 94,942 | 250 | 17,875 | 769,246 | 2,630 | 2,59 |
| Osceola | : 428 | 220 | 98,578 | 33 | 1,311 | 769,857 | 302 | 340 |
| Polk | :2,944 | 797 | 108,203 | 108 | 6,375 | 1,070,390 | 284 | 3,992 |
| Total | : 6,770 | 2,163 | 301,723 | 391 | 25,561 | 2,609,493 | 3,216 | 7,93: |
| $\pm i$ as or lecember 1964. |  |  |  |  |  |  |  |  |


| State and County | : | Number of workers <br> State Dept. of Employment |  | $:$ SSO county <br> $:$ estimates <br> $:$ all cattle <br> $:$ Jan. 1,1966 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | April 1966 | May 1966 |  |  |
| CALIFORNIA | : |  |  |  |  |
| Alameda | : | 2,747 | 3,097 |  |  |
| Contra Costa | : | 2,324 | 2,337 |  | 40,000 50,000 |
| Marin | : | 361 | 2,357 |  | 51,000 |
| San Benito | : | 2,197 | 2,382 |  | 70,000 |
| Santa Clara |  | 5,944 | 7,247 |  | 68,000 |
| Santa Cruz | : | 2,443 | 3,952 |  | 11,000 |
| San Mateo | : | 1,664 | 720 |  | 10,000 |
| Total | : | 17,680 | 20,092 |  | 300,000 |



The areas selected in California and Florida have most of the desirable characteristics previously listed and outlined to the states. The situation in the states selected is emphasized by estimates of numbers of hired workers from the 2967 June Survey.

| Frame 1/ | California | Florida |
| :---: | :---: | :---: |
| $\cdots 1$ | 93,180 | 18,850 |
| 2 | 13,029 | 9,301 |
| 3 |  | 90,151 |

Comparison of frames 3 and 4 for both Florida and California, which are conceptually estimating the same universe, illustrate that the area frame overlap was substantially less than list frame overlap estimates. Description of Survey and Detailed Procedures: Two small scale investigations of 50 segments each were set up in California and Florida. The sample size was comparable to the regular June Survey.


The survey week was March 24 to 30. State training schools were held on March 28 and 29, and the survey field work began on April 1. The 50 new segments were selected and enumerated using current procedures, with the following exceptions:

1. A special version of the June Part A questionnaire containing sections on land operated, tract and entire farm cattle inventory numbers, number of working operators, unpaid family members, and hired workers was used to obtain the following:
a. Data for the entire farm regardless of where located, - when the operator's residence was in the segment.
b. Data for the portion of the entire farm falling within the selected area of study, when the operator's resi... dence was in the segment.
c. Data for the tract only.
d. Questions to determine the name of the operator and approximate location of his residence.
2. Operators of non-resident tracts residing in the non-open country or city stratum were enumerated as resident farm operators to obtain the same data indicated in 1 above.

For the purposes of this study the NOC or city stratum was confined to that state only. Should this procedure be adopted for the entire enumerative survey, it means that the NOC or city stratum would need to be considered nationwide.

For tracts with operators residing in the NOC or city stratum, data for the entire operation was pro-rated to the segment proportional to the amount of land operated within the segment and used in an adjusted open segment expansion. In most literature this is referred to as the weighted segment approach when used for all sample tracts. Current enumeration procedures were used for operators of non-resident tracts who lived outside the city stratum. The Questionnaire: It is the usual procedure to have two questionnaires-one for a resident farm operator and another for a non-resident farm operator. The questionnaire for this study differed in that both resident and non-resident tract operators used the same questionnaire. The questionnaire consisted of seven sections. Sections A and B were basically set up to help the enumerator determine identity of the operator, identify the operating unit, and determine If the operation was a farm. Section $A$ was used for a tract which had a nonresident operator and Section $B$ for $a$ tract which had a resident operator. The questionnaire went to greater lengths than usual in defining the operation.

For an individual or partnership, the house in which the individual or the senior (in terms of age) partner lived, determined if the operator was a resi-. dent or non-resident. In the case of a corporation, cooperative, or some other tenure arrangement, the headquarters of the organization determined if the operator was a resident or non-resident.

Both Sections $A$ and $B$ went to.some length, to provide the enumerator, via questionnaire design, a common method for determining if the respondent was the tract operator. In the field while using the schedule for enumeration, Sections $A^{\cdot}$ and $B$ were impressive from the standpoint that the questionnaire provided a good outline and held the introduction to a minimum. In fact, if an enumerator just introduced himself and asked questions as they appeared in the questionnaire, the interview appeared to flow quite nicely. However, obser vation of the enumerators who were familiar with the regular June Survey procedures indicated much of the information covered by the entire questionnaire was obtained in their introduction. They were then required to ask for the information again when they started to complete the questionnaire. This occurred for information of all sections and made the respondent give the same information many times. More detail can be gained from Sections A and B by observing the questionnaire in the Appendix.

Section C "Cattle and Calves in Tract" covered basically the usual inventory questions, with the exception of two additional questions. Question No. 5 asked for cattle and calves which had free access to land both inside and outside the tract boundaries. If the enumerator received a positive answer to item 5, the next question was "How many acres both inside and outside the segment did these cattle have free access to?" And of these total acres, question 7 obtained how many were inside the segment.

In California, the enumerators inserted an additional question-8which said "What is the total number of cattle on (Item 6)___ acres now?" This then served as a clue as to whether the items 1 through 4 were for the entire farm or for the acres inside the segment. Section $C$ was designed so that the cattle numbers reported in questions $1-4$ represented only the number inside the
segment at time of interview. The free access questions were then used to delete cattle that were included in items $1-4$ erroneously.

Section D covered "Acres Owned, Rented, or Operated." Data were obtained for the entire operation as well as that operation located only in the specified counties.

In Section E, "Cattle and Calves on the Entire Farm", data were obtained for the entire operation as well as the portion located only in the specified location.

Section F obtained Farm Labor information. Questions 5, 8, 9 and 10 asked for agricultural services performed on the farm. These questions were asked to determine if the farm operator could be used as a lead to obtain the name of the firm which performed the work or services.

Section G, "Agricultural Services", was used to determine the effectiveness of the area frame in providing reasonable estimates for this sector of agricultural labor.

Results: The analysis of the data will be discussed separately for California and Florida. In California the survey was conducted over a much shorter time period than in Florida, due mainly to the fact that several questionnaires had to be returned to Florida for further clarification. $1 /$ The last shipment. of questionnaires was not received from Florida until the last week in August, nearly five months after the survey date.
. : .. Recontacts could not be made in several instances, and, therefore, substantial editing was required. Also, the additional free access tract question "What is the total number of cattle on the (Item 6)___ acres now?" which the enumerators inserted in California, was not used in Florida. For 1/ See memorandum in Appendix.
these reasons the results obtained in California should be more valid, and analyzing the two states separately is more appropriate.

California: The June Enumerative Survey for 1967 and 1968 indicated 2644 and 3480 farms respectively. The special April survey indicated 5252 farms, which compares with 6979 farms shown in the 1964 Census of Agriculture. Of the 5252 farms indicated by the Special April Survey, 705 were obtained from operators residing in the city. Thus, while on the basis of standard errors the difference can be explained by sampling error, there is a fairly strong indication that the increased number of farms was caused both by the different manner of handling operators residing in cities as well as the greater questionnaire detail used in determining the identity of the operator.

The All Land in Tract, at approximately 3 million acres, agrees quite favorably among all surveys. However, it should be noted that no attempt was made in the Special April Survey to see that the enumerated land in tract agreed with the planimetered area. The segments in the special April survey were not planimetered.

Considering total land operated, the June Survey indicated 2.0 and 1.5 million acres in 1967 and 1968 respectively, while the special April survey indicated 2.5 million. This compares with 2.2 million acres in the $i 964$ Census of Agriculture. Of the 2.5 million acre's total land operated indicated by the special April survey, 507,000 acres were obtained from city resident operators. Thus in terms of numbers of farms and total land operated the use of the city operators alone increased farms by 13 . percent and total land operated by 20 percent.

Basic in the use of the open and closed segment expansion is the concept that both estimates are measuring the same universe and have the same
expected value. To substantiate the special April survey somewhat more, note that rangeland and pasture were obtained both on the tract and entire farm basis and that the tract expansion was $2,078,315$ acres while the whole farm expansion was $2,076,349$ acres.

Turning now to the open and closed cattle questions, the tract expansion of total cattle was 303,800 head, while the entire farm expansion of total cattle was 300,794 head. Comparable items for the 1968 June Survey were a tract expansion of 309,643 head versus the open expansion of 270,509 head, and for June 1967 the tract expansion was 254,183 head while the total farm expansion was 336,654 head. The tract expansion of the Special April Survey obtained information concerning free access, which essentially shows that 112,000 head of cattle were on a total of 1,097,000 acres, of which 516,000 acres lay inside the segment, and the balance lay outside. Using a proration system proportional to land to prorate the cattle into the segment approximately 47 percent of the 112,000 , or 52,570 cattle, were prorated into the segment. According to the questionnaire and instructions, this means that without the access questions an additional 59,520 cattle probably would have been added to the 303,800 head resulting in a closed tract expansion of 363,320 head of cattle.

Additionally, prorated data of city resident operators expanded to 43,856 cattle on the entire farm basis. Therefore, one could make the assumption that had the city resident operators not been handled in a special manner, the entire farm cattle estimates would have been 300,794 minus 43,856 , or 256,938. It is hypothesized that had not the free access question and the method of prorating city resident operators entire farm data into the segment entire farm estimate been used, results from the special April survey probably
would have shown a spread of approximately 100,000 head of cattle between the open and closed estimates.

Considering the farm labor estimates, the June Enumerative Survey indicated 4,581 workers in 1967 and 2,664 workers in 1968 , while the Special April Survey indicated 10,183 workers. This compares with the 1964 Census of Agriculture regular worker number of 12,633 workers. The State Department of Employment shows 17,680 workers and 20,092 workers for April-May of 1966; however, this number includes some agricultural service workers which the enumerative survey numbers do not reflect. Of the 10,183 workers shown by the special April survey, 6,348 were hired and paid by city resident operators. If we adjust the 10,183 total workers shown by the April survey by subtracting those from the city resident operators, we would obtain 3,835 workers, which agrees favorably with the numbers of workers shown both in the 1967 and 1968 enumerative survey. Therefore, it is quite clear that the use of the special method for handling city resident operators very sharply increases the number of hired workers one can expect to obtain on an area type survey.

In sumary, the use of the special method for including city resident operators in the segment expansions resulted in increasing farm numbers 13 percent; land operated, 20 percent; cattle numbers, 15 percent; and farm labor, 62 percent.

Florida: Initially it should be explained that the situation as far as the frame is concerned is somewhat different in Florida than in California. The Florida frame has included several of the small cities in the agriculturalurban stratum. In contrast, all the small cities in California are included in the city stratum. Therefore, one would not expect to find as much additional
information added by a special method of including city resident operators in Florida as in California.

The 1967 and 1968 Enumerative Surveys indicated 4,310 and 6,072 farms respectively, whereas the Special April Survey indicated 7,299 farms. This compares with the 1964 Census number of farms of 6,770 . Of the 7,299 farms, 626, or nearly 9 percent, were obtained from city resident operators. The All Land in Tract from the special April survey compares quite favorably with the 1967-68 enumerative surveys. Concerning total land operated in the entire farm, the 1967-68 Enumerative Surveys showed a total of 701,000 acres in 1967 and $3,355,000$ acres in 1968, as compared to the $1,036,000$ acres on the Special April Survey. The 1964 Census of Agriculture indicates total land in farms of $2,609,493$ acres. Of the $1,036,000$ acres shown on the special survey, 71,525 were obtained from city resident operators.

The special April survey didn't appear to solve the question of open-closed cattle estimates in Flerida. The tract expansion of 294,000 head and entire farm expansion of 190,000 head compare to the June 1968 Enumerative Survey of 159,000 head on the tract basis and 176,000 on the entire farm basis and in 1967 of 204,000 on the tract basis and 136,000 on the entire farm basis. 'The city resident operators accounted for 15,000 head of cattle. The free access question was also very pertinent in Florida. A total of 213,571 head of cattle were on $1,445,000$ acres of which 684,000 were inside the.. segment. This indicates that of the 294,000 tract expansion, 101,000 were prorated based on the free-access question, and that the spread between the open and closed estimates could have been greater without the free access question. However, as mentioned earlier, the total cattle on the free access acres were not obtained in Florida and the number of cattle on free access
may, therefore, be questionable. In addition, according to the instructions given to Florida, once the enumerator learned that cattle had free access in question 5, they were to prorate in questions l-4; however, there is no assurance that they actually accomplished this in all cases.

Considering hired workers, the special April survey indicated 3,461 workers of which only 213 came from the city resident farm operators. This compares with the 1968 and 1967 June Enumerative Survey estimates of 1,392 and 1,476 wonkers, respectively. The 1964 Census of Agriculture indicated 7,933 regular workers. Therefore, on the basis of this information it does not appear that the concept of city resident operators worked as well in Florida as previously hoped. However, it should be noted that the method of data collection was somewhiat less than desirable. The long period of time over which the data had to be collected was a factor, as well as a difference in the frames mentioned earlier. Also, for example, there were three segments in which Minute Maid was one of the city resident operators. However, no data were obtained from Minute Maid and therefore Minute Maid is not represented in this survey.

In addition, a great many of the questionnaires were office edited and recontacts were not made on several of the questionnaires returned for clarification. The method that has been used in enumerating the citrus tracts in the June Survey (for citrus tracts no or minimum information pertaining to that tract is obtained) plus the carryover of poor enumeration methods and concepts may be responsible for some of the differences detected in Florida as compared with California. An illustration of poor enumerating methods was an enumerator completing the interview on an envelope and then at a later date
copying the information onto the questionnaire with the excuse he didn't want to agitate the respondent.

Conclusions and Recommendations: From experience in the field it does appear that there is a great need to more carefully define the operator by questionnaire design. The enumerator can no longer be afforded the luxury of determining the identity of the operator with only a paragraph or two of instructions from the manual to guide him. With the advent of complex tenure arrangements in agriculture, it does appear that there is merit in defining the headquarters of the operation for corporations and associations in a different manner than for other types of operation.

With the continued use of multiple frame survey designs it becomes more and more important that we better define the operator. This questionnaire took a first step in the direction of better definition of the operator by questionnaire design, as well as providing instructions via questionnaire design for the enumerator to use. Working these concepts into current surveys by one method or another would seem both desirable and beneficial.

The survey illustrated the free access question to be instrumental and important in collecting tract livestock information for cattle, and that if used properly can result in reducing the number of cattle in the tract expansion. On the other hand, the city resident operators also represent an important part of the open segment cattle expansion.

On the basis of this survey, particularly in Califormia, the use of the free-access question for the tract expansion and the use of the special method of obtaining information from city resident operators should be quite instrumental in bringing the two estimates closer together so that they are truly estimating the same universe. In Florida the effect of these two
procedures was not quite so evident. However, it does appear that they were helpful in pulling the two estimates together. Given tighter control on another project, the results would probably be more favorable in Florida as well.

When one considers workers it becomes very apparent, particularly in California, that the use of the city resident operators is necessary to obtain unbiased estimates of hired farm labor from an area sample. The method of prorating city resident operators entire farm data into the segment proportionate to land appears a feasible solution to sampling this important segment of agriculture.

Based upon the information the survey indicated concerning agricultural services, it appears that the only feasible solution in obtaining most of the data for this sector of agriculture would be through the use of a list frame. While the area frame does pick up some agricultural services, it probably could never do more than estimate for incompleteness in the list. Furthermore, the list of agricultural services should include all size groups, since the area sample is not designed to estimate for the very small agricultural service operations.

The Survey was conducted quite successfully in California, but far . more difficulties were encountered in Florida. The results are more conclusive in California than Florida. However, the poor results obtained in Florida are not conclusive that the concepts do not work, and before such a deduction could be made another test or pilot survey would have to be completed in Florida with far tighter controls and a greater degree of conceptual change inserted.

Admittedly, the use of the city operator concept will put more stress on the organigational effort within the State sffine. The gainc from
it, however, would seem to make such effort worthwhile. In addition to improving the estimates from the enumerative survey, it could make the area frame more flexible. A problem of the land use stratification is the growth of residential areas in the open country stratum. With the city operator concept one could eliminate the residential areas from the open country stratum with a minimum of effort.

Another point that may well be worth emphasizing is results from the June Enumerative Survey generally improved in the areas studied from 1967 to 1968. Generally speaking there was very little difference between the two surveys except that many of the enumerators in the district were used for the special study and possibly were made more aware of concepts and problems connected with the regular Enumerative Survey. This may have a significant bearing on our training programs.

Based on the results of this survey, it does appear that both the open and closed estimates of cattle numbers are somewhat suspect and that probably the true level lies somewhere between the two estimates. Hired workers obtained from the area frame are under estimated due to large numbers of workers hired by city resident operators which are not properly represented in the data collected. Before hired workers can be efficiently obtained by the area frame the city resident operator concept will have to be approached in one fashion or another. The evidence from this survey is strong enough . to sup̈port a mbve'in this direction of estimation in selective states as soon as the system can be fully implemented.

Survey Costs: The average cost per segment was $\$ 92.00$ in California and $\$ 37.84$ in Florida. An additional $\$ 9.24$ per segment was required for review and supplementary training in California. The training consisted of a second $\ddot{3}$-hour training school after one day of enumeration. These costs compare with the 1967 June Enumerative per segment costs of $\$ 28.50$ and $\$ 28.00$ in California and Florida respectively.

When comparing the special April Survey costs with those of the regular June Survey, it should be noted that the segments used for the study were new and had no problem segment action. Many of the segments were quite large and difficult to enumerate. For example, one range segment in California had, as a conservative estimate, between 40-50,000 people living within its boundaries. Also, with no prior knowledge of the segment, the enumeration costs tend to be larger.

Conceptually, the proposed method of enmerating the NOC stratum should be no more expensive than current procedures. Currently, the enumerator should contact all tract operators; however, in practice many of the non-resident tracts are enumerated by observation. Enumeration by observation should not be a recomended procedure.

## APPENDIX

## Tabulations of Data

Survey Costs and Materials

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28. 

Regular June Survey, Items Comparable with Special April Survey, 1968, Florida

Regular June Survey, Items Comparable with Special April Survey, 1967, FloridaA-30 Farms, Land in Tract, Land in Entire Farm, Florida

Special April Survey, Expanded Segment Listings, Cattle A-32 and Calves in Tract, Florida

Special April Survey, Expanded Segment Listings, Acres Owned, Rented and Operated, Florida

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Special April Survey, Expanded Segment Listings, City Residents, Number of Farms, Land in Tract, Land in Entire Farm, Florida

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Speoial April Survey, Expanded Segment Listings, City Residents, Cattle and Calves on Entire Farm, Florida

Special April Survey, Expanded Segment Listings, City Residents, Farm-Lsbor and Agricultural Services,.Florida

Table 1.--Special April Survey, Direct Expansion, and Standard Errors, California


Table 1.--Special April Survey, Direct Expansion, and Standard Errors, California--Con.


Table 2:-Special April Survey - City Residents - Direct Expansion and Standard Errors, California



Table 3:-Regular June Survey Items comparable with Special April Survey, 1968, California

|  |  | District 15 |  |  | District 71 |  |  |  | otal |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | : | $\begin{array}{\|l\|} \hline \text { Direct } \\ \text { Expansion } \\ \hline \end{array}$ | $\begin{aligned} & \text { Standard } \\ & \text { Error } \\ & \hline \end{aligned}$ | : c.v. | $\begin{aligned} & \text { Drect } \\ & : \text { Expansion } \\ & \hline \end{aligned}$ | Standard Error | c.v. | $\begin{aligned} & \text { Direct } \\ & \vdots \\ & \hline \end{aligned}$ | Standard Error | c.v. |
| 1. Nunber of Farms: | : | 2,471 | 1,009 | 41 | 1,009 | 490 | 49 | 3.480 | 1,122 | 32 |
| 2. All Land in Tract (Acres) |  | 607,316 | 25,173 | 4 | 2,685,593 | 163,894 | 6 | 3,292,909 | 165,816 | 5 |
| 5. Cattle and calves in tract |  |  |  |  |  |  |  |  |  |  |
| (a) Cons \& helfers ${ }^{2+}$ <br> (b) Heifers 1-2 | : | 40,559 | 20,333 | 50 | 130,805 | 53,474 | 41 | 171,362 | 57,209 | 33 |
| (c) Other cattle \& calves | : | 5,257 29,733 | 3,806 13,504 | 72. | 37,888 | 15,527 | 41 | 43,145 | 15,987 | 37 |
| (d) Total cattle | ! | 75,547 | 13,504 33,405 | 45 | 64,575 | 15,461 | ${ }^{24}$ | 94,308 | 20,528 | 22 |
| (e) Milk cows | : | 75,478 | 33,405 15,874 | ${ }_{83}^{44}$ | 234,096 64,502 | 81,383 50,413 | ${ }_{78}^{35}$ | 309,643 83,200 | 87,972 52.853 | 28 |
| 6. Acres onned, rented, or operated | : |  |  |  |  |  |  |  |  |  |
| (s) In all locations (acres) |  |  |  |  |  |  |  |  |  |  |
| (2) Withdramm from agriculture. | : | 376,231 4.506 | 146,695 | 39 | 850,533 | 356,788 | 42 | 1,226,764 | 385,768 | 31 |
| (3) Rented from others | ; | 87,400 | 2,221 35,717 | 49 | 223,029 | 218,295 |  |  |  | 49 |
| (4) Managed for others | ; | -378 | 35.178 | 100 | 223,029 59,301 | 128,295 59,301 | 53 100 | 310,429 59.679 | 123,569 59,302 | 40 99 |
| (5) Rented to others) | : | 26,969 | 15,145 | 9 | 9,9,186 | 99,186 | 100 | 59,679 26,155 | 59,302 17.713 | ${ }_{68} 99$ |
| (7) Total land operated |  | 442,533 | 155,235 | 35 | 1,064,376 | 377,04? | 35 | 1,506,909 | 407,753 | 27 |
| 7. Cattle and calves on entire farm <br> (a) In all locations | ! |  |  |  |  |  |  |  |  |  |
| (1) Cows \& heifers $2+$ | : | 43.654 | 22,376 |  | 125,225 | 66,103 |  | 168,879 | 69,787 |  |
|  | : | 3,741 | -3,864 | 67 | 25,126 | 15,744 | 63 | 30,867 | 16,211 | 53 |
| (4) Tother cattle \& calvos | : | 20,828 70,223 | 12,049 | 58 | 49,936 | 22,086 | 4. | 70,764 | 25,159 | 36 |
| (5) Milk cows | : | 70,223 19,013 | 36,101 15,882 | ${ }_{84}^{51}$ | 200.286 | 99,943 | 50 | 270,509 | 106,263 | 39 |
| 8. Farn Labor | ? |  |  |  |  | 59,42 |  | 93,476 | 61,817 | 66 |
| - (a) In all locations | : |  |  |  |  |  |  |  |  |  |
| (5) Total workers | : | 2,125 | - | --- | 539 | --- | -- | 2,664 |  |  |

- Table 4.---Regular June Survey, Items Comparable with Special April Survey, 1967, California


Land in Tract, Land in Entire Farm, California

| $\vdots$ <br> District:Segment: <br> $\vdots$ | Number of farms | Land in Tract |  |  | : Land in entire arm |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | :Regardless of where located :Local ed in specified counties |  |  |  |  |  |
|  |  | :Range \& :pasture | :Cropland | Total |  <br> : pasture | :Cropland | Total |  <br> - pasticre | : Cropland | Total |
| $1 \quad 1$ |  | 20,125 |  | 20,158 |  |  |  |  |  |  |
| 2 | 99 | 5,312 | 9,501 | 15,770 | 2,738 | 2,111 | 5,345 | 2,738 | 2,111 | 5,345 |
| 3 4 |  | 1,546 | 14,429 | 16,009 |  |  |  |  | 2,111 | 5,345 |
| 5 | 35 |  | 25,491 | 17,916 |  |  |  |  |  |  |
| 6 | 164 | 1,385 | 21,290 | 25,808 | 2,596 | 33,212 | 41,922 | 2,596 | 1,770 | 46,025 |
| 7 | 50 | 23,421 | 7,516 | 23,333 | 968 | . 692 | 1,681 | 2, 968 | 6,692 | 1,681 |
| 8 | 11 | 1,371 | 12,340. | 13,766 | 422 | 13,303 | 13,725 | 422 | 3,800 | 4,223 |
| 9 | 6 |  | 11,140 | 15,117 |  | 9,106 | 9,106 |  | 9,106 | 9,106 |
| 10 | 35 | 2,314 | 848 | 16,107 | 16,072 | , 848 | 20,558 | 16,072. | 9,848 | 20,558 |
| 11 | 183 |  | 7,062 | 17,344 |  | 16,058 | 16,751 |  | 16,058 | 16,751 |
| 12 | 277 | 12,625 | 11,787 | 27,573 | 5,591 | 2,475 | 8,239 | 5,591 | 2,475 | 8,239 |
| 13 | 242 | 1,212 | 10,368 | 25,877 | 67,713 | 49,521 | 117,355 | 67,713 | 49,521 | 117,355 |
| 14 | 325 |  | 12,293 | 21,349 | 16,928 | 37,218 | 54,170 | 6. | 12,328 | 12,351 |
| 15 | 104 |  | 6,058 | 19,196 | 52 | 9,693 | 9,883 | 52 | 9,693 | 9,883 |
| 16 |  |  |  | 18,550 |  |  |  | S | 9,693 | 9,883 |
| 17 | 209 | 5,366 | 9,208 | 21,636 | 1,545 | 9,079 | 12,839 | 1,545 | 9,079 | 12,839 |
| 18 |  | 138 |  | 12,919 |  |  |  |  |  |  |
| 19 | 277 | 346 | 11,978 | 18,534 | 2,596 | 4,673 | 8,378 | 2,596 | 4,673 | 8,378 |
| 20 | 658 | 6,671 | 8,395 | 19,445 | 5,123 | 7,893 | 14,020 | 5,054 | 7,754 | 14,020 |
| 21 |  | 7,128 | 6,237 | 13,365 |  |  |  |  |  |  |
| 22 | 35 | 6,924 | 4,327 | 11,251 | 76,160 | 14,540 | 90,699 | 76,160 | 14,540 | 90,699 |
| 23 | 42 | 9,105 | 6,058 | 15,163 | 282,392 | 36,072 | 318,464 | 282,392 | 36,072 | 318,464 |
| 24 | 208 | 5,262 | 20,632 | 27,556 | 5,608 | 18,313 | 23,921 | 5,608 | 18,313 | 23,921 |
| 25 | 171 | 9,003 |  | 14,391 | 14,954 |  | 15,158 | 14,954 |  | 15,158 |
| 26 | 277 | 1,143 | 1,610 | 26,919 | 18,365 | 4,016 | 22,536 | 18,122 | 900 | 19,421 |
| 27 28 | 308 137 |  | 11,343 | 14,072 |  | $\begin{array}{r}9,030 \\ \hline\end{array}$ | 9,514 |  | 9,030 | 9,514 |
| 28 | 137 | 19,654 | 2,176 | 22,516 | 24,452 | 14,685 | 39,823 | 24,452 | 9,887 | 35,025 |
| Total | 3,850 | 138,436 | 232,089 | 537,325 | 588,533 | 294,311 | 900,116 | 571, 291 | 251,867 | 840,880 |


| District:Segment |  |  |  |  | r. | $\operatorname{inx}$ | re Farm |  | $\begin{aligned} & \text { Number } \\ & \hline- \text { con. } \\ & \hline \end{aligned}$ | of Faras, |  | ¢ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Number of farms | : Land in Tract |  |  | : Land in entire farm |  |  |  |  |  |
|  |  |  | :Regardless of where located : Located in specified counties |  |  |  |
|  |  | : |  | :Range \& : Croplana: Total |  |  |  |  |  | : Range \& : Cropland:: past are : |  |  |
| 2 | 29 | : |  | 349 | 121,773 | 3,350 | 131,950 | 82,550 | 2,227 | 97,323 | 79,209 | 1,917 | 92,211 |
|  | 30 | : | 155 | 121,251 | 1,569 | 126,295 | 105,913 | 1,452 | 110,851 | 105,713 |  |  |
|  | 31 | : | 48 | 48,318 | , 484 | 89,974 | 28,807 | 1,484 | 41,056 | 18,307 | 1,452 | 110,464 41,056 |
|  | 32 | : | 65 | 49,946 | 3,510 | 138,897 | 24,713 |  | 31,296 | 24,713 |  | 31,296 |
|  | 33 | : | 121 | 69,777 | 1,798 | 85,710 | 90,228 | 1,853 | 92,881 | 87,938 | 1,853 | 90,592 |
|  | 34 | : | 132 | 128,546 | 3,332 | 147,296 | 30,962 | 3,727 | 38,709 | 28,1058 | 1,866 | 38,157 |
|  | 35 | : | 32 | 99,562 | 8,625 | 114,888 | 27,952 | 6,931 | 34,820 | 27,952 | 6,931 | 34,820 |
|  |  | : | 52 | 150,200 |  | 152,762 | 652,497 |  | 652,497 | 596,497 |  | 596,497 |
|  | 37 <br> 38 | : | 15 159 | 4,131 78,463 |  | 93,753 | 1,831 81,709 | 2,909 | 84,574 | 1,1331 | 2,909 | 83,772 |
|  | 38 39 | : | 159 3 | 78,463 104,460 | 2,935 | 86,473 104,460 | 81,709 104,409 | 2,343 | 84,089 104,409 | 81,769 | 2,343 | 84,089 |
|  | 40 | : | 99 | 190,298 | 2,010 | 192,425 | 42,968 | 4,095 | 104,409 | 55,537 | 4,095 | 55,537 47,198 |
|  | 41 | : | 27 | 63,050 |  | 161,111 | 31,931 |  | 31,931 | 31,931 |  | 31,931 |
|  | 43 | : | 14 | 35,205 |  | 35,205 | 108,240 |  | 108,240 | 108,132 |  | 108,132 |
|  | 44 | : |  | 125,964 |  | 125,964 |  |  |  |  |  |  |
|  | 45 | : | 84 | 161,278 | 28,787 | 161,278 |  |  |  |  |  |  |
|  | 47 | : |  | 143,418 |  | 143,418 | 69,186 | 13,251 | 82,436 | 69,186 | 13,251 | 82,436 |
|  | 48 | : |  | 126,225 |  | 126,225 |  |  |  |  |  |  |
|  | 49 | : | 35 | 36,288 | 128 | 69;826 | 3,920 | 246 | 4,692 | 3,920 | 246 | 4,692 |
|  | 50 | : | 12 | 27,547 | 421 | 49,780 |  | 117 | 140 |  | 117 | 140 |
| Tot |  | : 1,402 |  | 1,939,879 | 56,949 2,516,425 1,487,816 |  |  | 39,635 1,647,142 1,374, 301 |  |  | 36,193 1,533,020 |  |
| Grand |  |  | 5,252 | 2,078,315 | 289,038 3 | 3,053,750 | 2,076,349 | 333,946-2 | 2,547, 258 | 1,945,592 | 288,060 2 | ,373,900 |




Table 6. --Special April Survey, Expanded Segment Listings, Cattle and Calves in Tract, California--cont.


Table 7:--Special April Sirvey, mpanded Soment Lietince, derea Ouned, Rented and Operated, California

| District | Segment <br> $:$ |  | Acres Ouned |  | Aeres Pormanently Whthdraw |  | Acres Rentend from Others |  | Aeres Xanagedfor Others |  | Acras Rented to Others |  | Acres MarigedCora |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | All : Specified:Locations: Counties: |  | $\begin{gathered} \text { All } \\ \text { Locritione } \end{gathered}$ | :Spechriods <br> : Counties: | $\begin{gathered} A 1 \\ \text { Locations } \end{gathered}$ | : Spacifiod: <br> I Counties | A:i SpecifledsLocnitens: Counthes: |  | All Specified:Lecitions: Counties: |  | A12 cocithons: Cectintied: | a: :Spectrlediongigons: Co:nties |  |
| 1 | 11 | : |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | : 2 | : | 2,639 | 2,639 |  |  | 3,5\% | 3,596 |  |  | 891 | 891 |  | 5,345 | 5,345 |
|  | $\begin{array}{ll} 1 & 3 \\ 1 \end{array}$ | $:$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | : 5 | 1 |  |  |  |  | 46,026 | 46,026 |  |  |  |  |  | 46.026 | 46,026 |
|  | : 6 | : | 17,789 | 17,789 | 203 | 203 | 24,336 | 24,336 |  |  |  |  |  | 43.922 | 4:.922 |
|  | 27 | : | 532 | 532 |  |  | 457 | 457 | 692 | 692 |  |  |  | 1,631 | 1,65] |
|  | : 8 | \% | 2,112 | 2.112 |  |  | 11,614 | 2,112 |  |  |  |  |  | 23.726 | 4.224 |
|  | - 9 | 2 | 9,106 | 9.106 |  |  |  |  |  |  |  |  |  | 9.106 | 9.106 |
|  | - 10 | 1 | 358,891 | 40,975 |  |  | 6,182 | 6.182 |  |  | 344.515 | 26,599 |  | 29.558 | 20.558 |
|  | : 11 | : | 19,809 | 19,809 | 312 | 312 | 12,001 | 12,001 |  |  | 14.747 | 14,747 |  | :6.75 | 16.751 |
|  | : 12 | 1 | 1,835 | 1,835 | 121 | 121 | 6,525 | 6,525 |  |  |  |  |  | E,239 | 8.239 |
|  | $: 13$ | 2 | 34,445 | 34,445 | 19,040 | 19,040 | 106,450 | 106,450 |  |  | 4,500 | 4,500 |  | 127.355 | 117.355 |
|  | 1.14 | 8 | 49,250 | 10,720 |  |  | 4,920 | 1,631 |  |  |  |  |  | \$4.170 | 12.35 |
|  | : 15 | : | 3,514 | 3,514 |  |  | 6,370 | 6,370 |  |  |  |  |  | 9.933 | 9.283 |
|  | 1 <br> $: 16$ <br> 17 | : | 7,821 | 7,821 |  |  | 5.018 | 5.018 |  |  |  |  |  | 22,839 | 12,839 |
|  | : 18 | : |  |  |  |  | S,018 | 5.018 |  |  |  |  |  | 12,039 | 12,839 |
|  | 1 19 | 8 | 8,378 | 8,378 |  |  |  |  |  |  |  |  |  | 8.378 | 8.378 |
|  | : 20 | : | 13,674 | 13,674 |  |  | 346 | 346 |  |  |  |  |  | 14,020 | 14,020 |
|  | : 21 | 8 |  |  |  |  |  | . |  |  |  |  |  |  |  |
|  | : 22 | : | 90,699 | 90,699 |  |  |  |  |  |  |  |  |  | 93,699 | 90,699 |
|  | : 23 | : | 318,464 | 318,464 |  |  | - | ${ }^{\circ}$ |  |  |  |  |  | 312,454 | 312,464 |
|  | - 24 | $:$ | 17,897 | 17,897 |  | . -- | 3,461 | - 3.461 | 2,562 | 2,562 |  |  |  | 23.921 | 23.921 |
|  | : 25 | 1 | 9,190 | 9,190 |  |  | 5,968 | 5,968 |  |  |  |  |  | 15.158 | 15.158 |
|  | : 26 | 3 | 23,073 | 19,957 | 537 | 537 |  |  |  |  |  |  |  | 22,536 | 19,423 |
|  | 1 <br> $: \quad 27$ | ? | 8,451 | 8,451 | 548 | 978 | 1,302 | 2,302 | 308 | 308 |  |  |  | 9.514 | 9.514 |
|  | ${ }^{2}$ Total | $11.049,184$ |  | 51,304 |  |  | 6,682 | 1,885 |  |  | 18,164 | 18,164 |  | 39, ${ }^{\text {P }} 23$ | 35.025 |
|  |  |  |  | 639.312 | 20.761 | 20.26: | 251.257 | 233.669 | 3.563 | 3.563 | 382.817 | 64,901 |  | c:2:17 | 2.3, 32 |
| 2 | * 29 | ! | 72,177 | 67,064 |  |  | 23,152 | 23.152 | 1,995 | 1,995 |  |  |  | 97.323 | 92.21] |
|  | - 30 | \% | 84,291 | 84,291 |  |  | 44,958 | 44.571 |  |  | 18,398 | 28,398 |  | 110,251 | 110,464 |
|  | : 31 | 1 | 28,807 | 28.807 | 10,651 | 10,65 | 22,900 | 22,900 |  |  |  |  |  | 42,056 | 41,056 |
|  | : 32 | 1 | 9,196 | 9,196 |  |  |  |  | 22,100 | 22.100 |  |  |  | 31,296 | 31.296 |
|  | : 33 | 1 | 52,900 | 52,900 | 22 | 22 | 40,003 | 37.714 |  |  |  |  |  | 92,881 | 90.592 |
|  | : 34 | 8 | 44,757 | 44,206 | 850 | 850 | 10.356 | 10,386 |  |  | 15,555 | 25.555 |  | 39,709 | 39,157 |
|  | 835 $: 36$ | $:$ | 11,562 442,288 | 11,562 386,288 |  |  | $23,258$ | $23,258$ |  |  |  |  |  | $34,820$ | 34,820 |
|  | : 36 | 1 | 442,288 | 386,288 |  |  | 205,835 | 205,835 | 4.375 | 4.375 |  |  |  | 652,497 | 596,497 |

Table 7:--Speeiol april Surwey, Expanded Segment Listings, Acres Omed, Rented and Operated, California--1 ontinues

| District | Segment |  | Aeres Oumes |  | $\begin{aligned} & \text { deres Pormanently } \\ & \text { inthdram } \end{aligned}$ |  | Aerve Rentedfrom Others |  | Acres KanagedCor Othars |  | $\begin{gathered} \text { Acres Roated } \\ \text { to Othars. } \\ \hline \end{gathered}$ |  | $\begin{aligned} & \text { Acres } \\ & \text { fol } \end{aligned}$ | $\begin{aligned} & \text { anozed } \\ & \text { Boid } \\ & \hline \end{aligned}$ | Total :ar. Cpersie: |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Al1 iSpecifiedi |  | ${ }^{121}$ | Speelifled | 021 | ispeciriedt | 111 | :Speciried: | 111 | :Specified: | 111 | :Spectiles: | A11 : Speciftes:-iocati-r.s: Evarite: |  |
|  |  |  | 10cations | 51 Coderiasi | Lecations: | - counties: | Uacations | Sicountiese-1 | locations: | C-Cunties |  | S Sounties: | castion | Covaties: |  |  |
| 2 | $: 37$ | : | 24,659 | 83,258 | 83 | 83 | 218 | 118 |  |  | 122 |  |  |  |  |  |
|  | - 38 | 1 | 53,255 | 53,855 | 18 | 18 | 25,319 | 25,319 | 24,666 | 24,666 | 19,732 | 19,732 |  |  | 84, 81.509 | 84,072 |
|  | - 39 | 1 | 104,409 | 55,537 |  |  |  |  |  |  |  |  |  |  | 104.409 | 55.53\% |
|  | 1 40 | : | 46,273 | 46,273 |  |  | 925 | 925 |  |  |  | , |  |  | 47.15? | 47,1e: |
|  | 841 | : |  |  |  |  | 31.931 | 31.931 |  |  |  |  |  |  | 31,931 | 31,95: |
|  | 142 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 1 $: 43$ $: 4$ | : | 108,240 | 108,132 |  |  |  |  |  |  |  |  |  |  | 108,240 | 108,132 |
|  | : 45 | ; |  |  |  |  | , |  |  |  |  |  |  |  |  |  |
|  | : 46 | : | 73,124 | 73.124 |  |  | 9,312 | 9.332 |  |  |  |  |  |  | 82,436 | 22,43\% |
|  | 147 | $:$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | : | 5.933 | 5,933 | 1,065 | 1,065 |  |  |  | - | 175 | 175 |  |  | 4,692 | 4,672 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 240 | 29 |
|  | : Total | 11 | 2222.641 | 1.10 | 12.689 | 12.689 | 438.067 | 435.391 | 53.136 | 51.136 | 53.982 | 53.982 |  |  | 64:7,263 | 2,33, |
|  | Crand Total |  | 2,271,495 | 1,200,478 | 33,450 | 33,450 | 689,324 | 669,060 | 56,699 | 56,699 | 436.799 | 128,883 |  |  | 2,547,259 | 2.373.9: |

Table 8. --Special April Survey, Expanded Segrent Listings, Cattle ind Calves on Entire Farm, California


Table 8. - Special April Survey, Expanded Segment Listings, Cattle and Calves on entire farm; California--cion.


Table 9.--Special April Survey, Bepanded Segrant Liatinga, Fara Labor and Agricultural Services, Callfornia






Land in Tract, Land in Entire Farm, California

daviu +1---vyeclal hpril Survey, Expanded Segment Listings, City Residents, Cattle and Calves in Tract, California응

| District | Segment | Cows and Hedfers ${ }^{2+}$ | $\begin{gathered} \text { Helfers } \\ \text { 1-2 } \end{gathered}$ | Other cattle | Total cattle | $\begin{aligned} & \text { Milk } \\ & \text { cows } \end{aligned}$ | Free Access |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 6 |  |  |  |  |  | Cattle | Acres inside \& outside | Acres inside |
| 1 | 7 | 796 |  | 762 | 1,558 |  |  |  |  |
|  | 8 | 857 |  | 548 | 1,405 |  |  |  |  |
|  | 11 |  |  |  |  |  |  |  |  |
|  | 14 |  |  |  |  |  |  |  |  |
|  | 17 | 3,704 | 450 | 35 | 4,189 |  |  |  |  |
|  | 20 | 1,039 | 692 | 1,039 | 4,189 2,769 | 2,666 |  |  |  |
|  | 23 | 9,451 | 3,773 | 1,696 | $\begin{array}{r} 2,769 \\ 14,920 \end{array}$ |  | , |  |  |
| Total |  | 15,847 | 4,916 |  |  |  |  |  |  |
| 2 |  |  |  | 4,079 | 24,842 | 2,666 |  |  |  |
|  | 33 | 2,358 |  | 2,801 | 5,158 |  |  |  |  |
|  | 34 | 391 | 437 | 3,757 | 4,585 |  | 11,371 | 8,773 $73 ; 015$ | 4,869 |
|  | 35 | 1,050 |  | 188 | 1,238 | 862 |  | 13,015 | 6,800 |
|  | 37 | 2,466 |  | 2,512 | 2,600 |  | 2,500 | 25,000 | 17,500 |
|  | 38 | -937 | 86 | 1,833 | 4,316 |  |  |  |  |
|  | 39 | 4,950 |  | 5,116 | 10,066 | 37 | 42 | 9,299 | 8,189 |
|  | 46 | 1,962 5,791 |  | 717 | 2,679 | 37 | 2,532 | 234,327 | 104,460 |
|  |  |  |  | 3,84 | 9,633 | 27 |  |  |  |
| Total |  | 19,993 | 523 | 21,116 | 41,632 | 927 | 38,467 | 350,414 | 41,819 |
| Grand |  |  |  |  |  |  |  |  |  |
| Total |  | 35,840 | 5,439 | 25,195 | 66,474 | 3,593 | 38,467 | 350,414 | 141,819 |

Table 12.--Spacial April Survey, Expanded Segment Listings, City Residents, acres Cwned, Kented, and Operated, California


Table 13.--Special April Survey, Expanded Segment Listinga, City Residents, Cattle and Calves on Entire Farm, Californis


Table 14:--Special April Survey, Expanded Segment Listings, City Reaidents, Farm Labor and Agricultursi Services, California


Table 15.--Special April Survey, Direct Expansion and Standard Errors, Florida


Table 15.--Special April Survey, Direct Expansion and Standard Errors, Florida --continued


Table 16. -_Special April Survey, City Residents, Direct Expansion and Standard Errors, Florida


Table 16.--Special April Survey, City Residents, Direct Expansion and Standard Errors, Florida--continued

| : | District 30 | : | District 74 | : | Ag. Urban | ! | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ion: Error : |  | : Standard ion: Error |  | :Standard |  | $\begin{aligned} & \text { :Stand } \\ & : \quad \text { Err } \end{aligned}$ |

7. Cattle and Calves on Entire Farm
(a) In all Locations
(1) Cows \& Helfers $2+$
(2) Heifers $1-2$
(3) Other Cattle \&
(3) Other Cattle \& Calves
(4) Total Cattle
(5) Milk Cows
(6) Add. Cattle grazing rent free

In Specified Counties
(1) Cows \& Heifers $2^{+}$
(2) Heifors l-2
(3) Other Cattle \& Calves
(4) Total Cattle
(5) Milk Cows
(6) Add. Cattle grazing rent free

Farm labor
(a) In All Locations (Number)
(1) Working Operators
(2) Unpaid Family

Workers Hired \& Paid by You
(4) Workers Hired \& Paid by Cont.
(5) Total Workers
(b)
(6) Regular Workers

In Specified Counties
(1). Working Operators
(2) Unpaid Family.
(3) Workers Hired \& Paid by You
(4) Workers Hired \& Paid by Cont.
(5) Total Workers
(6) Regular Workers

1. Mo. Farms Having Ag. Services Performed
2. Agricultural Services
(a) No. Firms
(b) Totel Workers
(c) No. Horkers included on farm

| Item | District 30 |  |  | District 74 |  |  | Ag. Urban | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Direct expansion | $\begin{array}{\|c\|} \hline \text { Standard } \\ \text { error } \end{array}$ | C.V. | Direct expansion | Stendard error | C.V. | Direct expansion | Direct expansion |
| 1. Number of farms: | 4,192 | 811 | 19 | 1,599 | 461 | 29 | 281 |  |
| 2. All land in tract (acres) | 396,581 | 15,829 | 4 | 1,969,303 | 128,038 | 6 | 58,336 | 2,355,884 |
| 5. Cattle \& calves in tract <br> (a) Cows \& heifers $2+$ <br> (b) Heifers 1-2 | 20,362 | 6,642 | 33 | 59,256 | 15,662 | 26 | 1.870 | 81,488 |
| (b) Heifers l-2 | 4,696 17,399 | 1,405 | 30 | 15,270 | 6,132 | 40 | 1.070 | 19,056 |
| (c) Other cattle \& calves | 17,399 42,457 | 4,877 12,436 | 28 | 40,368 | 9,349 | 23 | - ${ }^{\circ}$ | 57,767 |
| (e) Milk cows | 42,457 284 | 12,436 | 29 50 | 114,893 | 27,305 | 24 | 1,870 | 159,220 |
| 6. Acres owned, rented, or operated <br> (a) In all locations (acres) |  | 141 | 50 | 482 | 332 | 69 | - | 766 |
| (1) Owned | 173,848 | 53,784 | 31 | 215,788 | 38,041 | 33 | 107.326 | 396.962 |
| (2) Withdrawn from agriculture |  |  | - | 125 | 85 | 68 |  | 125 |
| (3) Rented from others (4) Managed for others | 184,300 | 82,116 | 45 | 2,773,739 | 2,737,247 | 99 | 4,674 | 2,962.713 |
| (5) Rented to others | 1,450 1,097 | 1,323 943 | 91 86 |  |  |  | - | 1.450 |
| (7) Total land operated | 1,097 358,477 | 101,821 | 86 | 2,884,363 | 3,873 | 77 | 112,000 | 6,135 |
| 7. Cattle \& calves on entire farm <br> (a) In all locations | 358,47 | 101,021 | 28 |  | 2,131,861 | 95 | 112,000 | 354,840 |
| (1) Cows \& heifers $2+$ | 65,278 | 29,241 | 45 |  | 8,342 | 44 |  |  |
| (2) Heifers l-2 | 12,293 | 4,095 | 33 | 4,101 | 2,061 | 50 | 7,476 | $\begin{aligned} & 91,240 \\ & 16,870 \end{aligned}$ |
| (3) Other cattle \& calves | 53,994 | 28,860 | 53 | 12,213 | 4,241 | 35 | 2,244 | 68,451 |
| (4) Total cattle | 131,564 | 61,189 | 47 | 35,265 | 13,807 | 39 | 9,723 | 176,552 |
| 8. Farm labor | 347 | 148 | 43 | 348 | 324 | 93 | 1,870 | 2,565 |
| (a) In all locations (number) <br> (1) Working operators <br> (5) Total workers | $\begin{array}{r} 2,364 \\ 630 \end{array}$ | t |  | 962 201 |  |  | 280 | 3,606 |


| Item | District 30 |  |  | District 74 |  |  | Ag. Urban | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Direct expansion | Standard error | c.v. | Direct expansion | Standard error | C.V. | Direct expansion | Direct expansion |
| 1. Number of farms: | 2,963 | 612 | 21 | 1,159 | 339 | 29 | 188 | $4,310$ |
| 2. All land in tract (acres) | 392,017 | 16,910 | 4 | 1,963,402 | 128,211 | 6 | 58,852 | $2,414,271$ |
| 5. Cattle \& calves in tract <br> (d) Total cattle <br> (d) Milk cows | 56,452 20,803 | 24,712 20,472 | 44 98 | 146,984 149 | 29,853 75 | 20 50 | 560 | 203,996 |
| 6. Acres owned, rented, or operated <br> (a) In all locations (acres) | 20,803 | 20,472 | 98 | 149 | 75 | 50 |  | 20,952 |
| (1) Owned <br> (2) Withdrawn from agriculture | 157,632 | 53,041 | 34 | 135,308 | 72,811 | 54 | 88,628 | 381,568 |
| (3) Rithdrawn from agriculture (4) Rented from others (4) Managed for others | 158,041 | 69 91,196 | 73 58 | 40,071 | 22,921 | 57 | 122,472 | r 320,584 |
| (4) Managed for others |  |  |  |  |  | 5 | 12,472 | 320,504 |
| (5) Rented to others (7) Total land operated | 315,578 |  | 41 | 960 174,419 | 822 78.139 | 86 45 |  | 960 |
| 7. Cattle \& calves on entire farm <br> (b) In specified counties | 315,578 | 128,032 | 41 | 174,419 | 78,139 | 45 | 211,100 | 701,097 |
| (1) Cows \& heifers $2+$ | $46,870$ |  |  |  |  | 41 |  |  |
| (4) Total cattle | $90,715$ | $41,257$ | 45 | 16,724 | 6,985 | 42 | $28,233$ | 135,672 |
| 8. Farm labor | 189 | 130 | 69 | 103 | 63 | 61 |  | 292 |
| (a) In all locations (number) |  |  |  |  |  |  |  |  |
| (1) Working operators | $1,860$ |  |  |  |  |  |  |  |
| (5) Total workers | $1,040$ |  |  | 86 |  |  | $350$ | $\begin{aligned} & 2,1,17 \\ & 1,476 \end{aligned}$ |

Table 19.-mSpecial Apeil Sorvey, Dppanded Sagnant Liatinge, Mmber of Farns, Land in Tract, Land in Entire farm, Florida


Table 19.--Special april Survey, Expanded Segment Listinge, Dumber of Farms, Land in Tract, Land in Entire Farm, Florida--continued


Table 20.--Special April Survey, Expanded Segment Listings, Cattle and Calves in Tract, Florida--con.

| Dist. | Segment | Cows \& heifers $2^{+}$ | $\begin{gathered} \text { Hंeifers } \\ \mathrm{l}-2 \end{gathered}$ | Other <br> cattle | Total cattle | Milk cows | Free access |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Cattle | Acres inside and outside | Acres inside |
| 2 | 36 | 17,124 |  | 7,931 | 25,055 |  |  |  |  |
|  | 37 | 11,166 | 1,398 | 8,370 | 20,934 |  | 33,391 | 133,563 | 83,699 |
|  | 38 | ?,175 | 1,256 | 2,117 | 10,548 |  | 1,614 | 4,305 | 1,076 |
|  | 39 | 5,038 | 642 | 3,778 | 9,458 |  | 35,646 | 190,112 | 71,767 |
|  | 40 | 5,132 | 103 | 1,950 | 7,185 |  | 35,646 | 190,112 | 71,767 |
|  | 41 | 5,780 | 1,598 | 1,990 | 9,368 |  | 42,071 | 325,218 | 90,006 |
|  | 42 | 4,905 | 1,635 | 3,270 | 9,810 |  |  | -25,218 | 9,006 |
|  | 44 | 19,840 | 6,880 | 2,321 | 29,041 |  | $44,664$ | 212,896 | 90,043 |
|  | 45 | 6,286 | 1,104 | 127 | 7.517 |  | 9,981 | 38,226 | 25,060 |
|  | Total | 152.100 | 23.299 | 53.754 | 229.153 | 2,271 | 192,567 | 1,391,496 | 664,188 |
| 3 | $\begin{aligned} & 46 \\ & 47 \end{aligned}$ | 526 | 263 | 1,577 | 2,366 | 526 |  |  |  |
|  | 48 | 789 | 263 | 263 | 1,314 |  | . |  |  |
|  | $\begin{aligned} & 49 \\ & 50 \\ & \hline \end{aligned}$ | 6,572 | 1,314 | - 3,943 | 11,830 |  |  |  |  |
|  | Total | 7,886 | 1,840 | 5,783 | 15,510 | 526 |  |  |  |
|  | Grand total | 189,891 | 30,824 | 73.492 | 294,209 | 7.756 | 213.571 | 1,445,873 | 683,842 |

Table 21.-Speaial April 3wrvey, Expanded Sepment Listinge, derea Omed, Rented and Operated, Fioride



## COST OF PROPOSED SYSTEM:

(1) Billing cards with agency code prepunched © $\$ 1.06 / 1,000$
(2) K.P. services © $\$ 14.35 / 1,000$ (EST.)
(3) WP\&C editing cost $\mathbb{3} \$ 833.00$ (Page 9)
(4) EDP processing © $\$ 218.00$
\$ 42.40 ( 40 m e $\$ 1.06 / \mathrm{m}$ )--Prepunched Cards 574.00 ( 40 m E estimated $\$ 14.35 / \mathrm{m}$ )--K.P.
833.00 -- WP\&C Editing
218.00 -- ELDP Processing
\$1,667.40 -. MORMAL TOTAL MONTHLY COST
3,000.00 -- One-Time Development Cost (System's Design,
$\$ 4,667.40-$ ONE-TIME MDNTHLY COST Programming, etc.)
... $\$ 4,667.40-$ ORTE-TIME MONTHLY COST

HETEFITIS FFRM PREVIOUS AND INIERTM SYSTEM:
(1) Proof-listing to edit requisition entries.
(2) Calculate various cost and volume factors.
(3) Generate bills for all agencies.

POSSIBLE BENEPFITS FROM PROPOSED SYSTEM:
(1) Very basic edit (Visual scan) performed by WP\&C.
(2) Input cards may be edited during calculation pass thru computer.
(3) No proof-listing required to double check MS reader errors; errors are "flagged" during keypunching.


Table 22.--Special april Surver, Jopanded Sugment Liatings, Cattle and Caivea on Entira Fara, Floridg--conti.uaed


Table 23.r-Special April Surveỳ, Expanded Segrent Liatings, Farm Labor and Agricultural Services, Florida




| District | Segment | $\begin{aligned} & \text { Cows } \\ & \text { and } \\ & \text { calves } 2+ \end{aligned}$ | Heifers 1-2 | Other cattle | Total cattle | $\begin{aligned} & \text { Milk } \\ & \text { cows } \end{aligned}$ | Free Access |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Cattle | Acres inside \& out.side | $\begin{aligned} & \text { Acres } \\ & \text { inside } \end{aligned}$ |
| 1 | $\begin{array}{r} 2 \\ 4 \\ 5 \\ 10 \\ 11 \\ 13 \\ 14 \\ 15 \\ 17 \\ 18 \\ \hline \end{array}$ | 94 <br> 94 |  | 942 $125$ | 94 942 219 |  |  |  |  |
|  | Total | 188 |  | 1,067 | 1,255 |  |  |  |  |
| 2 | 25 44 | $\begin{array}{r} 231 \\ 1,214 \end{array}$ | $\begin{array}{r} 57 \\ 214 \end{array}$ | $\begin{aligned} & 175 \\ & 535 \end{aligned}$ | $\begin{array}{r} 463 \\ 1,963 \end{array}$ |  | 1,270 | 28,166 | 10,150 |
|  | Total | 1,445 | 271 | 710 | 2,426 |  | 1,270 | 28,166 | 10,150 |
| 3 | 49 | 6,572 | 1,314 | 3,943 | 11,829 |  |  |  |  |
|  | Total | 6,572 | 1,314 | 3,943 | 11,829 |  |  |  |  |
|  | Grand Total | 8,205 | 1,585 | 5,720 | 15,510 |  | 1,270 | 28, 266 | 10,150 |

Table 26, --Special Appil. Survey, Expanded Segment Listinge, City Rasidents, Acrea Owned, Rented, and Operated, Forida


Table 27.--Special April Survey, Expanded Segment Listings, City Residents, Catile and Calves on Entire Farm, Florida





1968 April Special Enumerative Survey
Time and Mileage Summary

|  |  | California |  |  | Florida |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{array}{r} \text { Dist. } \\ 15 \end{array}$ | $\begin{array}{r} \text { Dist. } \\ 71 \end{array}$ | $\begin{gathered} 50 \text { Seg. } \\ \text { Total } \end{gathered}$ | $\begin{array}{r} \hline \text { Dist. } \\ 30 \end{array}$ | $\begin{array}{r} \hline \text { DIst. } \\ 74 \end{array}$ | Ag-Urban | $\begin{aligned} & \hline 50 \text { Seg. } \\ & \text { Total } \end{aligned}$ |
| Number Segments | Number | 28 | 22 | 50 | 23 | 22 | 5 | 5 |
| Avg. Time: Within Segments | Nimutes | 839.2 | 1572.1 | 1161.7 | 492.3 | 329.3 | 275.0 | 398.8 |
| Between Segments | Nirutes | 303.5 | 634.1 | 449.0 | 212.8 | 225.9 | 220.6 | 219.3 |
| Avg. Mileage: Within Segments | Miles | 52.9 | 112.4 | 79.1 | 38.8 | 28.2 | 27.2 | 33.0 |
| Between Segments | Miles | 153.9 | 320.5 | 227.2 | 109.0 | 114.0 | 125.0 |  |
| Avg. Costs for 112.8 |  |  |  |  |  |  |  |  |
| Time: Within Segments | Dollars | 33.57 | 62.88 | 46.47 | 19.69 | 13.17 | 11.00 | 15.95 |
| Between Segments | Dollaxs | 12.14 | 25.36 | 17.96 | 8.51 | 9.04 | 8.82 | 8.77 |
| Mileage: Within Segments ${ }^{\text {Between Segments }}$ | Dollars | 4.76 | 10.12 | 7.12 | 3.49 | 2.54 | 2.45 | 2.97 |
|  | Dollars | 13.85 | 28.85 | 20.45 | 9.81 | 10.26 | 11.25 | 10.15 |
| Avg. Total Costs per Segment |  | 64.32 | 127.21 | 92.00 | 41.50 | 35.01 | 33.52 | 37.84 |
| Review and Additional Training | Mirutes | --- | - | 231.1 |  |  |  |  |
|  | Dollars | -- | --- | $9.241 /$ |  |  |  |  |

1/ Not included in Total Cost per Segment shown above

Joe E. Mullin, Statistician in Charge
Orlando, Florida

May 2, 1968
C. E. Caudill, Methods Staff, AED

Verification of questionnaires, Special April Study

Upon reviewing the questionnaires from the special 4-county April study a few were found which appear questionable. Initially we had planned to surmarize this study rapidly in order that an operational level program could be instigated for this year's June survey. However, I am afraid this was wishful thinking, and we will not be able to sumnarize the 4-county study for the next three to four weeks. With the additional time it seems desirable to do some follow-up work to assure the quality of our data will provide meaningful results.

Many of the questionnaires probably can be cleaned up by talking to the enumerator, while on others it may be necessary to contact the respondents. There follows a listing of questionnaires with comments pertaining to each.

Segment 44, Tract C - Section A item 3 indicates that the respondent lives outside of segment, but in a town or city, while the questionnaire is completed as if the respondent lives outside of segment and not in a town or. city. If Item 3, Section A is completed correctly, then Sections B, D, $\mathbf{E}$, and $F$ should be completed. On the other hand, if item 3 Section $A$ is incorrect, the questionnaire is acceptable if item 3 was checked to indicate the respondent lived outside the segment and not in a town or city. From the information given in Section $A$, and the address given in item 5 and on the face sheet of the questionnaire, it would appear that respondent may live in a green area of the city of Bartow. Would you verify that he either lives in the green area of Bartow or outside the green area of Bartow, and correct the questionnaire accordingly?

Segment 44, Tract K - According to Section A, item 4 and the address given in item 5, it appears that the respondent may live in the green area of a city or town. Please verify whether the respondent lives in the green area of a city or town, and if so obtain information for Sections B, D, E, and F. If the respondent lives outside a city or town and not in a green section of a town or city, please correct item 4, Section A.

Segment 44, Tract H - According to page 7, Donald Bryan is the foreman and manager of an operation, so he becomes the operator. His address is given on the face page as 805 Campbell, and item 3 Section $A$ indicates that he lives outside the segment and in a town or city. Item 5 indicates that the person in charge of the farm is Stokes, who lives in Lake Wales. However, for the purposes of determining what sections of this questionnaire
need to be completed, Donald Bryan is the operator, and it is his residence which will determine if he qualifies as a resident operator or not. Therefore, if Donald Bryan lives in a city or town in a green area, the entire questionnaire from Section $B$ forward will need to be completed. On the other hand, if Mr. Bryan lives outside the segment and not in a city or town, please correct item 3, Section A.

Segment 44, Tract L - Item 3, Section A indicates the respondent lives outside a segment but in a town or city, while the questionnaire is completed as if he lived outside the segment and not in a town or city. If item 3 is correct, please complete the balance of the questionnaire from Section B forward. However, if the respondent lives outside a segment and not in a town or city, please correct item 3, Section A.

Segment 44, Tract I - See the corment for Segment 44, Tract L. Also, in Section C it appears that the enumerator attempted to do some proration. However, it appears that it was not done correctly. Please verify.

Segment 28, Tract I - Section A, item 2 indicates that question 4 should have been answered rather than question 3. If the headquarters of the fruit company given in item 1 is in the green area of Orlando or any other city or town, then the entire questionnaire from Section B forward should be corpleted. Please correct item 4 and complete the questionnaire accordingly.

Segment 12. Tract E - Item 4, Section A indicates that the respondent lives in a town or city, while it appears from the editing of Sections D and E that the headquarters of the firm is located outside a segment and not in a town or city. Please check this questionnaire carefully as it is an extremely large operation.

Segment 28, Tract I - Question 2 of Section A indicates that item 4 should have been completed and the balance of the questionnaire completed depending upon the answer to item 4.

Segment 33. Tract M - Item 2 Section A indicate the operation is a corporation and item 4 indicates that the headquarters of the corporation are outside the segment but in a town or city. If this is correct, then the entire questionnaire from Section B forward should have been completed. Also in Section C questions 6 and 7 indicate that the cattle had free access to land both inside and outside the segment. Item 2, the enumerator indicated the answers were estimates. Does it mean that they estimated 100 head of cattle to be on the 120 acres inside the segment, or 100 head of cattle to be both inciute and iutsicie ine segment on 400 acres? in addition, are the 100 head only cows?

Segment 45 - Tract A - Item 4 Section A indicates the corporation's headquarters are outside the segment but in a town or city. If this is correct, then Sections B, D, E, and F, should have been completed. Please verify the answer to item 4, Section A and complete the questionnaire accordingly.

Segment 32, Tract 1 - Item 2 of Section A indicates question 4 should have been answered. It is the headquarters of Bronson, Inc. which will determine whether the operation is in a city or not. Enumerator mentioned that Mr. Bronson would be out of town until April 16. Possibly he can be contacted at this time to determine if his headquarters is in a city or town. If it is, complete the questionnaire from Section B forward. However, since the enumerator indicated in Section $C$ that the cattle, while they could range over the entire area, were not in the segment at the time of the original interview, no data should be entered in Section C.

Segment 23. Tract L - Question 3 of Section 2 indicates the individual lives outside the segment and in a town or city. However, Sections D, E, and $F$ are edited out. No address is given to indicate where the person in charge lives so it is difficult for us to determine whether 3 is correct or whether the editing was correct. Please verify or correct item 3 and complete balance of the questionnaire accordingly.

Segment 13. Tract B - Item 4 of Section A indicates the headquarters of the respondent is outside the segment but in a town or city. If this is correct, the questionnaire should be completed from Section B forward. Please verify question 4 and complete accordingly.
Segment 13, Tract A - Same comment as Segment 13 Tract B.
Sepment 13. Tract I - Same comment as Segment 13 Tract B.
Notice that some of these segments have Bartow as the address. A substantial portion of Bartow falls within the green area.

Sepment 13, Tract R - Same comment as Segment 13, Tract B.
Segment 13, Tract M - Same comment as Segment 13, Tract B.
Segment 13, Tract L - Same conment as Segment 13, Tract B.
Segment 13, Tract 0 - Same comment as Segment 13, Tract B.
Segment 13, Tract G - Same comment as Segment 13, Tract B.
Segment 13, Tract E - Same comment as Segment 13, Tract B.
Segment 13, Tract C - Item 3 Section A indicates the respondent lives outside the segment but in a town or city. However, Sections D, E, and F have been completed. Please verify question 3 Section $A$ and complete the questionnaire accordingly.

Segment 1, Tract F - This is a residential area with 260 acres which should be sub-sampled to yield 25 to 30 houses that could be screened for resident farm operators. This may be done by subdividing the area into small parts until a part is reached that has 20 to 30 houses, then contact each house within the sub-part. Note on the face of the questionnaires the subsampling fraction used. Complete a questionnaire for each farm operator found and
include the balance of the houses on a separate questionnaire.
Segment 35, Tracts A and B - Questionnaire B looks suspiciously like Mr. Harvey may be a manager for at least part of the Adams Ranch, Inc. So he may qualify as a resident farm operator, in which case the editing was in error. . Also, on page. 2, question 6 indicates 3490 acres are in the tract while on page 4, question 9(a) indicates about 2,000 acres are in the tract. The interview seems to have been taken rather poorly. Please verify if Mr. Harvey is the resident manager and complete accordingly, obtaining more exact information if possible.

Segment 41, Tract C - Please complete Section A, items. 2, 3, and 4, and complete the questionnaire accordingly.

Sepment 22. Tract C - Item 3 of Section A indicates the respondent lives. outside the segment but in a town or city. Please verify item 3 and complete questionnaire accordingly.

Segment 21, Tract E - The initial thought was that the respondent lived in a green area. However, notes on the questionnaire made by editor indicate that the respondent does not live in a green area but lives in Segment 45. I assume the data copied into the questionnaire came from Segment 45. However, this does not mean that Section C could have been obtained from Segment 45 information. If Mr. Wilson lives outside the segment and not in a city or town, then item 3 of Section A should be corrected. Please have Section C verified, as I note in Section $E$ the respondent does have some cattle and some of these cattle may be on the 310 acres he operates in Segment 21. Please verify.

Segment 15, Tract L - The address of Orlando would seem to be in the green area. Please verify and complete questionnaire accordingly.

Segment 15, Tract W - Item 4 Section A needs to be completed and the balance of the questionnaire filled out accordingly.

Segment 49, Tract B - The enumerator indicated this tract was nothing more than horse stables where horses were boarded. The owner of this operation should be contacted to determine if he lives in a city or town outside the segment as indicated in item 3 Section A. If Item 3 is correct, Sections D, E, and F should be completed. Please verify Section A and complete accordingly.

Segment 25, Tract B - It appears that there is some question as to who the operator of this tract actually is. It could be Mr. Davis or J. M. Blount, who is the caretaker. Could it be that Mr. Blount is the manager of this tract? Please clarify and complete questionnaire accordingly.

Segment 26, Tract A - This farm has land both inside and outside the segment. The 510 acres that the respondent owns is inside the segment and he shows all 220 cattle located inside the segment. In Section D he shows 1280 acres of pasture outside the 4 -county area. Are the 220 cattle all that the
respondent has and if so are they all on the 510 acres. Column 2 of Sections E and F should be completed also.

Segment 19. Tract J - It seems as though this farm is outside the segment but inside the green area, in which case it should be prorated into the segment. To do so we need to have item 9 Section B completed. Please verify question 9.

Segment 19, Tract V - Please verify that this individual lives outside the segment and not in a town or city marked in green. Also Items 6 and 11 of Section A do not agree.

Sepment 37, Tract B - Item 2 Section A indicates this respondent is an individual. However, the front of the questionnaire gives this respondent's address as 925 South Orange Avenue in Bartow, yet the ranch headquarters is at Cape Hays. According to the instructions, the residence of the respondent determines if he is a resident or not. From information given, it looks as if the respondent may live outside the segment but in a town or city. If so, Section B forward in the questionnaire should be completed. Also in Section C indicate if possible that the cattle numbers given (375) are in fact on the total 1500 acres or just on the 944 which are quoted in item 7 .

Segment 37, Tract A - item 4 Section A indicates the headquarters of the Waverly Growers Association is outside a segment but in a town or city. Please verify item 4 Section $A$ and complete the questionnaire accordingly.

Segment 17, Tract X - Please complete items 2, 3, and 4 Section $A$ and the balance of the questionnaire accordingly.

Segment 5, Tract D - Please complete item 9 of Section B.
Segment 5, Tract Q - Item 3 Section A indicates the respondent lives outside the segment but in a town or city. Also item 2 has not been checked. Please complete item 2, verify item 3, and complete the questionnaire accordingly.

Segment 20, Tract A - Item 4, Section A indicates the respondent lives outside the segment but in a town or city. Please verify item 4 Section $A$ and complete questionnaire accordingly.

Segment 18, Tract $F$ - Item 4 Section A indicates the headquarters of the respondent are outside the segment but in a town or city. Please verify item 4 and complete the questionnaire accordingly.
Segment 18, Tract $G$ - Are we sure that the headquarters of Minute Maid are not in a town or city? This may be a subdivision of Minute Maid. Whatever the case, please check this questionnaire and assure us that it is properly handled.

Segment 18, Tract I - Items 2, 3, and 4 of Section A have not been completed. Please complete these items and complete the questionnaire accordingly. Item 6 does not have any acres entered, as does Section G. We need an acreage entry for item 7 .

Segment 16, Tract A - are we certain that the headquarters of Minute Maid are located outside a city or town? Will you please verify this and complete the questionnaire accordingly.

Segment 47. Tract L - It appears that this tract is woefully short on information. The questionnaires should be checked out a little more completely.

Segment 48 Tract B - This is a commercial tract of 6.1 acres. However, the plants within this area must be contacted to determine if they have any agricultural activities and then the questionnaire completed accordingly.
Segment 48, Tract E - A 100-acre commercial and residential area. This tract should be broken into comercial and residential areas and subsampled accordingly. The residential area should be further broken down into areas of 25-30 houses, and then contact all houses in the sub-sample. The commercial part should also be broken down and sub-sampled. If subsampled, be sure to note the subsampling fraction on the face sheet of the questionnaires.

Segment 7, B Tract - The note on the front says "Larramore Trailer Park near Highway 92 counted about 30 head." I am not sure what the 30 head referred to. Was this people, trailers, or cattle? Also, who is the operator of the Trailer Park? We should determine who the operator is and complete the questionnaire accordingly.

Segment 7, Tract G - Items 13 and 14 of Section D must be completed so that this tract can be classified as a resident farm operator or as a resident non-farm operator.

Segment 7. Tract L - I would think it might be well to try to contact this farm again because some of the information given we cannot be very sure of $D, E$, and $F$. Obtain another interview if possible.
Segment 7. Tract J - the questionnaire says residential, but there is no indication as to whether anyone in the 35 acres was contacted. If this residential area was not screened, it should be all sub-sampled so that. we have approximately 15 or 20 homes to be contacted. If subsampled, please indicate the subsampling fraction on the face sheet of the questionnaire.

Segment 3, Tract F - In this case the Tract of 235 acres of which 40 to 50 is homes and the rest is waste, we should try to divide the houses into about two parts and contact all the houses in one of the sub-sampled parts. In addition, we need to find out who owns the waste land; and obtain a schedule for the owner of the land. He may be a farm operator.

Segment 42, Tract A - Note this was a refusal. However, the enumerator only interviewed Mrs. Dewey Fussell. Possibly it would be worth the effort, since this is a large cattle operation and will affect our survey results, to contact Mr. Dewey Fussell and try to obtain the information. Apparently Mr. Fussell is the manager and should report only that part of the operation which he manages. Possibly we ought to verify whether Dr. King or Mr. Fussell is the operator.

Segment 11, Tract B - Note says unoccupied - 4.5 acres no agriculture. Probably should check this tract to find out who the operator is and complete the interview accordingly.

Sepment 11, Tract Y - Sections D, E, and F should be completed on this questionnaire. From the information given we have no idea if this respondent's entire operation lies inside the segment and if the operation
qualifies as a farm.

Segment 11, Tract ZZ - Items 2, 3, and 4 Section A need to be completed and the questionnaire completed accordingly.

Segment 11, Tract XX - the 80-acre tract needs to be sub-sampled into plots of 15-20 homes and a portion selected to be screened. Please indicate the subsampling procedure on the face of the questionnaires.
Sepment 11, Tracts T and U-This looks like a duplication of tracts. Please verify. If so, destroy the incorrect schedule.
Segment 4, Tract K - Item 2, Section A indicates this is an individual who has a city address. Please verify if this person lives in a green area and complete the questionnaire accordingly. Item 11 of this questionnaire indicates the person operates 27 acres in the tract. Tract 109 has this person entered as the operator under $9 B$ of Section A for 12 acres, and tract 18, item 98 Section A has this person entered as the operator for 7 acres. Are these two operations included in the report of Tract 11?
Segment 4, Tract 133 - Please verify section $G$ Agricultural Services. In Section $\mathrm{F}, 8$ workers were reported but none of these workers appears in
Section f .

Segment 4, Tract 127 - Notes on this questionnaire indicate entries should be the same as Number 24. Tract No. 24 is a resident but not a farm operator. Please check out the reference to No. 24 .
Segment 4, Tract 121 - Section A gives the operator as a man in military service. The person who cares for this tract should be contacted to see if he might be classified as the operator and a questionnaire filled out accordingly.

Sepment 4, Tract 120 - Section G Agricultural Services. This is a citrus nursery and item 4 was answered 'yes' but no workers were entered in item 5. Please check this out and make corrections as necessary.

Segment 4, Tract 35 - The questionnaire appears to be filled out satisfactorily, but nothing was entered in the tract operator items.

Segment 4, Tract 36 - The tract operator appears to be in a city. Check this to see if he is in a green area and complete questionnaire accordingly.

Segment 4. Tract 13 - Were the 40 cattle recorded in item 8, Section E included in items 1 through 7 of that section? Verify and complete questionnaire accordingly.

Segment 14, Tract F - Item 4, Section A indicates the respondent lives outside the segment but in a town or city. Please verify item 4 Section A and complete questionnaire accordingly.

Segment 14, Tract E - Same comment as Segment 14, Tract F.
Segment 14, Tract B - Same corment as Segment 14, Tract F.
Segment 10, Tract N - Item 3 Section A has not been completed. Please complete Item 3 of Section $A$ and the balance of the questionnaire accordingly.

Segment 10, Tract L - Item 4 of Section A needs to be completed and the questionnaire filled out accordingly.

Segment 10, Tract H - Apparently this tract is operated by Minute Maid, Inc. Are we sure that the headquarters of Minute Maid are outside the segment and not in a tow or city? Please verify item 4 of Section A and complete the questionnaire accordingly.

Segment 22, Tract A - Please complete items 8 and 11 in Section A.

## APRIL 1968 AGRICULTURAL SURVEY

## California and Florida

| State Bistrict Segment |  |
| :--- | :--- | :--- |
|  |  |

County: $\qquad$ Segment Number: $\qquad$ Tract Code $\qquad$
A. Does the persion in charge live or is the headquarters

Inside the Segment? ( ) -- Begin Interview with Section B
Outside the Segment? ( ) -- Begin Interview with Section A

## Erumerator Notes and Appointments:

$\ldots$

Name of the person
interviewed $\qquad$
A.

| OFFICE USE <br> For Tract Operators living in a town or city |  |  |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { Item } 3(8) \\ & \text { Col. } 1 \\ & \text { Acres } \end{aligned}$ | Item A-11 or B-9 Acres | Adj. Factor |
| (1) | (2) | (3) |
| $\begin{aligned} & \text { Item D (8) } \\ & \text { Col. } 2 \\ & \text { Acres } \end{aligned}$ | $\begin{gathered} \text { Item A-11 } \\ \text { or B-9 } \\ \text { Acres } \\ \hline \end{gathered}$ | Ad. Factor |
| (1) | (2) | (3) |


| Enumerator Record of Interview |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Visited |  |  |
| Visit | Date | By: | 30 gin | End |
| lst |  |  |  |  |
| 2nd |  |  |  |  |
| 3rd |  |  |  |  |
| Enumerator's Signature |  |  |  |  |
|  |  |  |  | $\begin{aligned} & \text { isor's } \\ & \text { are } \end{aligned}$ |

1. What person or firm is in charge of this land inside these red lines?

Draw off on the photograph the tract thig
person or firm operates in the segment
2. Is thris (name)
an:
a. Individual ( ) -- (Interview this person)
b. partnership ( ) -- Who is the Senior Partner?
c. corporation ()
d. co-operative ()
e. other ( ) -- Specify
(Name of institution, school, etc.)
If a or b was checked in Item 2:
3. Where does this person live?
() In the segment. Go to Section B and interview this person
() Outside the segment but in a town or city. Hold for supervisor.
( ) Outside the segment and not in a town or city.
Enter address in Itom 5 and complete Sections $A, C$, and $G$
If c, d, or e was checked in Item 2:
4. Where is the office (headquarters) of this firm located?
() In the segment
() Outside the segment but in a town or city. Hold for Supervisor
( ) Outside the segment and not in a town or city. Continue and complete only Sections $A, C$, and $G 7$
5. What is the name of the person in charge of this firm?

Name
(Interview this person)
Address $\qquad$ Telephone $\qquad$ .
6. How many acres do you have in this tract? $\qquad$
7. Are there any occupied dwellings on the acres you manage in this tract? YRS ( ).- Draw off these houses on the photo and Interview the
head of household with a separate questionnaire. HO ()
8. Are there any fields in this tract operated by someone else such as fields rented for cash, share of the crop, or supervised by a hired manager or management firm?
() YES
( ) No Skip to Item 11
9. Is the operator of these fields a:
( ) cash renter $\begin{aligned} & \text { Mark off these tracts In bIue, assign the } \\ & \text { next tract code and complete another } \\ & \text { questionnaire. Skip to Item } 96 .\end{aligned}$
( ) hired manager
) caretaker service Go to 9a and 9b.
( ) management service
( ) other
Specify
9a. Does this make the day-to-day
decisions about the production and marketing
of the agricultural products?

YES ( ) NO ( ) | Probe to identify person who |
| :--- |
| makes day-to-day decisions |

9b. What is the name of the (person or firm)
Address
10. How many acres are rented out or managed by (Item 9 b name) $\qquad$

> Draw off the area in the tract rented
> or managed by others in blue.
11. Then the land you operate in this tract is: (Item 6-10 = 11)
a. Of the Item 11 $\qquad$ acres, how many are rangeland and pasture? $\qquad$
b. How many of the remaining acres are cropland?...................
c. If Ila and $b$ are both zeros: What is the land use at the present time?.....
12. Does (person-in-charge -- firm -- institution) now or at any time in 1967:
a. Operate a famn or ranch?......................................... ( ) NO ( )
b. Grow any crops or have any land grazed by
livestock? (Exclude home garden)........................IES ( ) NO ( )
c. Have any livestock or poultry?............................... ( ) NO ( )
d. Sell any agricultural products?...........................YES ( ) NO ( ) (Including any government program payments)


1. Who is the head of this household?

Name
(Interview this person if possible)
Address $\qquad$ Telephone $\qquad$
2. Do you own any land inside these red lines? ( ) YES

- ( ) ${ }^{\mathrm{N} O}$

3. Do you rent any land from others in these red lines? ( ) YES
( ) NO
4. Do you manage any land in these red lines? ( ) YES
( ) NO
Draw off the tract for the land, in Items 2, 3 and 4
answered "YES", in blue on the photograph. If all NO's,
draw off house and lot and call it one tract.
5. Is any of this land operated by a corporation or cooperative?

NO ( ) Continue
YES (6) Name $\qquad$
(Interview this firm for this land. Draw off separately on photo.)
6. Are there any fields in this tract operated by someone else such as fields rented for cash, share of the crop, or supervised by a hired manager or management firm.

YES () Ask Item 7
NO ( ) Probe and then skip to Item 8
7. Is the operator of these fields a:
( ) cash renter Mark off these tracts in blue, assign another
( ) share renter tract code and complete another questionnaire Skip to Item 7b.
( ) hired manager
( ) caretaker service
( ) management service
Go to 7a and 7b
( ) other
Specify
7a. Does this $\qquad$ make the day-to-day decisions about the production and marketing of the agricultural products?

YES ( ) NO ( )
Probe to identify person who
makes day-to-day decisions
7b. What is the name of the (person or firm) $\qquad$
8. Does anyone else living in this house operate a farm or work any land?
( ) NO
( ) YES (Complete a questionnaire for this person)
9. How many acres are inside these tract boundaries?.........
a. Of'these__acres, how many are rangeland and pasture? $\qquad$
b. How many of the remaining acres are cropland?.......
c. If zeros in 9a and b: What is the land use at the present time? $\qquad$
10. Do you (person in charge) now or any time in 1967:
a. Operate a farm or ranch?..............................YES ( ) NO ( )
b. Grow any crops or have any land grazed by ....YES ( ) NO ( )
c. Have any Iivestock or poultry?....................YES ( ) NO ()
d. Sell any agricultural products?
(Including any government program payments)..YES ( ) NO ()


## SECTION C. CATTLE AND CALVES IN TRACT

1. Are there any CATTLE or CALVES
inside these tract boundaries now?
If NO ( ), Go to Enumerator Instructions after Item 7.
If YES ( ), Continue, including all cattle and calves regardless of ownership.
2. Of the CATTLE and CALVES on this tract now, how many are:
a. COWS and HEIFERS two years old and over? (Include milk cows and beef cows)

b. HEIFERS one year old and under two, being raised for milk cows or beef cows?.

c. Other CATILE and CALVES on this tract now, (Include all steers, bulls, heifers not included above and calves born this year still on the tract)
3. Then the total CATTLE and CALVES of all ages on this tract now is (the sum of Items 2a through $2 \mathrm{c}=3$ )


Ask Item 4 if Item 2a has a positive entry
4. How many milk cows, both dry and in milk are on this tract now? (Do not include heifers that have not freshened)

5. How many of the (Item 3) Cattle and Calves have free access to land outside these tract boundaries?


## If "None" go to enumerator instruction at bottom of this page

6. How many acres both inside and outside the segment, do these (Item 5) ___ cattle have free access to?

7. Of these (Item 6) $\qquad$ acres, how many are inside the segment?
$\left.\begin{array}{|lll|}\hline & \text { (1) } & \text { If operator lives inside segment, complete } \\ \text { Enumerator } & \text { (2) } & \text { If the operator lives within a city } \\ \text { or }\end{array} \quad \begin{array}{ll}\text { Stratum, complete all Sections. }\end{array}\right\}$
8. What is the total number of cattle on the (Item 6) now 1/?

NOTES OR COMMENTS:

Column 1
Acres in entire operation regardless of where located.

1. How many acres do you own?

2. How many of the (Item 1)
acres that you OWN are SEPARATE PARCETS of land which are permanently withdrawn from agricultural uses?
(Include non-agricultural parcels such as factory sites, lumber mills, forest land not pastured, etc.)
3. Do you RENT any land FROM OTHERS?

Include all land regardless of where located. Include cropland, pastureland and other land rented for cash, standing rent, or a share of the crop.

If YES ( ) GO to Item 4.
If NO ( ) GO to Item 5.
4. How many acres do you RENT FROM OTHERS?

5. How many acres do you (or firm) now MANAGE FOR OTHERS?

 (A manager makes the day-to-day decisions about the production and marketing of the agricultural products.)
6. How many acres do you now RENT TO OTHERS for cash or share of crop?

7. How many acres are managed for you by a person or firm?

8. Then the total land in your entire farm operation is: (Items $1-2+4+5-6-7=8$ ) acres?

9. Do you own or rent any other land not included in Item 8 on which you have livestock?

If YES ( ) Include this land in Items 1 or 4 and 8.
If NO ( ) Continue.
If Item 8 is "zero", CONCLUDE INTERVIEN7
Column 1
10. Of the Item 8 $\qquad$ acres, how many are rangeland and pasture?
 Column 2
$\qquad$
$\square$
11. How many of the remaining acres are cropland? $\qquad$
$\square$
CHECK: Item 10 plus Item 11 mist be less than or equal to Item 8.7
12. Are all of the
(Item 8 acres) from Colum 1 located in these countieg? (Show respondent list of counties.)

If NO ( ) Ask Items 1 - 11 for the farming operation located in these counties and enter in Columm 2 and then go to to Item 13.
If YES ( ) Skip Column 2 and go to Item 13.
13. Was the totel value of all crops, livestock and livestock products sold from your farm in 1967, plus Government Farm Program payments received in 1967:

CHECK ONLY ONE
a. $\$ 250$ or more................. ( )
b. $\$ 50$ to $\$ 249 . . . . . . . . . . . .$. . ( )
c. Less than \$50............... ()
14. What two crops had the largest planted acreage in 1967 on your farm?

| Crop or Use | Acres |
| :--- | :--- |
|  |  |
|  |  | principal agricultural uses-hay, pasture conservation reserve, feed grain program.

1. Are there any CATTLE or CALVES on the (Item D-8) acres now?
NO ( ), go to Item 7 of this page YES ( ), continue
2. Include all CATTLE and CALVES regardless of ownership on these

| Complete colum I frirst. Then complete |
| :--- |
| column 2 if all land operated by person- |
| in-charge is NoT located in the speci- |
| fied counties. | fied counties.

Column I All Cattle and Calves on the Item D-8, Column 1 __ acres.

Column 2
AII Cattle and Calves on the Item D-8 Column 2 acres. (On land in specified counties) (Item D-8) $\qquad$ acres now. How many are:
a. COWS and HETFERS two years old and over? (Include milk cows and beef cows?

b. HEIFERS one year old and under two, being raised for milk cows or beef cows?

c. Other CATTLE and CAIVES on these (Item D-8) acres now? (Include steers, bulls, heifers under 1 year old and calves born this year still on the farm)? .

3. Then the total number of CATTLE and CALV̇ES of all ages on these (Item D-8) acres now is (Sum of 2a
through $2 c=3$ )


Ask Item 4 if Item 2a has a positive entry
4. How many MILK COWS both dry and in milk are on these (Item D-8) acres? Do not include heifers that have not freshened) $\square .0$ $\square$
5. In addition to the Item 3 CATTLE and CAIVES, do you have any other CATTLE or CALVES now on public grazing lands or grazing on private grazing land rent free?
YES ( ) YES ( )
NO $($,
of this page.
6. How many additional CATTLE and CALVES not included above do you now have on public grazing land or on rent free private grazing land?


Include Item 6 GATTLE and CALVES in Items 2, 3 and 4 above. Do not erase! 7
7. Does anyone else have any CATTLE or CALVES on the
(Item $\overline{\mathrm{D}-8)}$ YES ( ) YES ( )
acres that have not been included before?
NO ( ) NO ( ) If YES, ask Item 8.7 If NO, go to Section F, Farm Labor
8. How many additional CATTLE and CALVES owned by someone else are on these (Item D-8) acres now? $\square$


Include Item 8 CATTLE and CALVES in Items 2, 3 and 4 above. Do not erase!

Column 1

| All workers on the |
| :--- |
| Item D-8, Column 1 |
| acres. (On |
| all land operated |
| in State) |
| YES $(\quad$ NO $()$, |

Column 2
All workers on the Item D-8, Column 2 acres. (On land in specified counties)
YES ( ) NO ( )
2. How many UNPAID FAMILY MEMBERS did at least 15 hours of agricultural work on these acres during the week of March 24-30?

(Include partner, if any, and members of partner's family)
3. Did anyone do agricultural work for pay on these acres during the week of March 24-30? (Include paid family members) YES ( ) NO ( ) YES ( ) NO ( ) If NO, go to Item 87
4. How many workers were hired and paid by you (the farm operator) to do work on these acres during the week of March 24-30? ...................... . . No.

5. Were any workers hired and paid by a crew leader or labor contractor to do work on these acres during the week of March 24-30?

NO ( ) , If YES ( ) how many? ... No.

6. Then $\qquad$ workers did agricultural work on'these acres during the week of March 24-30. Is that correct? (Items $4+5=6$ ) $\qquad$
$\square$
$\square$
7. Of the (Item 6) workers, how many were regular workers (expected to work more than 6 months on these acres)?

8. Was any type of agricultural work or service performed for your farm on a fee or contract basis during the week of March 24-30?
YES ( ) Continue NO ( ) Go to Section G
9. What type of work or service was performed:
10. What was the name of the firm that performed this work or services

1. Do you operate any type of business other
than a farm?
If YES ( ) , Continue with Question 2.
If NO ( ), Conclude.interview.
2. What type of operations are performed ENUMERATOR: Compare the by this firm? (List below each operation) operations listed in Column (2) with agricultural services listed on Pagel3. Ther check below whether the listed operation is to be included in this survey.

|  | (List) | YES |
| :--- | :---: | :---: |
|  |  | NO |
|  |  |  |
|  |  |  |

4. For (operations checked YES), did you (your firm) employ workers during the week of March 24-30?

If IES ( ) , Continue.
If NO ( ), Conclude interview.
5. How many workers were on your payroll for these operations for week of March 24-30? $\square$

> ENUMERATOR: Account for all workers on the payroll for this
> firm who were connected with operations where a YES has been
> checked in Item 3 .
6. Were any of these (Item 5) ___ workers included in Section $F$, Item 4?

YES ( ) NO ( )
If YES, Explain: $\qquad$
7. Of the (Item 5) workers, how many were regular workers (expected to work more than 6 months for this operation? . Number $\square$

THIS INCLUDES EBTABLIBHMENTS PRIMARILY ENGAGED IN PERFORMING AGRIGULTURAL, ANIMAL HUBBANDRY, AND HORTICULTURAL BERVICES ON A FEE OR CONTRACT BABIB.

COTTON GINNING AND COMPRESSIMG

Include all cotton ginning and warehousing combined. Also ginning and compressing gotton.
GRIST MILLS, INCLUOING CUSTOM FLOUR MILLS

INCLUDE ONLY GRAINE THAT ARE CUSTOM GROUND OR FLOUR, FEED OR GRAIN MILLEO ON A CUBTOM BABIE FOR FARMB.
DO NOT INCLUDE OPERATIONS OF FLOUR, FEED, OR GRAIN MILLED AS A MANUFACTURING OR RETATL OFERATTON.

CORN SHELLING, HAY BALING, AND THRESHING SERVICES

INCLUDE CORN SHELLING, HAY BALING, AND THRESHING DONE ON A CONTRACT OR CUSTOM BABIS FOR FARMB. THIB CUSTOM OR CONTRACT WORK MAY INCLUÓE BOTH MACHINERY AND LABOR IN THE FEE.

CONTRACT SORTING, GRADING, AND PACKING OF FRUITS AND VEGETABLES FOR OTHERS
THIS COVERS ESTABLISHMENTS PAIMARILY ENGAGED IN PACKING AND SHIPPING FRUITS ANO VEGETABLEE ON A CONTRACT BASIS FOR THE GROWER. SUCH ACTIVITIEB MAY INCLUDE CONTRACT PICKING, GRADING, SORTING ANO OTHER OPERATIONS PREPARATORY TO PACKING AND SHIPPING. THE FRUIT OR VEGETABLEB ARE NOT PUPCHABEO BY THEBE E8TABLIBHMENTB BUT 18 MARKETED BY THE PERSON BY WHOM THIS CONTRACT 18 PERFORMED. THOBE E8TABLIBHMENTB WHICH PURCHABE THE FRUIT OR VEGETABLES ANO PACK AND GHIP ON THEIR OWN ACCOUNT BHOULD NOT BE INCLUOED IN THE BURVEY COVERAGE.

INCLUDE THE FOLLOWING IF ON A CONTRACT BABI8:

```
Packaging fruits and vegetable - contract
PACKING AND SHIPPING FRUITS AND VEGETABLES - CONTRACT
POTATO CURING - CONTRACT
SORTING, GRADING AND PACKING - CONTRACT
TREE NUT (EDIBLES PICKING, HULLING, AND 8HELLING - CONTRACT
```

AGRICULTURAL SERVICES, NOT ELSEWHERE CLASSIFIED

INCLUDE ESTABL IBHMENTS PRIMARILY ENGAGED IN PERFORMING ON A CONTRACT BAEIB, AGRICULTUPAL BERVICES NOT ELBEWHERE CLASEIFIED, SUCH AS GROP DUETING, FRUIT PICKING OR THINNING, GRAIN GLEANINE, HARVESTING AND PLOWINE. EXAMPLES ARE LISTED BELOW:

CHEMICAL TREATMENT OF SOIL - CONTRACT
CITRUS GROVE CURTIVATION - CONTRACT
CROP DUSTING OR EPRAYING - CONTRACT
FARM LABOR CONTRACTORS
FARM MANAGEMENT BERVICES - CONTRACT
GRAIN AND EEED CLEANING - 'CONTRACT
LIME HAULING AND BPREAOING - CONTRACT
PICKING OF EDIBLE FRUITS, NUTS, AND VEGETABLEB - CONTRACT
PLOWING ANO CULTIVATING - CONTRACT
PRE-COOLING OF FRUITB AND VEGETABLES - NOT IN CONNECTION WITH TRANBPORTATION
RICE ORYING - CONTRACT
WEED CONTROL ON A CONTRACT OR FEE BABIS

POULTRY HATCHERIES
ESTABLIEHMENTE PRIMARILY ENGAGED IM HATCHING POULTRY FOR THEIR OWN POULTRY OPERATION OR ON A CONTRACT BABIB FOR ANOTHER POULTRY RAIBER. THIS IAOLUDED GHICKENB, TURKEYB, AND OTMER FOWL. EXCLUDE FIBH AND FROG HATCHERIEE.

## ANIMAL HUSBANORY SERVICES

I NCLUDE EBTABLIBHMENTB PRIMARILY ENGAGEO IN PERFORMING ON A CONTRACT OR FEE GAEIS ANIMAL HUEBANDRY BERVIGEE, BUCH AB ANIMAL BREEDING, CATTLE FEED LOT OPERATIONE, VETERINARIAN BERVICEE, BOARDINE AND BREEDING OF LIVEETOCK.

## HORTICULTURAL SERVICES

ESTABLIBHMENTS PRIMARILY ENGAGED IN PERFORMING HORTICULTURAL BERVICEB, BUCH AB CEMETERY UPKEEP, LANOSCAPE GARDENING, AND TREE PLANTING. EBTABLIBHMENTB WHICH COMBINE THE GROWING OF PLANTS VITH LANOBCAPE QARDENINE OR LANDBCÁPE CONTRACTING ARE CLABSIFIED AS FARM OPERATORE.
AREORIST SERVICES
BERMUOA SPRIGGING SERVICE
CEMETERY UPKEEP, INDEPENDENT
GAROEN MAINTENANCE
GARDEN PLANNING
HORTICULTURAL AOVIBORY OR COUNBELING BERVICES
LANOSCAPE ARCHITECTB
LANOSCAPE CONTRACTING
LANDSGAPE GARDENING
LAWN MOWING BERVICE
LAWN BPRAYING BERVICE
MOWING HIGHWAY CENTER STRIPE AND EDGEE
TREE PLANTING, PRUNINE, BRACINE, BPRAYINE, \& SUREERY
TREE TRIMMING FOR PUBLIC UTILITY LINEE

## INTERVIEWERS MANUAL

1968 APRIL SPECIAL SURVEY - Florida and California

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SECTION C - Cattle and Calves in Tract ..... 17
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| A. | SEGMENT - | Small areas of land into which the total land area of the designated counties has been divided. |
| :---: | :---: | :---: |
| B. | SAMPLE - | The small areas of land or segments that have been selected at random to be included in this Survey. Each area or segment to be included has been outlined in red on the county highway maps and aerial photographs which you are supplied. Each segment had a chance to be selected; therefore, each area to be visited represents many similar areas. |
| C. | TRACT - | The area of land inside the segment which is under one management. Each tract will be outlined in blue and assigned a code letter on the aerial photograph. |
| D. | FARM-- | An area or areas of land both inside and outside of the segment boundaries on which there were crops, livestock, poultry, or some sales of agricultural products at some time in 1967 or 1968. |
| E. | SCREENING - | The process of outlining each tract on the aerial photograph, asaigning this tract a code, determining who is responsible for the management of the tract, and asking several questions to determine if this person 1) lives inside the segment, or outside the segment but in a city, or outside the segment and not in the city, 2) qualifies as the operator of an agricultural tract, and 3) operates a farm either inside or outside the segment boundaries. |
| F. | FIELD - | A continuous area of land inside a tract which is devoted to one crop or land use. |
| G. | MANAGEMENT - | A person or firm making the day-to-day decisions about the production and marketing of the agricultural products would be the management. |

III. PROCEDURE FOR ENUMERATING

## A. Organize Your Materials

The following materials will be given to you at the State training school:

1. State Highway map.
2. County Highway maps showing segment locations in red and quadrangle maps with NOC areas outlined in green.
3. Aerial photographs with segment areas outlined in red ink.
4. Masonite board or substitute to hold photos (including large cifs or rubber bands for holding photo to the board).
5. Clipboard to hold questionnaire or a large clip to hold questionnaire to photo board.
6. A small ruler for measuring distances on the photo and map.
7. Pencils-red and blue lead for marking on photo and black lead for recording information on questionnaires.
8. Segment working kit for each segment. This kit will consist of a large envelope with the State Statistician's address on the front and the segment number and county recorded on the back. Several questionnaires are included in each envelope.
9. One kit containing extra questionnaires to be added to the segment working kits as needed.
10. One kit containing all necessary adninistrative forms.
a. Four copies of CEF-201.
b. Motor Vehicle Accident Kit, Form OMS-92 containing:
11. Forms SF-91, AD-278 and SF-94 (2 copies)
12. Form CA-1, Notice of Injury
13. Survey Enumerators Handbook
14. Identification Card
B. Plan Your Course: of Action

Before beginning your field enumeration, mark on a State highway map the location of your home and the location of all segments you are to enumerate. Use this map to plan your daily route of travel. This will minimize your duplication of mileage.
C. Drive to Segment

Using the State highway map, county map and aerial photo, drive to the segment.

Upon arriving at the segment boundary, orient your county highway map and photo with ground features. Identify your location on the photo from ground landmarks such as roads, ditches, streme, treee, and buildings.

Drive around the segment, if possible, to verify the boundaries of the segment with features shown on the aerial photo.

Become familiar with the segment boundaries and with the landmarks as these will be helpful in talking with the farmer about the boundaries of the land he operates.

Drive to a residence located inside the segment and begin interview on page 4. For area of land within the segment boundaries having no occupied residence, determine who operates the land and begin interview on page 2.

## Start the Interview

Introduce yourself and briefly tell the respondent why you are there.

Ask the respondent to show you on the photo the boundaries of land he now operates inside the segment. On the photo, draw in tract boundaries with a
blue pencil and assign a letter code for identification. (A tract is an area of land inside this segment which is under control of one management.)

If an operator has two or more separate parcels of land in the segment (in other words, his land is separated by pieces of land operated by other people in the segment), consider all separate parcels as one tract and assign only one letter to the operator. Print the same letter in each separate part of the operator's tract on the photo.

If the respondent is well informed, ask about other tract operators and where they can be contacted. Using the photo, ask him who operates the land adjoining his farm. If some adjoining land inside the segment is not farmland, ask who the manager is. It must be accounted for on your photo and a Questionnaire completed.

Continue to ask about other tract operators in the segment. Find out where they live so you can contact them. You will find that some respondents can tell you about every farm operator and all farm boundaries in the segment, while others can provide very little information about other farms.
E. Call Back Procedures.

It is important that you attempt to interview the operator of each tract. Generally you will be able to contact the operator and complete the interview on your first visit, but occasionally you may need to make several visits. If after several visits you have been unable to complete the interview, check with your supervisor.

## SECTION A: Land With No Occupied House in Segment

This section will be used for each tract of land within the segment having No Occupled House on the tract. (A tract is an area of land inside the segment which is under one management.)

Item 1 - What person or firm is in charge of this land inside these red lines? Enter the name of the person or firm in charge of this tract of land having no occupied house. On the photo, draw in the boundaries of this tract in Blue.

Note: Enumeration Instruction Box following item 1.

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Item 2 - Is this (name)
an:
```

a. Individual ( ) -- (Interview this person)
b. Partnership ( ) -- Who is the Senior Partner
c. Corporation ()
d. Cooperative ( )
e. Other ( ) Specify
(Name of institution, school, etc.)

This question is to make sure that the management of this tract is properly classified, and that the information obtained in the interview is from the best informed person or persons.

The following definitions will be used to properly classify the management of the tract:

## DEFINITIONS



Item 3 - Where does this person live?
( ) In the segment.

Go to Section $B$ and interview this person/
( ) Outside the segment but in a town or city.

> Hold for supervisor/
( ) Outside the segment and not in a town or city. Enter address in Item 5 and complete Sections A, C andG

This question is to determine which sections of the questionnaire will be completed for this tract. Each answer has "Enumerator Instructions" in the enclosed block directly under the answers.

In the Segment means within the area outlined in red on the area photo.

Outside the Segment but in a Town or City means outside the area outinned in red on the area photo, but within the area outiined in green on the quadrangle map.

Outside the Segment and 筧ot in a Town or City means outside of both the outlined red and green areas on the area photo, county Highway map; and Quadrangle map.

If $c, d$, or $e$ was checked in item 2:

Item 4-Where is the office (headquarters) of this firm located?
( ) In the segment.

## Continue intervien/

( ) Outside the segment but in a town or city.

Hold for supervisor/
( ) Outside the segment and not in a town or city.

$$
\text { Peontinue and complete only Seetions } A, C \text { and } G]
$$

This question is to determine the location of the headquarters of this firm. The headquarters being the administrative center of an enterprise. In the more complex operations having several Administrative Headquarters, payroll locations should be the determining factor.

Item 5 - What is the name of the person in charge of this firm?

Name
(Interview this person)

Address $\qquad$ Telephone $\qquad$

Enter the name, address, and telephone number of this person-in-charge of this firm: This could be the owner, resident manager, etc.

The name obtained in item 5 should be the person contacted to interview or to obtain permission to interview some other employee of the firm.

Item 6 - How many acres do you have in this tract?

Show the respondent the aerial photograph and outline in blue all land within the segment boundaries (red outline) operated by this firm. Enter the total, acres for this tract in the corresponding answer box.

Item 7 - Are there any occupied dwellings on the acres you manage in this tract?

YES ()

NO ( )

If respondent answers yes, mark off this dweling in blue pencil on the photo as a separate tract, assign the next tract code to it and complete another questionnaire for the head of this household.

Item 8 - Are there any fields in this tract operated by someone else? . Fields rented for cash, share of the crops, or supervised by a hired manager or management fi (m)

YES (.)

NO ( ) (skip to item 11)

This question is to make sure that a separate tract code is assigned to each person or management that operates any land in the segment. If yes is checked, continue to item 9. If no is checked, skip to item

Item 9 - Is the operation of these fields by a:
() cash renter
( ) share renter
Mark off these tracts in blue, assign the next tract code and complete another questionnaire. (skip to item 10)

Ma. Does this $\qquad$ make the day-to-day decisions about the production and marketing of the agricultural products?
( ) caretaker service
NO ( ) Probe and skip to item 10.
$\therefore$ ( $\therefore$ ) management service
YES ( Mark off this tract in blue and complete another questionnaire.
( ) other $\qquad$

9 b . What 18 the name of the (person or firm) $\qquad$

Address $\qquad$

Items 9, Ya, and $9 b$ are designed to determine the person-in-charge of the tract corresponding to a yes checked in item 8.

Not
If ga 'is checked "No", ask a few probing questions to verify who makes the day-to-day decisions for this enterprise.

Item 10 - How many acres are rented out or managed by (item 9 name)?

Draw off the area in the tract rented or managed by others (yes in item 9a)

Enter the total acres rented out or managed by the (item 9 name). These acres should be outlined in blue on the aerial photograph and another tract code assigned and questionnaire completed.

Item 11 - Then the land you operate in this tract is: (Item 6-10=item 11)
a. Of the item 11 acres, how many are range land and pasture? $\qquad$
b. How many of the remaining acres are crop land? $\qquad$
c. If Ila and $b$ are both zeros: What is the land use at the present time? $\qquad$

Record in 11a, the acres both wooded and cleared that are used as pasture and rangeland. This should include permanent grazing land or cropland used only for grazing. Do Not include cropland that was or will be harvested and then used for range or pasture.

Record in 11b the acres used for cropland. Cropland ineludes any acreage from which crops were or will be harvested during 1968. Include wild and tame hayland and the acres of crops that were intended for harvest but were abandoned. Record the acres only once if two or more crops were or will be harvested from the same land.

INCLUDE the following cropland for harvest:-
a) Acres on which crops were or will be planted for harvest in 1968. Include land planted to crops in the fall of 1967 for harvest in 1968.
b) Include acres from which hay, including wild hay, was or will be cut in 1968.
c) Acres from which a crop was or will be harvested even if the crop was coneidered ( or expected to be) a partial failure and the yield was abnormally low.
d) Acres in bearing and non-bearing fruit, muts and grapes. Include acres on which the 1968 blossoms but not the trees were killed by a freeze.

Item llc will be asked only if lla and b are both zeros. Enter a brief description of land use such as residence, poultry house, packing house, etc::

Item 12 - Does (person-in-charge --firm -- institution) now or at any time in 1967:
a. Operate a farm or ranch? YES ( ) NO (.)
b. Grow any crops or have any land grazed by livestock? (exclude home garden) YES ( ) NO ()
c. Have any livestock or poultry YES ( ${ }^{( }$) No ()
d: Sell any agricultural products?
$\because: \because$ (including any govermment program paypents) $\cdots \cdots$ YES ( ) ................ ()

Instructions for item 12: After first yes is checked for any of the items $a ; b, c$, or $d$, continue.interview with Section $-G$. If all ite asd are answered no, go to Section G

This question is designed to determine if the management of this tract is a farm operator. After the first "yes" is check in a-d, continue interview with. Section $C$.

## Iequa2a; Operate afarm or ranch?

This farm or ranch can be either inside or outside the segment boundaries. Check 'YES" without asking the question if it is obvious that the managenent operates: farm: I\% YOU CHECK."TEs" IN item 12a, skip to Section C.

Item 12b - Grow any cròps or have any land grased by livestock?
(Exclude home garden)

Check "YES" if the respondent grew any crops or grazed pasture in 1967 or 1968. Includa crops to be produced or pasture, to be grazed from now through December 31. $\because$-These; crops or pasture can be either inside or outside the segment boundaries. To qualify as growing a crop, the respondent must have control of the crop. That is, he must make the decisions on planting, caring for and harvesting the crop, etc. Do not include the home garden: Check, "YBS"-without asking the question If it is obvious' that the persom in charge of the tract has control of erops grown or pasture grazed. If "YES" is checked, skip to Section C.

