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Committee Report on Discussion Held on the Desirability
of Operating and Maintaining Beef Projects on W.R.A. Centers

February 24, 1944

Consensus of opinion on desirability of producing project fed beef for the use on center subsistence brought out the fact that due to physical existing conditions at the centers, only four centers have been selected for beef production. The four selected centers are as follows:

1. Gila to produce beef for Gila and Poston.
2. Granada to produce beef for Granada and Heart Mountain.
3. Central Utah to produce beef for Central Utah and Minidoka.
4. Manzanar to produce beef for Manzanar.

Tule Lake is not considered in the beef project programs due to its not being a relocation center. The objective of the beef production program is to guarantee sufficient beef supply for the centers as far as possible at equality and prices comparable to that obtained from the United States Quartermaster. The breeding program was discussed and found undesirable if sufficient feeder stock was available at desired times and could be purchased at reasonable prices.

With the exception of Gila River, several months will be necessary to bring the program into full production and all of the projects selected to produce beef are faced with one or more obstacles to overcome, such as lack of sufficient feed on hand, lack of adequate fencing, shortage of hay and feed crop equipment, and shortage of necessary feed lot construction.

POULTRY SESSION

Feb. 25, 1944

The session opened with a discussion of poultry project problems by Mr. Wm. E. Rawlings, Minidoka, and Mr. W. C. Sharp, Colorado River.

The poultry programs started very slowly on most projects because of the lack of adequate housing and other facilities needed to enter the poultry business. Most of the efforts of the poultry projects during the past year have been directed toward the preparatory phases of the programs. This has included both the development of facilities and the raising of pullets necessary to get into actual egg production. Due to climatic conditions, there has been a great deal of difference in the type and cost of facilities needed to carry on the poultry projects.

Construction is now well advanced and it was the opinion of the group that the poultry projects will soon be in a position to make a very important contribution to the food supply of each center by furnishing (1) eggs and (2) meat birds. Several centers indicated that their programs contemplated the production of all the eggs needed to supply the centers and enough meat birds to fill in when there is a shortage of other meats.

All centers reported very satisfactory egg production rates at the present time, with the cost of production well under the current market prices. Several of the centers are raising two different types of chicks; sexed white Leghorns for egg production, and mixed chicks for both egg and meat production. Mortality of poultry has been due to lack of instances of high adequate facilities to properly care for the birds. No turkeys will be raised this year.

The problems of feeding poultry were discussed in detail. It was suggested that because of the scarcity of prepared mashes that as much feed as possible be raised and mixed on the projects. Protein supplement is particularly scarce and should be secured insofar as possible from project produced alfalfa hay, soybeans, etc. However, it was suggested that some arrangements be made to facilitate project purchases of protein supplements needed to prepare mixed feeds for poultry and swine.

The slaughter of meat birds has presented a problem to some projects because of lack of equipment for dressing poultry. In some instances, this has been solved satisfactorily by delivering live birds direct to the commissary.

George L. McColm
W. T. Jarrett

VOCATIONAL EDUCATION AND ITS RELATION
TO THE PROJECT AGRICULTURAL PROGRAM

The Agricultural Section recognizes the value of vocational training in the field of agriculture for both high school students and adults. Full consideration will be given to all proposals for cooperation from vocational departments on the center.

February 25, 1944

GILA RIVER PROJECT

Labor and Employment

It was recognized that the present total available labor supply will be reduced during the current agricultural production season through the Relocation, Selective Service, and Segregation Programs. There was great apprehension among those present at the conference as to whether the attainment of presently planned programs will be possible, without some positive provision to assure both a greater availability, mobility, and efficiency of labor remaining within the Project.

In order to accomplish greater efficiency in the use of labor it was recognized that there must be by concert of action in all centers a drastic tightening-up of the requirement of work efficiency of the evacuee. In order to assure a labor supply adequate to attain the self-sufficiency program now planned, concerted action on all centers will be necessary in further reduction of excess employment on all activities and curtailment or suspension of less essential activities.

As positive steps toward the attainment of the above objectives the following steps are suggested. (1) A statement from the Director of W.R.A. setting forth the objectives of the organization with respect to an agricultural program and its relative importance to other segments of the over-all program.

(2) A directive setting forth in a general way the priority of activities to be followed in allocating the total labor supply. (3) That a critical analysis of labor distribution and efficiency of use be made by a qualified member of the Washington staff in order that the labor requirement of each activity may be determined. (4) That the Project Directors be authorized and encouraged to adjust the over-all employment within the limitations as set in total labor allotments now established for the Project, down or upward as the total labor supply changes, so that the total will not exceed 90 percent of available labor within the Project. In adjusting this total ceiling the Project Director will make adjustments in Project employment in accordance with the priorities of needs as determined in 2 and 3 above. (5) In order that the greatest possible use be made of the available workers it is suggested that each Center follow up in an attempt to approach the goal of an eight-hour working day as provided in a previous directive.

W.R.A. FARM ORGANIZATION

The conference believes that good organization is fundamental to efficient operation on center farms. It is further believed that organization seldom becomes static but must be improved continually in order to meet the ever changing physical and human situations existing in the enter and on the farm.

A few fundamentals of every farm organization are set forth as follows:

1. Obviously the same pattern of organization cannot exist on every project.
2. Delegation of responsibility and authority is a first essential.
3. Under no circumstances should lines of authority be by-passed.
4. Flexibility of organization is essential to securing maximum production at minimum cost.
5. The creation of a competitive attitude between farm groups encourages production and maintains interest in the work.
6. Organizations must be based on a year-round program which makes possible the retention of key farm workers regardless of seasonal activities.
7. Mobility of workers is desirable to the extent that such mobility does not eliminate competition or take away from the worker the credit which is due one who does a good job.

8. The farm organization should bring about a close relationship between all of the people living in the center and those who are responsible for farm production. At the same time the farm organization must protect the farm leaders and technicians from the wains of powerful cliques who might be more interested in selfish gains than in securing maximum farm production. The Center must underwrite the farm operation, keeping before them the goal of an ever increasing degree of self-sufficiency.

AGRICULTURAL CONFERENCE

GILA PROJECT

MEETING: February 23, 1944, 1:00 P.M.

CHAIRMAN: Mr. E. H. Reed

The meeting was opened by the Chairman outlining the purpose for the conference, the reasons for selecting the site and the suggested agenda.

Mr. L. H. Bennett, Project Director at Gila, extended a warm welcome to the representatives of other projects.

For the purpose of orientation, a brief report of the physical situation and scope of the agricultural program at each project was presented by various representatives.

Mr. Donald Sabin presented in outline form the 1943 production and 1944 plans for all centers. By the use of charts he also presented the fiscal 1944 production goals and the current estimates of achievements.

The balance of the session was devoted to a discussion on the desirability of continuance of farm programs on W.R.A. projects.

The primary consideration should be whether or not the farm program interferes with relocation. It is granted that the primary objective of W.R.A. is relocation of evacuees into normal American life.

The statement was made that if complete relocation were possible within one or two years there would be little justification for extensive farming operations.

However, it was the consensus of opinion that a considerable number of residents of centers, particularly older men, and women and children will remain in the centers for the duration of the war. So long as center population continues the cost of project operation will not be increased and it is reasonable to suppose that the cost will be reduced through an agricultural program. The agricultural production program on the project offers the only project employment to evacuees which is a direct contribution to the war effort. Records for

1943 indicate that of the total food cost for ten centers approximately 20 per cent was project produced food. This production represented a material reduction in the volume of critical and perishable commodities withdrawn from quartermaster supplies or diverted from the consuming public. All centers are in a position to materially increase this volume this year.

Good public relations demand that residents of W.R.A. Centers make a contribution to the war effort by providing as large a proportion of their subsistence need as is possible.

The maintenance of morale within the center is essential to both project operations and relocation. By demonstrating their ability to produce under unfamiliar conditions evacuees preserve their self confidence essential to effective relocation.

The diversified nature of farming activities on the projects has broadened the experience of former growers of specialized vegetable crops, and opened up whole new fields of agricultural endeavor, greatly widening their opportunities for relocation. This is especially evident in experience gained in livestock, dairy, general field and feed crops. Project experience has given evacuees a new vision of geographic possibilities in agriculture. This is an important contribution to the wide dispersal program of W.R. A. for the Japanese people.

Experience and training through W.R.A. agricultural production programs have opened new avenues of farm employment to the Japanese in contrast to individualistic small farm operations to which they were formerly accustomed.

The agricultural program on the project offers opportunities for vocational training in agriculture for former city people. This has been demonstrated through successful outside employment in many agricultural areas of the United States.

There is a feeling that in certain respects a project farm program is a deterrent to relocation, as a part of the overall employment and security pattern within the center. While agriculture contributes to the sense of security within the center it is not a dominant factor. Dominant factors for security are freedom from outside hatred and bitterness, a guarantee of subsistence and facilities for education, recreation and social intercourse, these if carried to extreme would

definitely hinder relocation by making life in the center too attractive. At this point agriculture acts as an effective counter balance to this tendency, in that its labor requirements force a greater output of effort on the part of the residents. The agriculture program necessitates improved work habits by creating a demand for services within the center.

In view of the fact that preliminary steps in agricultural land development have been completed, facilities have been provided and equipment secured.

Agriculture is now in a position to make a substantial contribution toward a reduced cost of project operation. This is in line with W.R.A. policy as stated in the Agriculture Handbook as follows:

"It is the policy of the War Relocation Authority to produce as large a percentage as possible of the crop and livestock products needed in feeding evacuee residents of W.R.A. centers."

The meeting adjourned at 5:30 P.M.

SUMMARY REPORT ON AGRICULTURE CONFERENCE

MEETING: February 24, 1944, 1:00 P.M.
CHAIRMAN: Mr. Sabin

The first conclusion reached was that except for special types there is plenty of equipment on hand if properly distributed and maintained.

Due to the fact that one project will be closed in the near future and one project has materially curtailed the agricultural program, a re-distribution of equipment was the next order of business. In a great many cases equipment and tools not particularly suited or needed on other projects was exchanged. The details of all these transfers will be arranged and approved in the Washington office and all parties concerned will be notified.

It was brought out in the discussion that young operators were responsible for inefficient use and increased wear and tear, and that experienced operators were seeking other jobs in the center operations. The above features together with our failure on many projects to provide adequate servicing of equipment is the cause of a great many pieces of equipment being idle when they are vitally needed.

Our inability to secure repair parts after breakdown has been the cause of equipment laying up several months in some instances. It was urged that a speedier method of moving repair parts be arranged, especially on crawler tractor equipment.

It was agreed upon that adequate servicing and maintenance of equipment in the field was probably our greatest shortcoming, and it was also the opinion of the group that it is imperative that the necessary equipment and supervisory personnel be provided immediately in order to insure proper servicing and maintenance if we are to derive the fullest use of our equipment.

It appears from past difficulty in purchasing new equipment that the machinery now on hand will have to serve the centers as long as they are in operation, and this fact makes it mandatory that the most effective and efficient use be made of our machinery.

In this connection it is recommended that pressure servicing equipment be provided and that a member of the appointed staff be made directly responsible for this work. The duties of this employer would be to furnish daily and immediate field supervision.

It is also felt that some priority in repair of farm equipment should be given especially during peak loads on the equipment. Delay during some periods sometimes means the complete loss of crops and this factor should be borne in mind at all times by the motor pool supervisor.

REPORT OF DISCUSSION

HOG PRODUCTION

Mr. D. R. Sabin acted as the chairman of the meeting and opened by stating that he believed that the justification for a hog project in W.R.A. was to transform edible waste foods of the kitchens or garbage into pork for center needs.

Mr. Walter E. Emrick of Gila and Alden S. Ingraham of Heart Mountain had been selected as discussion leaders because each represented a different type of operations. Gila River production program has been based upon the carriage of a breeding herd whereby the eventual aim is to produce all of their feeder pigs. Mr. Emrick stated that this plan had been selected for two reasons: First, practically no facilities are necessary to farrow out gilts and farrowing can extend over a nine months' period; and secondly, it had been thought that growing gilts may as well produce a litter in the final stages of reaching slaughter weight; and third, Gila produced its own grain necessary for young pigs. Only one litter is planned from each gilt after which she is slaughtered at a low sow weight.

Mr. Ingraham stated that Heart Mountain's program is an entire feeder purchase plan where by pigs are bought at approximately 100 pounds in weight and fed out almost entirely on garbage. Because of some early losses and experiences he stated that a vaccination and veterinarian assistance program had been adopted. The services of a veterinarian for three days each week had been procured and this person not only aided in their complete disease and health control program but also inspected the pork that was slaughtered at a nearby town for center use. Vaccination consisted of giving a mixed Bactrin to the feeder hogs when they arrived on the farm which seemed to protect them from Swine Flu and other related troubles. After approximately two weeks the hogs are then given the simultaneous treatment for Cholera.

Discussions from the various representatives from different centers indicated that the same types of programs were being carried by some, and with others variations, including both types.

Discussion further indicated that the physical conditions of the project, its nearness to available feeder pigs and other factors had determined the type of enterprise. It was agreed

by the group that irrespective of the type of program now carried that the aim should be to fully utilize all garbage for low cost production and that no large construction overhead cost should be planned in such a W.R.A. program.

Mr. E. H. Reed of Washington stressed the need of sanitation and it was agreed by all that while high overhead cost construction should be held to a minimum that certain efficient types of small construction and facilities were necessary for disease control within the enterprise, and as protection to center residents, the eventual consumers of the product.

Mr. Lowe, sanitary engineer of the Washington office, stressed the control of flies and stated that our program should consist mainly of eliminating breeding places through the disposing of all decayed organic matters on or near the farm.

Different feeding practices were discussed and most everyone indicated that they were feeding alfalfa to supplement all feeding plans. Some centers had plans for production of tankage and others had ways by which offal products were exchanged for protein supplements.

Mr. Reed stated that legally it was unnecessary for W.R.A. to inspect its farm produced meat, but it was thought by him and all that some efficient type of inspection was necessary for protection of the health within the center.

The different types of swine personnel organizations were discussed and the amount of employment varied in accordance with the size of the project, with the physical conditions and with the expense of work covered by the crew. It was thought by the group that with increasing relocation and the effect that selective service may have upon available employment in the future that more thought should be given to the employing of older persons and women. Several projects indicated that women made up part of the crew and in one or two incidences a high percentage of women were employed.

OPERATION'S COST

The place cost accounting has in Agriculture and the need for more efficient personnel to insure accurate records was discussed in detail at the meeting on February 28th, 1944. Representatives from each center and the two representatives from the Washington office unanimously agreed that accurate cost records are not only desirable but necessary for the continuance of a satisfactory farm program. It was also agreed upon that up to the present time accurate and dependable farm costs have not been available from either the farm sections or the accounting sections.

It is the farm sections responsibility to collect and present field cost data on Agricultural operations to the accounting sections for compiling and recording. Due to the lack of adequate evacuee personnel for the work of collecting and forwarding cost data to the accounting section all center Agricultural representatives present agreed that efficient accurate cost reports could not be depended upon unless provisions are made to change the present regulation forcing the Agricultural Sections to use only evacuee personnel in this work.

It was the recommendation of the entire group representing the Agricultural Section in the various centers that provisions be made by the Washington office to allow one additional appointed person on each centers Agricultural staff to assume and carry out the duties of an office manager. These office managers should be under the direct supervision of the Agricultural Sections.

This recommended change in the Agricultural organization chart is primarily due to the rapid relocation of the evacuees best fitted for this type of work. Continuous changing of evacuee office managers and statistical workers very definitely interrupts the continuity of recording and reporting which is causing most of the inaccuracy in our cost reports.

Agricultural Conference

Discussion on

Farm Mess

Feeding of agricultural workers was discussed at some length by the group and varied pictures of existing conditions and methods of farm messing were presented by the representatives. It appeared that no plan for efficient and satisfactory farm feeding could be outlined that could be applied to all centers. This was due to the fact that physical conditions of the centers are not alike. Some of the contrasting factors which prohibit uniformity of feeding workers in the fields are climate, size of farm programs, distances of farm fields from centers, and variance in the amounts of equipment available for transportation purposes.

It was the consensus of opinion that additional mess facilities centrally located for farm workers, particularly at peak cropping seasons, should be provided to assure adequate quantities of food to sustain heavy physical work, reduce conveying transportation and encourage a full eight-hour day of work. Operation of such facilities are to be under Mess Management.

1943 PRODUCTION AND 1944 PLANS

Center	Vegetables		Feed Crops		Hogs		Eggs	Hens	Meat Birds	Beef Cattle		
	1943 Acre	1944 Acre	1943 Acre	1944 Acre	1943 no.	1944 no.	1943 Doz.	1944 No.	1943 No.	1944 No.	1943 No.	1944 No.
Central Utah	507	297	690	1500	555	2080	807	7000	268	7000	192	1500
Colorado River	258	652	70	600	609	2500	16470	30000	13481	30000		
Gila	1520	858	539	1707	477	2485	5821	12000	28	3000	536	2795
Granada	549	590	1703	2225	987	1500	6392	6000	11927	1000	189	2000
Heart Mountain	809	815	197	580	491	2112	2070	12000	176	24000		
Jerome	590	549		150	1215	1600						
Manzanar	322	312	107	195		1600		8000		6000		600
Minidoka	270	536		430	278	1700	4290	7500	1137	24000		
Rohwer	582	611	184	566	138	1300				20000		
Tule Lake	1267	184	1393	1023		2200						
	<u>6674</u>	<u>5394</u>	<u>4883</u>	<u>8996</u>	<u>4748</u>	<u>19077</u>	<u>33850</u>	<u>60500</u>	<u>27015</u>	<u>124000</u>	<u>917</u>	<u>6695</u>

LIST OF PERSONS ATTENDING AGRICULTURAL CONFERENCE

GILA RIVER CENTER**Feb. 23-26, 1944

Central Utah	W. Wendall Palmer George L. McCain
Colorado, River	W. C. Sharp
Gila River	David A. Rogers Carl W. Quast Walter E. Barick
Granada	John W. Spender Ernest Tigges
Heart Mountain	Glen Hartman Alden C. Ingraham
Jerome	Wm. H. Ballard Louis E. Rice
Manzanar	Horace R. McConnell
Minidoka	Robert S. Davidson Wm. E. Rawlings
Rohwer	James F. Rains Ben Rives
Tule Lake	W. T. Jarrett
Washington, D. C.	E. H. Reed Donald R. Sabin

AGRICULTURAL NARRATIVE

REPORT FOR 1944

Central Utah

BEEF CATTLE PRODUCTION

PRODUCTION RESULTS

Our Beef Cattle Program was well begun at the beginning of 1944 and aims were to carry sufficient cattle to supply the slaughter needs of this center, and Minidoka beginning August. The slaughter requirements of the two centers were approximated to be 1020 head, and for the year 1946 were used. Full demand of our center was met and nine carloads were shipped to Minidoka.

Two principle operations have gone on; one, the feedlot fattening of cattle for our center for the period January to June, and two, the carriage of cattle in pasture for growth and pasture fattening. Our feedlot program was very successful and some very fine meat was produced for the center.

There was a question in our minds as to the number of cattle that could be carried through the winter of 1943-44 on our rough pasture without the feeding of hay. As a result only about 170 head were purchased for this purpose. Even though we had a rather severe winter as termed in this section our pasture cattle did fine and we had more rough feed than we could use.

As soon as it was seen that the winter was gone through pretty well, attempts were made to make rather heavy purchases. It was found that cattle prices were advancing and stockman were getting as high as 14 $\frac{1}{2}$ ¢ for good steers. It appeared that these prices were out of reason considering the fact that we could only procure ceiling price credit for our dressed meat and also perhaps this quality was a little too high anyway.

Therefore, a decision was made to buy cows and heifers, in the main, and to buy steers only if we did not have to pay over 12¢ per pound. This policy was continued pretty well throughout the year, but we had planned to buy approximately 250 steers the forepart of December when we were advised by Washington to make no further purchases.

Our purchases of cattle amounted to 1060 head and just about offset our slaughter. Cattle killed for this center plus those shipped to Minidoka had a credit value of \$88,200.00.

The results from pasturing throughout the summer were quite successful although in most instances our purchases were not made sufficiently in advance of the time we needed the stock to kill.

Periods of good pasture gain ^{VARIED} considerable during the year. Our spring was later than usual and feeds did not grow well until June. We then had ample pasture but in September, preceding the time that we could get into many of our crop fields, older pastures dried up and gains were

going slowly. We were not able to irrigate some of this pasture land to the extent that it should have been to offset this drying up period. As fields opened up, gains became good again and results were fine until freezes began to get severe about the middle November.

Cattle were placed in the feedlots on December 15 and as of January 1 there were 441 head in the pens which are estimated as the needs for this center to July 1945. We are feeding a grain mixture of 20% dried beet pulp, 30% ground wheat, and 50% ground barley plus our alfalfa hay. Last year we fed a mixture of 60% wheat and 40% barley, but this year we thought it advisable to use some dried beet pulp because it was cheaper than grain and also bloat preventing.

PROBLEMS

Our greatest problem in connection with the beef program was the getting up of hay. First, it was impossible to get sufficient labor to irrigate our fields properly and second, most of our crop had depleted in quality to where good yields were only possible in a few fields.

We attempted to procure two modern hay balers, and had we gotten them, our haying program would have been quite successful. We did purchase, however, a second hand Ann Arbor but it was of the old hand blocking type and it never proved very advantageous. We hired the baling of 160 tons in the field. In all there were 316 tons put up.

It was thought that a beef crew was well established during the winter of 1943-44, but all of it, with the exception of one adult and some high school boys, left the center upon seasonal or indefinite leave in May. It was necessary to rebuild an entire crew and this was not done very successfully because in the main, our older residents have preferred other work. We had to depend almost entirely upon high school students for haying and cattle operation.

Ever since the project began, some fencing has gone on, however, more was done this year than ever before. This was necessary if our beef pasturing program was to succeed. There were approximately 10 miles of fence put up.

Losses of cattle have been held to a minimum throughout the year and only amounted to about 3%. Practically no losses occurred in the feedlots, but we had some heavy bloat loss in May and June when alfalfa and all feed was green and very tender. Losses then occurred, mainly as a result of some cattle breaking into the crop fields.

FUTURE PROGRAM

It is estimated that there are sufficient cattle in the feedlots to take care of our center to July 1. In addition there are 126 head in our overwintering pastures and they will supply sufficient meat for at least

two months. However, the pasture cattle are lighter in weight and about one third of them are calves weaned this fall. Whatever our program of farming is for the ensuing year, we will have to carry sufficient pasture land to care for these feeders.

SWINE ENTERPRISE

PRODUCTION RESULTS

Only fair results were gotten from our Swine Enterprise this year because several problems entered into the program.

The aim of the year's program was to fulfill the full needs of the center in pork and this was done through the supplying of 1640 hogs with an average live weight of 231 lbs. at slaughter. The center's needs had been estimated to be 1800, but slaughter weights turned out to be heavier than was anticipated, and a little more beef was used in lieu of hogs.

The Swine Program at the beginning of the project was based largely upon the carriage of a breeding herd, and thus the production of our own feeder pigs. Not the best results were being gotten from this type of program and at the beginning of this year our plans were reduced from about 200 sows down to 125, which it was estimated would produce approximately 1/3 of our feeder pigs.

A new farrowing house was completed in February, but this would not take care of any more of our sows than was planned in our program. However, as the year went our labor conditions became more severe, and the percentage of pigs being raised was not very high and thus a decision was made to cut the breeding herd further to about 30 to 40 gilts.

Feeder pigs could be purchased very easily during the forepart of the year because farmers had had an unfavorable feed price ratio and they were going out of the hog business. This situation, however, changed during the fall and at the present time feeder pig prices are high and pigs are hard to locate.

Losses were too high during the year amounting to about 15%, but the major part of the loss can be attributed to an improper properly equipped swine set-up.

PROBLEMS

The man-power situation at the Swine Ranch was quite serious during the main part of the year. Our younger residents have tended to want to work in some of the other enterprises instead of going to this unit. During the summer our employment got down to about 8 to 10 men and extreme efforts had to be put forth to procure transfers from other units and to get new workers out of the center.

Depletion occurred mainly as a result of men going out on leave and some being taken into the army through Selective Service.

This problem has been overcome to a large extent, but we have mainly the old residents working and some of them are not able to do much work.

Most of our sheds and pens at the beginning of the year were very poor since no new construction had been carried on. Sheds were always very poor and during the late winter and early spring, as a result of considerable stormy weather, our hog losses mounted higher than should have been the case. A heavy wind in June just about blew all the sheds away. They have now, however, been repaired and are in quite good shape.

All during the year we have been attempting to get construction of concrete garbage floors, but it was September before the Engineering Section got started. Now we have two garbage floors about completed which will take care of approximately 300 feeder hogs. We have been using small board garbage floors and sanitary conditions are almost impossible but no improvements were made since we have been waiting for the concrete.

All during the year we have had considerable trouble with necrotic enteritis. It has not only occurred in our feeder hogs, but also in our young suckling pigs. We have attributed the cause of this mainly to unsanitary feeding conditions and we should be able to help this situation from now on. Recently we have been using a Sulfaguanadine treatment in the feed of sick hogs and this is giving us the best results of any treatment used to date.

In October, a rather serious outbreak of Cholera occurred. When it was first observed it was thought for a day or two that perhaps it was enteritis, but soon the situation became too serious and determination was made that we had Hog Cholera. At first we could not get enough serum and virus to vaccinate, because our herd required more than was available in the state. It was feared that our losses would go very high, but they stopped at a total of 134 head.

We had been using the Crystal Violet single treatment vaccine since the beginning of the project and all hogs had been vaccinated. When this break occurred we were advised by Veterinarians to change immediately to the double Serum-Virus treatment.

FUTURE PROGRAM

There are sufficient hogs on the farm now to take care of the pork needs of the center until about May. All of our breeding program has stopped and only sows heavy in pig will be farrowed out. It will be necessary, however, to purchase approximately 200 feeder hogs to meet the center needs to about July 1, 1945. The Swine Unit is in the best shape from several

points of view to do a better job than in the past, but now with the lifting of the Exclusion Order, of course, our program is to recede in accordance with relocation and center closing.

POULTRY ENTERPRISE

PRODUCTION RESULTS

Results in our Poultry program have been quite good but the yearly income was not as great as it might have been because we did not have sufficient egg producing hens.

At the beginning of the year, we had 1482 hens from 1943 production, but this number dwindled down during the summer as a result of culling and death loss. Our pullets, which we produced this year, did not get well started into production until October, but now at the close of the year we are up to a high point, because egg production is nearing 50% from our 5,000 laying pullets and hens.

In February we finished the killing of our turkeys which we grew out in 1943.

Our kill in February consisted of 321 birds and 889 were killed in the fall and winter of 1943. This made a total kill of 1210 out of 1362 purchased and a loss of only 11%. These results we have thought were very good, but the weights of our slaughtered birds could have been a little higher; the average being 13.6 pounds each.

At the beginning of the year, we only had sufficient laying houses to take care of our small flock. This was 4 adobe houses, but today we have 9 houses, 7 adobes - 20'x40', 4 frame - 20'x100', 1 frame house - 20'x40', and 1 house 24'x100', or we have a total floor space of 16,800 feet which is sufficient room for our present flock. It was the middle of the summer before this housing was finished and at the beginning of the brooding season in March, we were crowded for room.

We procured 5,900 sexed chicks in March, April, and May and quite good results in brooding and the growing out of these pullets occurred. The first lot of 3700 arriving in March were by far the best and the remaining 2200 coming in April and May were not the best in quality and losses were quite heavy from them. In May we purchased 5,000 meat chicks, 4,000 Barred Rock, and 1,000 New Hampshire Reds. New Hampshire Reds did, by far, the best and the losses were very light. We had rather poor results with the Barred Rocks and losses were heavy. These chicks did not seem to have the vitality that they should have had, and considering our conditions they did not feather out well, and we had troubles in them all the way from paralysis to rickets.

At the time that our chicks were growing out, we were very much crowded for room since not all of our laying houses were finished and we only had

4 or 5 range houses. However in July, 12 in all range houses were completed and we were able to get some of the pullets out and relieve some of our congestion. Our losses of the purchased chicks during the brooding and growing period amounted to approximately 23%, but it is believed had there been sufficient room that they would have been cut materially. The New Hampshire Red chicks did so well that we retained 300 of the best pullets for the laying flock.

At the beginning of the year, our aim had been to have 7,000 laying hens or pullets by fall. However, at the time of the purchase of chicks, we could not see sufficient housing room ahead, but thought that to fill this quota we could buy pullets later on in the season and that we could retain more pullets from our meat birds.

In July, Mr. Reed was here from Washington and thought it was best to discontinue any further house construction. We had three 20'x100' houses to build. These would have housed the additional 2,000 laying birds that we planned to have.

During the year, water lines were put in to all of the houses, a feed building 20'x60' was put up and at the present time we have a very fine poultry setup. Recently also electricity has been put in each house for lighting but results from its use would have been best if it had been completed about November 1.

PROBLEMS

Most of our problems have been enumerated in the above discussion under results, but in addition during the heavy brooding season we were somewhat short in employment. At this time folks moved out to a considerable extent upon season and indefinite leave.

The location of our poultry plant being approximately 3 miles from the center has always resulted in a considerable problem of having sufficient transportation and having men that would stay at the farm all hours of the day which is necessary when a lot of chicks are being taken care of.

Some losses occurred throughout the entire year from theft, however, only in one instance were we able to apprehend any thieves, but it seems that each month chickens disappear which the poultry men cannot account for as disease or death loss.

Our poultry plant now is in very good condition and were the project to operate as in the past the most efficient results should be gotten. Only a few of the men we have employed have had previous poultry experience and none of them upon the large scale basis that we attempted to operate this year. There has been a tendency for our men to want to spend too much time upon details of individual house feeding and methods when perhaps better results would have been gotten adapting larger mass type operations.

Also there has tended to be a fear upon their part that if birds were put out in range houses or given less heat and more room that higher losses would be entailed. As a result some of our birds have not had quite the vitality that they should have had. These conditions have improved, however, and this year less men have taken care of more birds than were on the farm in 1943.

FIELD CROP ENTERPRISE

PRODUCTION RESULTS:

We didn't reach our anticipated goals in our Field Crop production this year partly because of weather conditions, because of the labor situation and because of a certain amount of deterioration in some of our perennial crops.

Our aims in the fall and winter of 1943-44 were to have near one thousand acres of grain but our total planting amounted to 744. It was necessary to abandon 20 acres just after seeding thus leaving us 724.

We went into 1944 with only 108 acres of winter wheat and 15 acres of barley. During the fall it had been very stormy and the land froze up before we could exceed this planting. There were quite a few acres, however, practically ready for sowing when we were able to get on the land in the spring.

In March there were only about 10 days of good weather and it was April before we got any material seeding done. After a storm occurs here it is usually several days before we can work the land because of the clay sticky nature of the soil.

Of the 108 acres of winter wheat, 55 were not irrigated until April, and it was quite apparent at that time that the crop would not amount to much. This, however, was in a field with 50 acres of barley, all of which we planned to sow to alfalfa during the year. In April we planted the entire area of 105 acres and later on because the wheat was very poor we cut it for hay. The field produced 30 tons of baled wheat hay. Earlier it had been necessary to abandon 12 acres of wheat and 8 acres of the fall planted barley because of winter kill.

This area is not considered to be a good spring wheat territory but we decided to try some anyway. We sowed 39 acres but the yield was only fair and not nearly as good as from winter wheat. The average yield for all of the harvested wheat was 23.2 bushels per acre.

Plantings of grains moved as fast as possible but it was about the first week in June when we finished with the last barley seeding. Sixty acres of oats and 522 acres of barley were planted in addition to the spring wheat. We knew that we could not expect the best results from the sowing of barley as late as June, but we had the land prepared and we felt that we could utilize the crop somehow whatever it turned out to be.

The earliest planted grain was, of course, the best and required less irrigation water during the summer. Some of the latest sown barley was short and pretty weedy, and it was felt that more utility could be gotten out of it by pasturing it with cattle. One hundred forty-four acres were pastured.

There were 385 acres in all of barley harvested as grain, giving an yield of 16.5 bushels per acre. This was not a good yield but considering the time of planting and our problems of irrigation, we have thought it was fair.

Our seven acres of winter barley yielded about 75 bushels to the acre which was indicative that good results can be gotten from winter grain if properly taken care of. A few acres of our early seeded spring barley neared the 50 bushel mark, but the later the sowing the less the yield.

Our oats was rather poor only making 13.6 bushels to the acre, but it was planted on a very unlevel field and irrigation could not be done well.

We started harvesting grains in July and it was November before we were finished. Because of our late sowings, however, the grain couldn't have been cut much faster because it was not ripe enough. Our harvest crew consisted of high school students, mainly.

With 299 acres of the spring barley, we planted sweet clover so that the fields could be utilized for pasture in 1945 or some of them might be plowed under with a good green manure crop. We got very good stands and considerable pasture was available for cattle during the fall.

The old alfalfa that has been on the farm since the Project began has been showing up as a continuing disappointment. Many of the stands were rather poor and the last two years, weeds have come in until we had been going out of the hay business pretty fast. Part of this deterioration has been due to our inability to get some of the acreage properly irrigated.

It was realized that past year that if the project was to go on any length of time and if we were to maintain a winter cattle feeding program that some good hay must be established. Therefore, we planned to sow approximately 300 acres this year. We, however, exceeded these plans in that we sowed 105 acres in the spring and then 305 acres during the early fall, beginning in August.

In all instances we sowed a small amount of winter wheat with the alfalfa planted during the fall. Under this plan we have thought that we could increase our first hay crop in 1945 and it would also give us an alternative that if the alfalfa did not show up good, that we could harvest a grain crop. About half of this acreage was sown in newly prepared fields and the rest on land that was in grain this year. There are approximately 100 acres of this grain and alfalfa that now shows a very fine stand of grain. This is mainly the first that was sown and the grain had plenty of time to stool out. These fields also show very fine alfalfa stands. In the fall all fields showed good alfalfa stands but it might be that some of the last seeded will not come through the winter in the best of shape.

Last spring we were handicapped considerably because we had a lot of trouble with the breakdown of our heavier track-laying tractors. This

situation was alleviated considerable when we procured in April one HD10, one Farmall M, and one Farmall 20 from Jerome. We, in turn, shipped one Farmall H to Rohwer.

For the past fall we again have not reached our anticipated grain seeding goals. We, however, planted 160 acres of barley and 176 acres of winter wheat in addition to alfalfa-wheat seedings. All of the barley was irrigated and was up green when winter set in. However, only 70 acres of the wheat was irrigated, and it is questionable what our results will be from that not irrigated to date. We had to stop irrigating in the middle of November because freezing occurred so severely that streams would freeze up during the night and not thaw out during the day.

At the time that the Exclusion Order was lifted, we had approximately 300 acres of land that was nearly ready for seeding. We could have sown some of this since had we been permitted to do so.

PROBLEMS:

Our plan of getting up the years hay crop consisted of dividing the responsibility between several units. The Poultry Unit put up approximately 35 tons which was estimated as their needs for the winter. Likewise 80 acres of hay was assigned to the Swine Unit but labor conditions became so severe there that the Beef Unit had to take it over. The largest amount of acreage was left to our Beef Crew. However, our Machinery Unit was responsible for the cutting and raking of all hay. The Machinery Unit was also responsible for the operation of machines in the Food Crop Section and the handling of the entire grain crop with the exception of irrigation.

We established a separate irrigation crew that was to irrigate all the grain and go as far as they could on hay. We never could build this unit to sufficient size to get much hay irrigated. Poultry irrigated their share but about all of the rest plus the pasture had to be handled by men and boys attached to the Beef Unit.

Our grain yields would have been much higher had we been able to get better irrigation the 24 hours around. Most of our fields were flooded out on the bottom ends as a result of over-night watering.

We had a real job at hand in trying to get our hay put up since about the only persons we could get to work in the harvest were the young high school students. More hay would have been harvested, however, with the same effort, if the crop had all been good.

All of our land because of its heavy alkaline nature will not stand hardly any punishment from over irrigation or flooding. The water stands on the fields and kills out the crop. A considerable acreage of hay has been killed in this manner.

Very little of any of our crops have ever been irrigated properly. We have never been able to get effective night applications, and streams could not be turned off at the main head gates in the evening and then turned on in the morning and get any appreciable water to the crops.

FOOD CROP ENTERPRISE

PRODUCTION RESULTS:

The vegetables production program was fairly successful during the year, but again as in 1943 our final results were effected by our growing of some crops that are questionable as to their adaptability to this section.

Approximately 280 acres of vegetables were planned but after the building of our plant houses, our workers became perhaps a little too enthusiastic and grew plants for crops that were not intended, and some seeding in the fields were a little in excess of that previously planned. As a result, about 320 acres were planted and abandonment amounted to about 30%. We attempted to raise 22 different classes of vegetables.

A rather unfavorable year as to weather occurred since we had a late cold and stormy spring, and a killing frost occurred in the fall ahead of the previous year.

Our vegetable workers spent most of their time during the first two months of the year in helping to build our two plant houses 96' x 15' each; the building of 6 cold frames, and the making of plant flats, and covers for the houses. The plant houses were constructed near the hospital boiler room and excess steam from the hospital was used for heat. Covers for all of the plant houses were made from old muslin feed sacks by a group of women established as a sewing crew during the winter. Five thousand plant flats were made out of old ammunition boxes.

As a result of our plant houses, we only purchased sufficient onion plants to plant seven acres and enough celery plants to plant about three. We grew cabbage, broccoli, tomatoes, peppers, and celery in our own hot houses. The operation of these houses was very successful and the plants were of better quality than those that could have been purchased outside. They took, however, considerable labor especially when it came to re-setting of the plants from the seed boxes.

We had some little trouble, as a result, too much alkali and chlorine in the water that we had to use for irrigation. This was overcome by more thorough irrigation so that alkali washed out of the plant flats, and by our use of some iron sulphate to off-set the alkali.

There was only a short time in April when field work could be done. Only peas and some nappa were sown in this month. It was May when any major seed planting got underway in the fields. Such crops as mustard, onions, cabbages, daikon, spinach and lettuce were planted this month. May was quite stormy and it was really June before the greatest amount of planting got underway. At this time we were involved in getting a lot of direct seeding done in the fields as well as getting out all of our cabbage, tomatoes, broccoli, peppers and eggplants.

The fact is we had too much work in a short period for the man-power we had to get the job done and eggplants, peppers, and potatoes were not finished until in July.

Vegetables that were planted in June didn't seem to grow very much, since the weather was cold, and with tomatoes especially, it seemed that they really went backwards and did not get to growing until July.

Harvesting of peas, and early planted greens got well under way during July, and from then on until December it could be said that the center had more greens available than they were able to consume.

In the spring of the year, the food crop acreage was divided into five different units with a head foreman in charge of each. This worked out, we believe, better than an entire group method of production. An overall harvest crew was established but each unit helped this crew when it was not tied up with other work.

Better working relations were established with Commissary and meetings of their representatives and agriculture were held throughout the year at about three weeks intervals to establish prices and discuss vegetables to be harvested and quality problems. Commitments were made to the Commissary a week ahead and in practically all instances they were fulfilled as agreed upon.

Our acreage of all vegetables this year was about 30% under that of last year, but about 100,000 pounds more were turned to the Commissary.

About half of the number of persons worked in the Food Crop Unit as compared with 1943. The fact is our average employment for the year of all units on the farm was 37% under that used in 1943. The average employed in 1943 per month was 313 and the average employed this year per month was 196.

Some of our crops were planted too late this year again to give best results. This was especially true with our potatoes, since we finished planting them on July 5, with all of our corn and some other crops such as celery, squash, cantaloupes, etc.

Crops did very well during July, August and September until we were hit with a bad killing frost on September 15. This freeze went down to 25° and it was 28 days earlier than in 1943. Eggplants, peppers, cucumbers, and squash were completely destroyed. Vines of cantaloupes and tomatoes were all frosted and the harvest from these two crops was only green tomatoes and cantaloupes for pickling.

All corn were frost^d but a reasonable harvest had occurred up to this time. The potato vines were half frosted also and they were just in their prime for the development of tubers.

Harvesting from this frost period on proceeded as fast as was possible considering our man-power.

We were rather late with our potatoes and two acres were frozen in the ground in November. Also we lost about five acres of celery when final severe freezes occurred the middle of November.

Attempts were made to get some of the celery covered in the fields and some pitted, but we were not able to get very much of this done.

The green onion crop during the year was very good, but the Sweet Spanish onion plants that were set out in May did not seem to make very much growth all during the summer. One acre of the seven was harvested as green in August, but the remaining six acres have been left in the field with the thought that they might be used as green onions in the spring of 1945. Some onions were similarly left over the winter of 1943-44 and this year in May and June we had a very good yield from them, and they provided some food for the center at a time when nothing else was ready for harvest and when vegetables were hard to get from the outside.

Our best crops of the year were our green crops and the most outstanding were beets, chard, nappa, daikon, lettuce and mustard. Our celery crop was very good, but we raised too much for the period in which we could consume it from the field. We failed again this year in getting a good stand of carrots. After planting in May, we irrigated but then we had a very hard drying wind which sealed over the top soil and we were unsuccessful in getting the young starting seedlings out of the ground.

We had planned in reducing our acreage in 1945 to approximately 125 acres when the Exclusion Order was lifted and the word was received that we would plant no more. We had planned to eliminate all of the very tender crops such as peppers and eggplants and to reduce some of the other planting materially such as tomatoes, cantaloupes, and onions.

PROBLEMS:

There have been several major problems in our Food Crop Production, many of which we could do nothing about. Because of climatic conditions we have had extreme peak requirements of work at planting and harvesting periods, and during these times we have not been able to increase our tempo of work from our regular employment and we have not been able to secure efficient additional help. We had too many planting to be made in May and June of this year. Similarly we had too much harvest to do for about a month's time during the fall. It was thought by our regular employed persons that they could cover the jobs themselves but delays occurred that amounted to hazards in final production.

In 1943 considerable volunteer labor was used from other sections and from the High School, but much sentiment had built up against a recurrence of this throughout the Center.

Because it has always seemed that the Commissary could secure ample vegetables from the outside or through the Quartermaster, our vegetable produce has never been too popular.

This year we still attempted to grow some crops that were questionable as to their adaptability to this locality. Our attempting to grow them turned out as a loss, and in addition, took time away from some of the other crops that would do best.

Ever since the Project began, we have been attempting to seek out the best lands for vegetables. The heavier soils contain more natural fertility and less alkali, but since they are heavy they remain colder during a late spring, and once they become alkaline a high concentration exists.

We have some sandy light soil but alkali has been more prevalent in them and of course it comes up faster. This year because of coldness and also perhaps because of additional alkali, some of our crops that were planted in the heavy soils such as tomatoes and onion plants grew very poorly throughout the season. Quite good care was given them but even late in the fall some of our onions planted for dry onion harvest were not much larger than they were in July.

This year we planted, mainly, the hardy types of vegetables on the sandier soils and they seemed to do much better there than when the same varieties were planted on the heavier soils. We had planned the coming year to divert over to the use of our lighter soils for the more tender crops using new land out of alfalfa. Alkali is a real hazard on the farm and it is apparent now that it is too plentiful to even attempt to grow such crops as cucumbers, peppers and peas.

The production figures shown upon the statistical summary WRA-309 will not always check with figures arrived at by adding up the monthly reports. At the time of completing Form WRA-309 records were procured from the Cost Division and the Commissary to compare with ours. We found that in some instances we had erred in our monthly reports because delivery tickets didn't always check with the Commissary's tally-ins and also with records finally posted by the Cost Division from Form WRA-189. A complete analysis of all the reports was made and the figures reported in the Annual Statistical are correct. A corrected monthly report for December will accompany the January report to make past reports correspond with the annual.

WAR RELOCATION AUTHORITY
Yearly Summary Report - Crops

For Year Ending December 31 194 4Central Utah Relocation Center

Crop	Acreages			Total Production (lbs.)	Yield Per Harvested Acre (lbs.)	Disposition of produce			Average Price Per lb. (¢)	
	Planted	Abandoned	Harvested			Used on Center (lbs.)	Shipped to other Centers (lbs.)	Sold (lbs.)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
Beets (table)	7	0	7	72,050	10,293	72,050	-	-	2.4	1,729.20
Broccoli	6	6	0	990	-	990	-	-	2.4	#23.76
Cabbage	9	5	4	47,390	11,847	47,390	-	-	2.1	995.19
Cantaloupes	36	2	34	62,731	1,845	62,731	-	-	1.1	190.04
Carrots	23	22	1	10,165	10,165	10,165	-	-	2.1	213.46
Celery	7	5	2	45,710	22,855	45,710	-	-	5.0	2,285.50
Chinese Cabbage Mustard, Spinach	30	10	20	77,779	3,889	77,779	-	-	2.8	2,177.81
Corn (sweet)	40	8	32	61,712	1,928	61,712	-	-	2.1*	1,295.95
Cucumbers	6	6	0	-	-	-	-	-	-	-
Daikon-Radish	32	5	27	99,535	3,686	99,535	-	-	3.5	3,483.72
Eggplant	2	2	-	-	-	-	-	-	-	-
Kohl Rabi	1	-	1	23,696	23,696	23,696	-	-	2.5	592.30
*Includes credit of \$4.00 per acre for cattle pasture.										

#Field was abandoned but vegetable crew picked it over and got a little production.

104

WAR RELOCATION AUTHORITY
Yearly Summary Report - Crops

For Year Ending December 31 1944

Central Utah Relocation Center

Crop	Acreages			Total Production (lbs.)	Yield Per Harvested Acre (lbs.)	Disposition of Produce			Average Price Per lb. (¢)
	Planted	Abandoned	Harvested			Used on Center (lbs.)	Shipped to other Centers (lbs.)	Sold (lbs.)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Lettuce	2	0	2	7,188	3,594	7,188	-	-	3.0
Melons	5	5	0	-	-	-	-	-	-
Onions	10	1	9	17,700	1,967	17,700	-	-	4.0
Onions (plants)	7*	0	1	4,150	4,150	4,150	-	-	5.0
Onions	10	0	10	30,270	3,027	30,270	-	-	5.0
Peas	10	0	10	9,120	912	9,120	-	-	6.7
Peppers	2	2	0	-	-	-	-	-	-
Potatoes	30	2	28	48,160	1,720	48,160	-	-	1.7
Squash	24	6	18	36,872	2,048	36,872	-	-	4.8
Swiss Chard	7	0	7	81,092	11,585	81,092	-	-	3.0
Tomatoes	18	0	18	18,752	1,042	18,752	-	-	1.2
Turnips	5	5	0	-	-	-	-	-	-
*6 acres left in field for 1945 harvest.									

215.64

708.00

207.50

1,513.50

611.04

818.72

1,769.86

2432.76

225.02

21,488.97

433

1791.222

WAR RELOCATION AUTHORITY
Yearly Summary Report - Crops

For Year Ending December 194 4

Central Utah

Center

Crop	Acreages			Total Production (lbs.)	Yield Per Harvested Acre (lbs.)	Disposition of Produce			Average Price Per lb. (¢)
	Planted	Abandoned	Harvested			Used on Center (lbs.)	Shipped to other Centers (lbs.)	Sold (lbs.)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Alfalfa (old)	395 ✓	-	395	572,000	1448	572,000	-	-	1.1
Alfalfa (alone)	28 ✓	-	1945	Pasture					\$1.50 per A
Alfalfa (with grain)	105 ✓	-	1945	Pasture					\$1.50 per A*
Alfalfa (with grain)	305 ✓	-	1945	Pasture					\$1.50 per A
Barley (grain)	393 ✓	8	385	318,415	827	318,415	-	-	2.25
Barley (pastured)									
Barley ripe	144 ✓	-	144	38,000	264	38,000	-	-	1.14
Barley	160 ✓	-	1945	-	-	-	-	-	-
Corn (field)	83 ✓	10	73	Pasture	-	-	-	-	4.00 per A
Oats	60 ✓	-	60	32,640	544	32,640	-	-	2.58
Pasture	3000								\$1.50 per A
S. Clover (with barley)	299		1945	Pasture					\$1.00 per A#
S. Clover (with wheat)	150		1945	Pasture					\$1.50 per A

*55 acres of this was sown with wheat that was cut for hay but had pasture value after. The remaining 40 was with barley and barley was cut as grain.

#Sweet clover was sown with barley in spring but had considerable pasture value after barley harvest.

6,292.00
 42.00
 157.50
 457.50
 7,005.00
 415.00
 322.00
 846.64
 4500.00
 299.00
 225.00

WAR RELOCATION AUTHORITY
 Yearly Summary Report - Livestock

For Year Ending December 31 1944

Central Utah Relocation

Center

TABLE I HOGS

Beginning Inventory				Purchased				Litters Farrowed		Slaughtered		
Feeders		Breeding Stock		Feeders		Breeding Stock		Litters	Pigs Raised	No.	Av. Dr. Wt.	Av. Pr. pr. lb.
No.	Est. Av. Wt.	No.	Est. Av. Wt.	No.	Av. Wt.	No.	Av. Wt.	No.	No.			
1015	130	145	250	941	126.5	-	-	107	534	1640	165.6	19.8
				Death Loss				Closing Inventory				
				Under 6 wks.	over 6 wks. old		Feeders		Breeding Stock			
				No.	No.	Av. Wt.	No.	Est. Av. Wt.	No.	Est. Av. Wt.		
				362	401	85	516	150	15	325		

271,584

53,774.49

TABLE II CHICKENS

Beginning Inventory				Purchased				Eggs Produced		Butchered		
Chicks No.	Pullets No.	Hens No.	Other No.	Chicks No.	Pullets No.	Hens No.	Other No.	No. of Doz.	Av. Pr. pr. doz.	No.	Av. Dr. Wt.	Av. Pr. pr. lb.
-	-	1482	-	10900	-	-	-	27954	39.2	4436	2.09	38.3
				Death Loss				Closing Inventory				
				Under 6 wks. No.	Over 6 wks. No.	Chicks No.		Pullets No.	Hens No.	Other No.		
				820	2046	-		-	5080	-		

9271.24

3,540.48

(Up and Over)

TABLE III

BEEF CATTLE

Beginning Inv.		Purchased		Calves Born No.	Used on Center			Shipped to other Centers			Death Loss		Closing Inv.	
No.	Av. Live Wt. lbs.	No.	Av. Live Wt. lbs.		No.	Av. Dr. Wt. lbs.	Av. Pr. pr. lb.	No.	Av. Wt. lbs.	Av. Pr. pr. lb.	No.	Av. Wt. lbs.	No.	Av. Live Wt. lbs.
567	600	1060	872	#37	783	421	18.5	*263	898	10.93	51	800	567	715

*Includes 30 head shipped on January 1, 1945. Included because of last shipment.

#This does not include calves born in December that will be shown in total number for January 1945.

OTHER

TURKEYS

Beginning Inventory	Purchases	Butchered			Death Loss	Closing Inventory
		No.	Av. Dr. Wt.	Av. Pr. Per lb.		
357	0	321	13.8	40¢	36	0

Granada Project
Amache, Colorado

GR:OP:WMF

January 18, 1945

Mr. Dillon S. Myer
Director
War Relocation Authority
Barr Building
Washington (25), D. C.

Attention: Mr. E. J. Utz
Chief, Operations Division

Dear Mr. Myer:

Enclosed herewith in triplicate are yearly reports for the calendar year 1944 as follows: (1) Narrative; (2) Yearly Summary Report - Crops; and (3) Yearly Summary Report - Livestock.

Very truly yours,

James G. Lindley
Project Director

Enclosures





RECEIVED
JAN 22 1945

WAR RELOCATION AUTHORITY

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JAN 22 1945

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JAN 22 1945

WAR RELOCATION AUTHORITY

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JAN 22 1945

WAR RELOCATION AUTHORITY

ANNUAL REPORT for 1944
Agricultural Section

NARRATIVE

Vegetables amounting to 3,318,000 pounds, field crops totaling 10,676,000 pounds, and 745,075 pounds of dressed meat represent farm production for the Period January 1, 1944 to December 31, 1944.

Disregarding the many problems and disappointments--organizational "pains", lack of workers during critical periods, and inadequate facilities--the center's farm program has accomplished much; much which will be of lasting value. The economic worth of the farm's production has been considerable. Less tangible--although equally important--has been the psychological effect both inside the center among its people, hundreds of whom were kept continually employed at work to their liking; outside among the public who gained a tolerant respect for a people they little knew or little understood. In addition, the farm project has demonstrated to evacuees and to local farmers that this valley can be made to produce profitably crops other than corn, hay, and cattle.

The farm set forth as its objective production of the center's vegetable and meat requirements to the extent that climate and environment would permit. It is noteworthy that it has not missed a week of providing both vegetables and meat for center use. A total of 370,000 pounds of dressed beef, 349,486 pounds of dressed pork, and 25,038 pounds of dressed poultry have been delivered to the Mess Section.

The slaughter of cattle and hogs was accomplished in the project slaughterhouse, an enterprise which has been carried on with a high degree of efficiency as indicated by the following quotation from the report of the project's Chief Sanitarian: "The slaughterhouse proper was extremely clean, well kept and free from disagreeable accumulated odors often associated with such establishments. The men working there were in uniform dress and wearing clean white caps. They appeared very professional, both personally and in the execution of their duties. The whole establishment and its staff compare more than favorably with similar 'outside' establishments."

The Mess Section has utilized 2,102,914 pounds of vegetables from the farm this year. They have been unable at times to utilize the vegetables produced even to the extent of using the amount called for in the annual plan. This situation occurred in the disposition of beets, swiss chard, and Chinese cabbage. Partial abandonment of the acreage planted to these crops is thus accounted for. The crops were grown and yields were good, but no outlet was available either within the center or outside. Total acreage so abandoned is relatively small, amounting to less than 10 acres. In other instances vegetables surplus to mess

requirements were utilized by the center's population. Examples are melon, daikon, and squash. Insofar as possible this surplus was equitably divided among the blocks.

Growing conditions during the year were unusually favorable for some crops, notably onions, carrots, beets, melons, and celery. Yields of these were higher than expected. Conversely, the season was unfavorable for some vegetables, especially beans. All beans produced unsatisfactory yields. Some failed entirely. Heavy spring precipitation with resulting cold soils caused poor stands and encouraged soil born diseases. As a result plants were weakened and made readily susceptible to blight diseases.

Growing of soy beans has not been generally recommended in this area. However, the scarcity and high price of this commodity and the center's demands made rather mandatory an attempt at production. Yields were discouraging. Some varieties shattered before they could be harvested and nearly all were too early for this climate. It is believed that yields would have been better had the land been phosphated and the seed inoculated before planting. Whether or not edible soy beans can be grown successfully in this valley is conjectural. Contrary to authority, the project did learn that several varieties will mature in this climate. In fact, early maturity was one reason for poor yield.

The cannery enterprise was confronted with two primary difficulties: (1) Lack of equipment, a problem which was finally overcome; (2) Inability to convince the population that locally canned products were safe for consumption. It was not unusual to hear comments such as the following: "It is one thing to die for democracy; quite another to die from a can of tomatoes." Facetious? -- Perhaps. The results of this enterprise are 5,000 gal. of canned tomatoes and 5,500 gal. of pickles stored in warehouses.

Some of the results and conclusions of the past two years' experience cannot be found in a statistical report. It is believed that they are worthy of note. A few of these are listed in the following outline:

- (1) Organic matter incorporated in the top soil will reduce the depth of crust formation, a most serious problem in this valley and one which is a hazard to all crop production, especially vegetable crops which start from small seed. Frequent deep plowing eliminates the coarse organic materials and leaves the surface soil a mixture of subsoil clay and alkali. Methods of farming aimed at reducing the frequency of plowing will undoubtedly favor the production of many vegetable crops not grown in the valley at the present time.
- (2) Most years cattle cannot be expected to make good gains on river bottom pasture during the months of July and August. The abundance of insect pests is responsible for this condition. Perhaps the newly developed spray materials will overcome this problem in future years.

- (3) It is doubtful if calves can be grazed on alfalfa pasture without considerable death loss. However, the one year's experience on the WRA farm indicates that the gain in meat production over other kinds of pastures will offset the losses.
- (4) According to the farm's experience the most efficient and economical way to handle a corn or sorghum crop is to harvest it green with a field ensilage harvester, place in trench silos, and feed to cattle using alfalfa and bone meal as supplemental feeds.
- (5) Soils in this valley are heavily contaminated with organisms that cause intestinal disturbances in livestock. Unusual precautions are necessary to prevent severe losses of hogs and chickens from necro, erysipelas, and coccidiosis. Inadequate facilities with resulting exposure during wet weather is believed to have made the attack by these organisms more virulent, thus causing the death losses shown in monthly reports.
- (6) The two years' experience in growing vegetables in a country not heretofore considered adapted to this usage has brought forth several important considerations.
 - (a) Climatic conditions in this section of the Arkansas Valley are not conducive to commercial production of lettuce, broccoli, and eggplant. There is still some doubt as to the economical soundness of growing cabbage and soy beans.

Vegetables which were not before grown commercially but which appeared to offer splendid possibilities are celery, mung beans, carrots, spinach, and herb tea. Others which the project produced in abundance are onions, potatoes, tomatoes, melons, squash, cucumbers, turnips and beets.

- (b) Contrary to local opinion late potatoes (the variety Katahdin) were found to produce better yields and better quality than early potatoes. Irish Cobblers produce more than Bliss Triumph. The keys to successful potato production in this country are good seed, insect control, and the maintenance of proper soil moisture conditions.
- (c) Celery must be given a heavy treatment of nitrogenous fertilizer early in the fall to stimulate rapid growth. It is noteworthy that the celery crop was better the second year that it was grown on the same land.
- (d) There is evidence of a serious deficiency of available phosphate in most of the project's soil. This deficiency was most noticeable in the leguminous crops.

War Relocation Authority
Yearly Summary Report - Crops

For Year Ending Dec. 31, 1944

Granada Center

Crop	Acreages			Total Production (lbs) (5)	Yield Per Harvested Acres (lbs) (6)	Disposition of Product			Average Price Per lb. (¢) (10)	
	Planted (2)	Abandoned (3)	Harvested (4)			Used on Center (lbs) (7)	Shipped to other Centers (lbs) (8)	Sold (lbs) (9)		
Spinach	8	0	8	60,510	7,863.75	60,510			.02927	1,754.79
Lettuce	10	7 3/4	2 1/4	8,000	3,555.6	8,000			.0255	204.00
Soybeans	155		155	8,000	51.61					
Celery	4		4	141,450	35,362	77,890			.0265	3,687.70
Potatoes, Sweet	5	0	5	18,250	3,650	18,250			.0242	438.00
Potatoes, Irish	70	0	70	475,960	5,949	352,560		150	.017	8,091.32
Onions, dry	30	0	30	874,250	29,142	218,150	478,125	2200	.013	11,365.25
Onions, green	4	0	4	37,560	9,390	37,560			.0274	1,014.12
Beets	7 3/4	*	6	68,530	11,422	52,370		380	.0202	1,370.60
Radish, red	2 3/4	0	2 3/4	10,055	3,656	10,055			.0169	170.93
Cabbage	4	0	4	17,205	4,301	17,205			.0175	292.49
Pepper	3	0	3	11,410	3,803	11,410			.0209	239.61

* Harvest of beets and carrots will continue through January, 1945.

War Relocation Authority
Yearly Summary Report - Crops

For Year Ending Dec. 31, 1944

Granada Project

Crop	Acreages			Total Production	Yield Per Harvested Acre	Disposition of Produce			Average Price Per lb.	
	Planted	Abandoned	Harvested			Used on Center	Shipped to other Centers	Sold		
(1)	(2)	(3)	(4)	(lbs) (5)	(lbs) (6)	(lbs) (7)	(lbs) (8)	(lbs) (9)	(¢) (10)	
Tomatoes	30	0	30	255,105	8,507	247880 **		*7,225	.0226	5,867.41
Eggplant	1	1	0	0						
Carrots	12		12	194,230	16,186	76,263			.0267	5,244.21
Turnips	6		6	171,115	28,519	180,835			.0158	2,737.84
Daikon	10 1/2		10 1/2	280,770	26,740	235,090			.0107	3,088.47
Garlic	1	1	0	0		275				
Mustard	1	0	1	5,250	5,250	5,250			.0085	52.50
Cucumber	12	0	12	64,675	5,389.6	139,075			.0232	1,487.53
Cabbage, chinese	12 1/2	7	5 1/2	115,615	21,020.9	134,565			.0071	1,156.15
Beans, string	10	0	10	6,925	692.5	6,925			.0345	235.45
Beans, cranberry	12	12	0	0						
Beans, lima	14	0	0 1/4	1,400	100	1,400				10.40
Beans, Red Mung	18	0	18	1,040	57.78	1,040			.10	

* 400 lbs were seeded and the seeds stored for next years crop

** 53,440 were used in the cannery

War Relocation Authority
Yearly Summary Report - Crops

Granada Center

For Year Ending Dec. 31, 1944

Crop	Acreages			Total Production	Yield per Harvested Acre	Disposition of Produce			Average price per lb.
	Planted	Abandoned	Harvested			Used on Center	Shipped to other Centers	Sold	
(1)	(2)	(3)	(4)	(lbs) (5)	(lbs) (6)	(lbs) (7)	(lbs) (8)	(lbs) (9)	(¢) (10)
Catapoupe	13	0	13	42,818	3,294	42,560		258	.0116 513.82
Corn	21	0	21	24,710	1,176.7	24,710			.0137 345.94
Popcorn	2	0	2	1,190	595				
Squash	15	0	15	70,960	4,731	70,960			.0187 1,348.44
Swiss Chard	2 1/2	1	1 1/2	20,720	13,813.3	20,720			.01 207.20
Watermelon	12	0	12	323,260	26,938	322,600		660	.0063 269.38
Shiro Uri	6	0	6	4,240	707	4,240			.0376 161.12
Herb tea	4	0	4	1,500	375	900			.175 270.00
Beans, Green									
Mung	11	0	11	1360	123.6	1,360			.0472 63.92
Pumpkin						3,816*			
Dry Beans						8,240*			

reg. 3,377,703

~~23,057.78~~

War Relocation Authority
Yearly Summary Report - Crops

For year Ending Dec. 31, 1944

Granada Center

Crops	Acreages			Total Production	Yield Per Harvested Acre	Disposition of Produce			Average Price Per lb.	Av. Sell- ing Price Sold
	Planted	Abandoned	Harvested			Used on Center	Shipped to other Centers	Sold		
(1)	(2)	(3)	(4)	(lbs) (5)	(lbs) (6)	(lbs) (7)	(lbs) (8)	(lbs) (9)	(¢) (10)	(11)
Corn	575									
Grain		250	250	362,400	1,449.6				.018 :0039	\$6523.20
Silage			175	2,400,000	13,717				.004 :00043	9600.00
Fodder Pastured			150	750,000	5,000				.00157	1125.00
Sorghum grain	150		150	139,800	932				.018 :0047	1118.40
Sorghum, forage	380									
Silage			225	3,200,000	14,222				.003 :00031	9600.00
Fodder			155	720,000	4,645				.001 :000099	720.00
Alfalfa	675		675	2,312,000	3,425	58,000		1783,198	.005 :00103	.00564 11,560.00
Wheat (winter)	185		185	242,645	1,311.6	53,820		80,005	.016 :0016	.01088 3,882.30
Wheat (spring)	95		95	115,135	1,106.6				.016 :00395	1842.16
Barley	125		125	434,400	3,475.3	278,110		83,090	.017 :00172	.0125 7471.70
				10,676,380						53442.76

WAR RELOCATION AUTHORITY
Yearly Summary Report - Livestock

For Year Ending December 31 194 4Granada

Center

TABLE I HOGS

Beginning Inventory				Purchased				Litters Farrowed		Slaughtered		
Feeders		Breeding Stock		Feeders		Breeding Stock		Litters	Pigs Raised	No.	Av. Dr. Wt.	Av. Pr. pr. lb.
No.	Av. Wt.	No.	Av. Wt.	No.	Av. Wt.	No.	Av. Wt.	No.	No.			
915	135	0	0	2,009	161.8	0	0	51	221	1933	180.8	.139
				Death Loss			Closing Inventory					
				Under 6 wks.	Over 6 wks. old		Feeders		Breeding Stock			
				No.	No.	Av. Wt.	No.	Av. Wt.	No.	Av. Wt.		
				181	270	80	790	136	0	0		

349,486.4 48,578.61

The difference of 29 in favor of the project can be accounted for by litters farrowed and not brought into the book records.

TABLE II CHICKENS

Beginning Inventory				Purchased				Eggs Produced		Butchered		
Chicks No.	Pullets No.	Hens No.	Other No.	Chicks No.	Pullets No.	Hens No.	Other No.	No. of Doz.	Av. Pr. pr. doz.	No.	Av. Dr. Wt.	Av. Pr. pr. lb.
0	0	3199	465	8005	8300	0	*19	13,860	1231	9449	2,652	.1996
				Death Loss			Closing Inventory					
				Under 6 wks. No.	Over 6 wks. No.	Chicks No.	Pullets No.	Hens No.	Other No.			
				4487	**463	0	0	0	0			

* Inventory adjustment at May 1

** Unaccounted for at closing of project, accumulated loss figure (in and over) during the year of 1944.

38-2305 @ 1845.14
68814.90

TABLE III

BEEF CATTLE

Beginning Inv.		Purchased		Calves Born No.	Used on Center			Shipped to other Centers			Death Loss		Closing Inv.	
No.	Av. Live Wt.	No.	Av. Live Wt.		No.	Av. Dr. Wt.	Av. Pr. pr. lb.	No.	Av. Wt.	Av. Pr. pr. lb.	No.	Av. Wt.	No.	Av. Live Wt.
736	770	803	715.8	222	951	389.65	.179	30	780	.10801	47	642.7	*747	696.38

All figures have been checked with records available in the farm office, property office and cost accounts. Included in the beginning inventory of cattle are 54 calves. These have been taken into the cattle account. ^{OTHER} All calves will be taken into the cattle account as of January 1, 1945. Death loss on cattle represents 29 adults, mostly old cows, and 18 calves.

Closing inventory 747
Book inventory 733
* 14 overage

* Refer Washington Audit May 1, 1944 and letter June 2, 1944 -- showing overage of 14 head. Never adjusted on Farm records. Adjusted 1/145.