

WESTERN ASSOCIATION OF AGRICULTURAL EXPERIMENT STATION DIRECTORS
AND
UNITED STATES DEPARTMENT OF AGRICULTURE
212 POST OFFICE BUILDING
BERKELEY, CALIFORNIA 94701

OFFICE OF THE
RECORDING SECRETARY

November 28, 1967

TO : Western Directors
FROM : Leo R. Gray, Recording Secretary *LRG*
SUBJECT: Minutes of Special Meeting in October 1967 of Western Directors

Minutes of the October 1967 meetings are attached.

TABLE OF CONTENTS

<u>Item</u>	<u>Page</u>
Call to Order and Attendance	1
Introductions and Announcements	1
Billing for DAL Position	2
Report of DAL.	2
ESCOP - Policy Concerning Special Grants from CSRS	2
Long Range Plan for Physical Facilities	3
Long Range Planning Workshop	5
Workshop	6
CRIS Review.	6
Long Range Program Projections of SMY's by RPA's	6
Miscellaneous.	8
Program on Control of Codling Moth	8
Standardization of Regional Research Publications	9
Resolutions and Appreciations	10
Adjournment	11
APPENDIX A	12
APPENDIX B	14

MINUTES OF WESTERN DIRECTORS'
SPECIAL MEETING

Regents Room, University Hall
University of California
Berkeley, California
October 3-5, 1967

Call to Order
and Attendance

Chairman Asleson called the Western Directors' Special Meeting to order at 8:35 a.m. on Tuesday, October 3, 1967. Those present during all or part of the business meetings included:

R. K. Frevert	Arizona
T. M. Stubblefield	Arizona
C. F. Kelly	California
E. G. Linsley	California
D. M. McNeill	California
D. F. Hervey	Colorado
C. P. Wilson	Hawaii
J. E. Kraus	Idaho
R. D. Ensign	Idaho
J. A. Asleson	Montana
M. J. Burris	Montana
D. W. Bohmont	Nevada
R. E. Ely	Nevada
M. L. Wilson	New Mexico
G. B. Wood	Oregon
H. F. Horton	Oregon
K. W. Hill	Utah
C. E. Clarke	Utah
J. S. Robins	Washington
L. W. Rasmussen	Washington
N. W. Hilston	Wyoming
L. C. Ayres	Wyoming
M. T. Buchanan	Director-at-Large
C. F. Sierk	CSRS
H. A. Dunn	CSRS
B. D. Joy	RPDES
W. W. Paul	California
W. W. Wood, Jr.	California
L. R. Gray	Recording Secretary

Introductions
and Announcements

Asleson welcomed B. D. Joy and H. A. Dunn who came to this meeting as resource specialists.

Kelly introduced D. M. McNeill, Assistant to the University-wide Dean of Agriculture. He also introduced Dr. W. W. Wood, Jr., an Extension Economist at the University of California, Riverside, who was sitting in for A. M. Boyce.

Hill introduced C. E. Clarke, the new Assistant Director at Utah.

Wood introduced H. F. Horton, a new Assistant to the Director at Oregon.

Prevert introduced T. M. Stubblefield, Acting Assistant Director at Arizona.

The four avid novices (McNeill, Clarke, Horton, and Stubblefield) were appropriately welcomed as members of the Association.

Asleson announced that Western Directors were invited to send a representative to a meeting of the North Central Directors in Chicago. However, since the dates of that meeting conflict with this WD meeting, someone from the North Central group will meet with WD at the LGC meetings in Columbus, Ohio and report on that meeting. Two items to be covered at that meeting are:

1. Exchange of information, plans, and ideas with agricultural industry research representatives; and
2. The role of Experiment Stations in international agriculture.

Billing for
DAL Position

Asleson - Western Directors agreed to bill each state for their share of contributions for the position of DAL. A table indicating a billing for the position of DAL appears as APPENDIX A.

Hill moved, Bohmont seconded, that we bill each Station after June 1 for payment of the annual assessment for the position of DAL, based upon an estimated financial statement projected through June 30 of that year, and subject to an adjustment the following year, not to exceed a regional total of \$60,000. PASSED.

Bohmont suggests Montana, or some other state, put money into an investment escrow account. The interest earned could be paid back into the DAL account, with allotments to states on a pro-rata basis. The money then could be placed in a bank account annually, as of July 1, and drawn on a demand basis for interim operation adjustments (usually monthly).

Report of DAL

1. ESCOP - Policy Concerning Special Grants from CSRS

Buchanan - The feeling expressed among ESCOP members was that the item in the past for special grants from CSRS has been rather small (\$2,000,000 in FY '67). If such grants are to be, it might be preferable that they be made by an agency with a research mission rather than one with an administrative mission such as CSRS. The \$2,000,000 for special grants

might be put under Hatch and distributed by formula. The Southern Region is opposed to CSRS special grants.

Hervey - If we go the contract route might it not be going in a direction counter to the Long Range Plan for which we have been working?

Duchanan - The research mission of USDA is toward research that will forward the USDA's program; that of NIH is toward research that will forward health-related research missions; and NSF's mission is basic research.

- Evaluation of grants by peers implies allocation of research funds by formula (such as Hatch) is not the most appropriate way to administer and fund agricultural research.

- The Agriculture Committee in the House approaches the question of how research dollars are to be used differently than does the Committee that considers Forestry, NIH, NSF and others.

Hill - There seems to be a sizable waste of manpower committed to the preparation for submitting requests for a limited number of grants, and the review of such grants. Formula funding would likely be more efficient.

Ensign - If we can, we might set aside areas and indicate we will emphasize them with new (grant) monies. Grants may not be the most efficient means of funding agricultural research if they are to be administered in an environment with formula funds.

In essence, Western Directors prefer not to jeopardize formula funds by seeking to utilize a grant funds program that is under-funded. Unless the grants program is to be funded at a sufficiently adequate level, Western Directors prefer to go along with the formula approach. There is little enthusiasm for the grant approach among the Western Directors.

2. Long Range Plan for Physical Facilities

The target date set by USDA for completion of the Long Range Plan for Physical Facilities is January 1, 1968.

Buchanan suggested the USDA and SAES ought to develop their Physical Facilities Long Range Plans separately and then get together for an overall plan.

Buchanan noted that USDA people tend to be moving from SAES housed facilities to "centers of excellence." Some reasons given for this tendency have been: 1) Elimination of one-man units in favor of centers; 2) Following the policy concept of centers of excellence; and 3) In-house housing problems of SAES.

Frevort suggested that a check might be made on USDA policy regarding length of lease contracts for land and facilities.

Duchanan pointed out that Federal funds under the Abernathy Act would overshadow RRF for facilities for research.

Joy led a discussion pertaining to the form entitled Data on "New" Agricultural Research Facilities. This form should include entries for any building or facilities constructed or planned for since October 1965, or contemplated for the future. ("Old" positions means those reported in the 1966 Inventory of Research.) There would have to be some means of updating this information from time to time, perhaps annually. This planning should be tied to potential financing under the Abernathy Act - (for amounts greater than \$20,000).

Joy - Western Directors as a group can plan for physical facilities in coordination with the DAL. Each SAES Director ought to coordinate with appropriate USDA people to facilitate coordination of physical facilities plans of SAES and USDA.

- This form is basically for cooperative planning to show if physical facilities fit into the needs set forth in the Long Range Study (LRS).

Bohmont - We ought not concern ourselves at this time with potential budget allocations anticipated from our State Legislatures. We ought to consider such planning from the point of view of meeting the needs anticipated in the LRS for Scientist-man-years (SMY's). We know what we might ask for, but we can't predict what our legislatures will allocate. We also need to know what is actually in hand that has been approved for planning and funding (since January 1, 1966).

Kraus - The twelve states here ought to know what is going on in the other SAES in the region, and also what USDA is going to do on physical facilities and program-wise in the Western Region.

Joy - We will seek to have you receive feedback on all pertinent information on facilities. When USDA completes its job on physical facilities planning, Western Directors will receive copies of the information.

The consensus of WD was that whatever requests come from R. Lovvorn on physical facilities will be fed back to him on copies of this form (revised) - filled in with appropriate information. Joy will revise this form based on the discussion, and supply Duchanan with 45 copies.

Duchanan - The four DAL's recommended to Lovvorn that we concentrate on the SMY Long Range Planning data rather than dollar budget figures, and that the SMY's can be converted to dollars at a later date.

3. Long Range Planning Workshop

Buchanan distributed DAL handouts on four subjects, namely;

- a. Research classification. (OWDAL-21, September 29, 1967.)
- b. Outline for use in preparing materials on contributions of agricultural research. (OWDAL-23, September 29, 1967.)
- c. Use of CRIS in research management. (OWDAL-24, October 2, 1967.)
- d. North Central Region provisions for regional advisory committees in broad areas of research. (Memorandum to Dr. C. P. Wilson, dated October 2, 1967.)

Buchanan - The Long Range Study (LRS) is part of a USDA system that in turn is part of a government-wide system. We are engaged in this process of projecting the program of the LRS for various reasons, including:

- a. USDA was told to do so;
- b. USDA invited the Land Grant Colleges (LGC) to participate to enable a truly cooperative effort between SAES and USDA in developing projected research problem area (RPA) needs for scientist-man-years (SMY's) by selected groupings to 1975. Representatives of SAES and USDA made a tentative division of SMY's among USDA agencies and SAES in total.
- c. Increased familiarity with the working mechanisms of this system will enhance one's appreciation of it. The "guts" of the system revolve around the revised classification scheme - as outlined on page vii of "An Inventory of Agricultural Research," coordinated and compiled by RPDES, June 1967. When you get to workable projections you move to SMY's by RPA's, rather than by summary components.

Ensign - How do we know where, in the RPA's, a project will fall when we classify it? Dunn indicated there is a book that can serve as a guide for delineating RPA's for projects classified. The basic information is included in the appendix to the long range study report.

Dunn - A copy of every new project or revision going into the CRIS system will be returned to the Stations indicating any changes that have been made (in classification and RPA).

Joy - RPA will probably become the system most widely used to bring about coordination of people who are widely scattered, but are working on similar things.

- As noted in OWDAL-21, page 2, PPB is structured into six Program Categories (plus general support): I. Income and abundance; II. Growing Nations - New Markets; III. Dimensions for Living; IV. Communities of Tomorrow; V. Resources in Action; and VI. Science in Service of Man.

- Projects are listed in CRIS by keyword index (KWIX).

- CSRS considers that "agricultural research" is whatever is being done by SAES and USDA agencies regardless of the classification by State or other Federal agencies.

- There are alternatives for adjustment of projected SMY's, namely: 1) Trade-off within regions; 2) Trade-off among regions; 3) Trade-off with USDA; or 4) Change the projected figures.

Workshop

1. CRIS Review

Henry Dunn reviewed in depth each of the four Current Research Information System (CRIS) forms under the general title: "Research Work Unit Project Description."

Dunn also distributed a handout about CRIS, dated 1/9/67, entitled: "Titles, Abstracts, and Key Words for Information Retrieval from CRIS."

2. Long Range Program Projections of SMY's by RPA's

The workshop began with a review of tabular sets of long range program projections of scientist-man-year (SMY) requirements through 1977. These SMY projections by research problem areas (RPA's) had been compiled and summarized tentatively for all states and for the region by the DAL prior to the meeting. Western Directors spent considerable time discussing necessary adjustments that should be made in the tabular presentations.

Buchanan suggested that adjustments not be limited to this session. WD took the worksheets home, thought about them for a couple of weeks, and returned them, with appropriate explanatory comments, confirmations and/or revisions, to the DAL and/or the Recording Secretary. A recapitulation of projections, including all adjustments, appears as APPENDIX B to these Minutes.

Hervey predicted the states will pick up a significantly larger share of watershed management SMY's (RPA #107) in the future due largely to expected increases in available McIntire-Stennis funds.

Sierk - The allocation for the West is low for the animal diseases group.

Joy expressed concern over the large allocation of SMY's for range management (RPA #112), since almost all of it is in the West, and therefore not much opportunity for trade-off.

Classification inconsistencies were noted, particularly as they pertain to commodity and discipline allocations. Cotton insects, bees and other pollinating insects were set up as units apart from the discipline of entomology. Disciplines likewise cut across commodity groupings. Range improvement work is one of the components of task force #3 - forage, pasture, and range - they will draw from all 96 problem areas.

Bohmont moved, Wood seconded, that Western Directors request that the Range Management Problem Area, now identified as #112 in the Long Range Plan, be restudied with key research problem areas identified to adequately reflect the importance of this problem area to the Nation. PASSED.

Sierk noted the West is low in the RPA #307 ("Improvement of biological efficiency of field crops"), and questioned whether some range couldn't be included.

Robins - WSU treated range management the same as they did timber management and wheat management. Washington's people are spread throughout other groups, rather than pulled together under RPA #112 as did New Mexico. With different interpretations, what do the figures mean?

Joy suggested that Bohmont's motion on RPA #112 be directed to task force group #3 - on forage, pasture, and range; and also to the ARPC task group subcommittee.

Frevert - Some SMY's (at least 3 at Arizona) are not reflected in RPA #108 ("Economic and legal problems in management of water and watersheds"), because the SMY's are in the Water Research Center, and personnel in that center are not under the administrative control of the Agricultural Experiment Station. Work in this area however, is being covered - (it is up 2.5 SMY's since 1965). Other stations have similar situations.

Joy - The long range study report recommended that in the next decade, the program of SAES and USDA be increased in scientist-man-years by 76 percent. The 70 percent guide on projected increases from the FY '66 manpower for 91 problem areas to 1977 was based on the total SMY's by research problem areas (RPA), excluding RPA #603 (Technical Assistance to Developing Countries). If RPA #603 were included, the guide would be 76 percent. However, RPA #603 depends on new Federal funds for support.

Miscellaneous

1. Program on Control of Codling Moth

Robins - The problem of control of codling moths is a matter of significant concern in Washington, Oregon, and Idaho. A proposal for an expanded program estimated that a \$5 million facility, with an annual operating budget of \$3-4 million would be required to do the control job in the West. There is need for talk among the above three states and others with major apple and pear production. The three Northwestern States are willing to host such a meeting, but they are not certain as to the output results of such a program. To date, the existing program has been carried on in the U.S.A. by ARS with a little involvement by the States. The Canadians have had a pilot program of this type underway. Such a program should be viewed in a manner similar to the screwworm program conducted with livestock interests, and ought to be worked into a long range plan.

The proposed program indicates cost estimates for spray programs in Washington could be eliminated to the extent of \$30-40 per acre, plus other savings.

Linsley cautioned about certain physiological adaptations associated with codling moths. He indicated that whether or not a central station, for rearing sterile male codling moths, would be preferable to a series of satellite stations would depend on the success of the control efforts.

Ensign moved, Hervey seconded, that a special conference of competent people be called by Robins to discuss the proposed program for the control of codling moths, and make appropriate recommendations to Western Directors. PASSED.

During discussion of the above motion the following comments were made:

- a. At what stage should orchardists themselves be expected to contribute to offsetting costs of such a program? The concept has come forth that commercial agricultural industries benefiting from a program such as the one proposed ought to pay for its research. There are a number of research problems involved that ought to be paid for by those in a position to benefit, apart from the general public. Therefore, as the research program gets sufficiently developed, someone other than the experiment station ought to pick up the tab.
- b. The consensus of the group was that the Extension Service and ARS control agencies ought to be brought into this program.

2. Standardization of Regional Research Publications

W. Paul reported on his efforts to help standardize certain aspects of the Regional Research Publications issued by the States in the Western Region - See WD Minutes of July 1967, p. 23. He indicated agreement by 11 of the 12 states had been reached on the following points:

- a. Elimination of the double numbering system - only State numberings will be used.
- b. There was general agreement on the design of the proposed logotype with minor modifications of shadings to suit individual publications. The statement "A Western Regional Research Publication" has been incorporated into the logotype. California will provide the experiment station editors with satisfactory reproductions of this design.
- c. The list of states cooperating in each project will appear on page 2 (inside the front cover) when this is felt desirable by the state's editor, but may be used as part of the front cover design.
- d. The statement regarding the mailing indicia for the Regional Publications may be carried on either pages 2 or 3, at the discretion of the state's editor.
- e. Regarding the regional mailing list proposal, responses from the other states indicate it would be expensive, would require much responsibility on one state to handle the mailings, and that additional mechanical problems would be involved.

Paul suggested that the idea of a standardized regional mailing list be dropped, and that the system now used be continued.

Discussion of Paul's report brought out the following comments:

- a. Sierk - CSRS has accumulated a list of regional publications over time.
- b. Stubblefield - The fact a publication is regional is secondary to the subject matter and author.
- c. Ensign questioned whether all regional publications get to key places. He suggested every SAES Director, by position, ought to be on every station's mailing list.

Paul noted that all SAES libraries are on the mailing lists.

Sierk suggested that perhaps SAES would be interested in the key places required for all USDA publications.

d. Hill - Paul has done a commendable job in getting the double numbering concept out of our minds.

Hill moved, C. P. Wilson seconded, that we drop efforts to standardize a regional mailing list, that all states will check their mailing list against a list of required USDA mailings to be furnished each station editor by C. Sierk, and that the report and other recommendations of Paul is accepted by the Western Directors. PASSED.

Resolutions and
Appreciations

Resolution No. 1

WHEREAS, it has been readily apparent to all that our Director-at-Large, for the Western Region, Dr. Mark T. Buchanan, has rendered us yeoman service in the operation that we have just gone through; and

WHEREAS, in addition, reports from his associates indicate that he has represented us very well in the National Councils; and

WHEREAS, he has kept us informed by reports and circulars, and he has visited our Stations, and been otherwise helpful;

THEREFORE, BE IT RESOLVED, that we the Western Directors do commend him for his service, and assure him of our continued confidence in his administration.

Hill moved, Ely seconded, that the above resolution be approved. It passed with applause.

Resolution No. 2

WHEREAS, Dr. H. A. Dunn and Dr. B. D. Joy have devoted their whole-hearted and untiring efforts as consultants to help make this workshop, concerned with the Long Range Plan, a success;

THEREFORE, BE IT RESOLVED, that we the Western Agricultural Experiment Station Directors Association, including CSRS representatives, do hereby express our appreciation for their services.

Wood moved, Buchanan seconded, for approval of the above resolution. PASSED.

Resolution No. 3

WHEREAS, Dr. W. W. Wood, Jr. and Mrs. Patricia Pope (Secretary to the DAL) labored diligently in their efforts to assist in the compilation of data and in expediting the flow of updated materials used during this Workshop session concerned with the Long Range Plan for agriculture in the Western Region;

THEREFORE, BE IT RESOLVED, that we the Western Agricultural Experiment Station Directors Association, including CSRS representatives and guests, do hereby express our appreciation for their services.

B. Wood moved, Buchanan seconded, for approval of the above resolution. PASSED.

Resolution No. 4

WHEREAS, the Western Association of Agricultural Experiment Station Directors, including the CSRS representatives and guests, have completed a successful three-day special meeting in Berkeley, October 3 through 5, 1967;

THEREFORE, BE IT RESOLVED that we the Western Association of Agricultural Experiment Station Directors, the CSRS representatives and guests do hereby express our sincere appreciation to the staff of the University of California, and to their wives for their special efforts to provide transportation and the means for excellent meeting facilities, and for their delightful hospitality that enhanced the success of the meeting.

B. Wood moved, Robins seconded, for approval of the above resolution. PASSED. In addition, Asleson, on behalf of the Western Directors, presented Dr. Kelly a token expressing the group's appreciation for the hospitality of the Kellys, the Buchanans, the Linsleys, and others.

Adjournment

Chairman Asleson adjourned the meeting at 12 Noon (sharp) on October 5, 1967.

Respectfully submitted,



Leo R. Gray
Recording Secretary

APPENDIX A

Western Director-at-Large FUNDS

State	Rate of assessment	Amount received 1966-67 ^{1/}	Credits			Balance due for 1967-68	Total annual assessment for 1967-68
			Pro-rata share carry forward	Pre- pay- ments	Total		
	Percent	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
Arizona	8.3	2,490	1,507.09	-	1,507.09	3,472.91	4,980
California	16.3	9,780	2,959.71	4,890	7,849.71	1,930.29	9,780
Colorado	11.3	3,390	2,051.82	-	2,051.82	4,728.18	6,780
Hawaii	4.1	1,230	744.47	-	744.47	1,715.53	2,460
Idaho	6.8	2,040	1,234.72	-	1,234.72	2,845.28	4,080
Montana	7.6	2,280	1,379.99	-	1,379.99	3,180.01	4,560
Nevada	4.1	1,230	744.46	-	744.46	1,715.54	2,460
New Mexico	4.6	1,380	835.26	-	835.26	1,924.74	2,760
Oregon	11.0	6,600	1,997.35	3,300	5,297.35	1,302.65	6,600
Utah	8.1	2,430	1,470.78	-	1,470.78	3,389.22	4,860
Washington	11.3	3,390	2,051.82	-	2,051.82	4,728.18	6,780
Wyoming	6.5	3,900	1,180.25	1,950	3,130.25	769.75	3,900
Total ...	100.0	40,140 ^{*/}	18,157.72	10,140	28,297.72	31,702.28	60,000
^{*/} To Regents of U. of C.		38,000	26,157.72				
To WDAL Fund		2,140	2,140.00				

^{1/} Initial billing to all States was for one-half the amount of the annual assessment, except for three States--California, Oregon, and Wyoming--who were billed initially for a full year. The initial billing covered expenses for April 1 through June 30, 1967, plus a carry-over sum of \$28,297.72. This carry-over sum was pro-rated among the States as indicated above.

FINANCIAL STATEMENT

DIRECTOR-AT-LARGE

WESTERN ASSOCIATION OF
AGRICULTURAL EXPERIMENT STATION DIRECTORS(to cover period
April 1, 1967 - June 30, 1967)RECEIPTS:

Payment #1		\$23,790.00	
Payment #2		<u>14,210.00</u>	
Total			<u>\$38,000.00</u>

EXPENDITURES:

Acad. (Director) 3 months	6,549.99		
Non-Acad. (Secy) 1 month	458.00		
Benefits (Director) 3 months	851.49		
Benefits (Secy) 1 month	45.80		
Supplies & Expenses	1,689.85*		
Equipment & Facilities	<u>2,247.15</u>		
Total Expended to Date		11,842.28	<u>-11,842.28</u>
Balance			26,157.72
* U.C. Storehouse	40.18		
Printing	124.80		
Mailing	6.20		
Telephone	23.00		
Travel	1,476.41		
U.C. Garage	.76		
Central Duplicating	17.50		
Grounds & Bldgs.	<u>1.00</u>		
Total, S&E		1,689.85	

BUDGET FOR 1967-68:

Acad. (Director) 12 months	26,199.96		
Non-Acad. (Secy) 12 months	5,760.00		
Benefits (Director)	3,405.96		
Benefits (Secretary)	576.00		
Supplies & Expenses	22,558.08		
Equipment & Facilities	<u>1,500.00</u>		
Total		60,000.00	

APPENDIX B

RECOMMENDED INCREASES TO 1977 IN SMY'S IN SAES IN WESTERN REGION BY RESEARCH GOALS AND PROBLEM AREAS

State Agricultural Experiment Station recommended SMY projections to 1977 of additional requirements above 1966 levels for the 12 States in the Western Region were reviewed and adjusted in Berkeley, California, October 3-5, 1967. These projected levels have been tabulated by Long Range Program goals of agricultural research, and by Research Problem Areas, and they reflect the considered judgments of the SAES Directors and their staffs in the Western Region.

The tabular presentations are presented in two forms, namely: Table Series I - presents SMY projections for activity groups by their short titles; and Table Series II - presents SMY projections by RPA number.

The following extracts, concerning the rationale for their long range SMY figures, are from letters addressed to the Director-at-Large and to the Recording Secretary:

ARIZONA - Richard K. Frevert

"We considered your comment regarding the allocation of SMY's to the unallocated areas, and reached a decision that this was the only appropriate way to handle this problem. In this category we are putting only research which covers a broad spectrum of crops and is, therefore, impossible to properly identify with any given commodity.

"You will note, that under Goal VI, we are indicating Arizona's interest in obtaining 4.0 SMY's for RPA 603, in accordance with the understanding that new funds must be made available for this purpose.

"As you know, we consider these projections as the program needed to meet our needs as we now see them. Obviously, there will be changes in priorities as new problems arise and old problems are solved. One of the severe limitations in developing this program is that we had very little information on the plans of the USDA agencies in Arizona and in the Southwest; and, as you know they have a very substantial research program in Arizona."

COLORADO - Donald F. Hervey

"We have a growing poultry industry in Colorado, and a progressive research staff in the Poultry Department."

IDAHO - R. D. Ensign

If possible, Idaho would like 9 (rather than 7) SMY's on Forestry because we think this group is low for Idaho in comparison to the importance of Forestry in other states.

"Rather substantial research needs are projected for production and protection goals for beef cattle. To a considerable extent, these are related to the present and increasing importance of beef cattle in the state, and the complexity of problems affecting the beef production enterprise. Reproductive efficiency and feed efficiency are two areas which beef cattle are at a relative disadvantage when compared with other species. Failure to reproduce, whether from a physiological or pathological cause, represents a phenomenal annual loss to the industry. Disease in other forms represents an additional loss through death and reduced growth rate. Tied directly to the cost of beef production is the need for drastic increases in productivity of native ranges, our greatest current and potential feed source for beef cattle. Recent loss of a federal range man and the planned removal of a second federal man reduces effort in this area to a very low level; only $\frac{1}{2}$ FTE is currently devoted to range research at the Main Station. An expanded and concerted effort in beef cattle research is necessary if the current and emerging problems of beef production in Montana are to be solved to improve the economic situation of the beef producer. Recently created facilities for this research include beef feeding lots, beef barns, and isolation areas for disease research. This represents justification for Montana's increased scientist man years in the categories of Beef Diseases and Parasites (RPA 211 & 212) Beef Production (RPA 310, 311, 312, 313, 409), and Range Production (RPA 112).

"Feasibility studies have indicated the potential of swine in Montana, particularly with the large production of feed barley which is often shipped to neighboring states. While swine production is relatively low, the state ranks third in the Western Region. Distance to West Coast markets is much less than from the corn belt states, suppliers of much of the pork needs of the expanding population of the Pacific States. Ability to expand greatly before population concentration reaches that of the Midwest is an advantage in control of diseases and parasites. A new swine research facility has been constructed which will be an important element in encouraging an expanded research program. This represents justification for increased research support in the category of Swine Production (RPA 310, 311, 313).

"Wheat is the most important single crop grown in Montana, accounting for about 25% of the cash receipts from agriculture. Losses from disease alone may amount to 20% of the value of production. Active programs in breeding for rust resistance must be extended to produce resistant varieties with good agronomic characteristics and acceptable flour characteristics. Cultural methods also require a concerted effort, both as approaches to control certain diseases, and to increase yield and quality. The phenomena of hybrid vigor in wheat can be exploited only if adequate information is known about flowering characteristics, influences of weather, and combining ability of strains and varieties. Wheat will receive a concerted research effort in coming years. This represents a justification for increased research support in the category of Wheat Production (RPA 208, 209, 307, and 405)."

NEVADA - Ray E. Ely

"We have reviewed our projected facilities program and needs and have given highest priorities to the building program that complement the proposed research. For example, one of the high priority research facilities is a laboratory and

office addition to the Renewable Natural Resource's Center. This will include greenhouse and headhouse facilities and controlled environment plant growth facilities. Another high priority research facility is the gamebird and wildlife environment laboratory which has been acquired and is in the process of development for research use. These facilities fit very closely with the research program which we have projected for development over the next ten-year period.

"Our allotment of SMY's complements the projected long range program for the College of Agriculture with consideration for the research and teaching needs in the same areas."

NEW MEXICO - Marvin L. Wilson

"Goal I Resource Conservation and Use

"New Mexico projected 13 scientific man years under this goal. Four and one-half men were allocated to five research problem areas. These are to be used primarily for strengthening on-going programs.

"The remaining 8.5 SMY's were placed in the range management category for the purpose of developing a center of excellence in research for New Mexico's most important natural resource.

"This state has a total of 73,200,000 acres of rangeland consisting of 55,000,000 acres of arid rangeland and 18,200,000 acres of semi-arid rangeland. The Agricultural Experiment Station has three ranches consisting of approximately 190,000 acres for use in rangeland studies.

"New Mexico has already initiated a strong range management research program. Five years ago the range program consisted of two professional men and one research technician. At the present time, we have seven professional men, five research technicians and several graduate students working in this problem area.

"We are committed to developing a strong range management program. With an excellent staff nucleus, plus our facilities and the additional 8.5 SMY's in this problem area, we feel that we could make outstanding research contributions in this RPA.

"Goals II, III, IV, V, VII

"The manpower allocated by New Mexico under these five goals (a total of 18.2 SMY's) would be used to strengthen our on-going program, and also to increase scope of program especially in forestry and vegetable and fruit production. The 5.5 SMY's programmed under Goal II would also contribute either directly or indirectly to our planned program as listed under Goal I.

"Goals VIII and IX

"The six SMY's programmed under these two goals would be a new program and would supplement each other.

"New Mexico has a relatively large number of low-income rural people. Many thousands of dollars are spent yearly in relief payments as a part of the social

and economics costs of this problem. To date, our research program has been very limited in this area. We have a definite need to initiate programs in (a) a socio-economic analysis of low-income rural areas in Northern New Mexico, (b) economic alternatives of subsistence farmers in Northern New Mexico, (c) economics of multiple resource use in the rural complex of Northern New Mexico, (d) economic feasibility of recreation developments in the economically-depressed and underdeveloped areas of New Mexico, (e) family decision making and financial management, and (f) causes and remedies of poverty among rural people."

WASHINGTON - J. S. Robins

"I would offer for the record the following, general observations on our discussions at Berkeley (October 3-5, 1967):

"(1) I believe the meeting held there was most productive and did much to consolidate all our thinking on the important subject of long-range planning. We still have much to do in terms of summarizing facilities requirements and then implementing this needed program, but I believe we are in much better position now to do this than prior to the Berkeley meeting.

"(2) In regard to relative emphasis on various subject matter areas, I would indicate the following:

"We are in agreement with the other Western states that the 219 man projection for horticulture was in excess of realistic, relative need here in the West. I believe the figure of around 120 is more appropriate relative to emphasis in other subject matter areas.

"We agree with the other Western states that the animal production area, particularly in beef cattle production, received inadequate emphasis for the West.

"We believe that the Western states allocation for food safety and for marketing efficiency groups was inadequate to meet the needs, if we understand these categories correctly.

"We agree with other Western states that the total area of range management was inadequately defined and distributed in the crop production group. We believe a recognition similar to that for wheat, pasture, corn, etc., would be more appropriate, breaking out the three or four distinct areas, thereby lending additional emphasis to this important area of the West. The 15 SMY's allocated, likewise seem to be low.

"Finally, certain individual problem areas within groups seem to be considerably out of balance. Of particular note would be the soil resources (area 101), drainage and irrigation (area 106), and weather (area 109), in the air, soil, watershed and environmental pollution group; RPA 305 in agricultural engineering; and a few items in the social science group.

"In general, however, the total framework seemed to be reasonably appropriate and I am hopeful that some adjustments between regions and between states and USDA will take care of some of these problems."