

WESTERN ASSOCIATION OF AGRICULTURAL EXPERIMENT STATION DIRECTORS  
AND  
UNITED STATES DEPARTMENT OF AGRICULTURE  
211 POST OFFICE BUILDING  
BERKELEY 1, CALIFORNIA

May 1, 1963

OFFICE OF THE  
RECORDING SECRETARY

TO : Western Directors  
FROM : John O. Gerald, Recording Secretary  
SUBJECT: Minutes of March 26-28 Meeting

Attached are the Minutes of your recent meeting at Lake Arrowhead. Minutes of the joint meeting on March 25 must be delayed for a week or two. Items below are listed for your specific attention:

<u>For Specific Attention of</u>	<u>Page No.</u>	<u>Sidehead or Other Identification</u>
All Directors	2	Correction in November 1962 Minutes
	10	RRC Report, Item A.
	32 - 37	Budgets for 1963-64, 6 Tables
	30	Arrangements for June 1963 Meeting
All Administrative Advisers	22	RRC Report, Item F.
Alexander	15	RRC Report, Item B, WM-47
Asleson	18	RRC Report, Item C, W-56
Buchanan	4 - 5	ESCOP, Motion re. excess property
	5 - 9	Legislative Subcommittee discussions
	16	RRC Report, Item B, WM-48
	24 - 25	Dues for WAESD
Farris	10	Committee of Nine, Motion re. 1964 CRF reserve
	17	RRC Report, Item B, Clearance of Chemicals for Minor Uses . . .
	21	RRC Report, Item E, IR-2, Amend- ment, and W-58 addendum
Frevert	19	RRC Report, Item C, W-51
	26	Approval of meeting of Home Economics Administrators

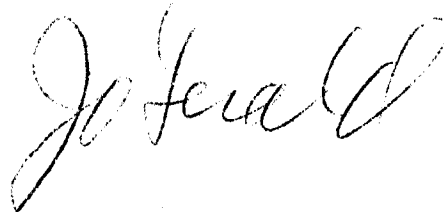
<u>For Specific Attention of</u>	<u>Page No.</u>	<u>Sidehead or Other Identification</u>
Henderson	17	RRC Report, Item B, WM-50
Hilston	21 - 22	RRC Report, Item E, WM-23
Kraus	21	RRC Report, Item E, IR-2, Amendment, and W-58 addendum
Leyendecker	17	RRC Report, Item B, WM-49
	19	RRC Report, Item C, W--, Range
Peterson	22	RRC Report, Item E, W-6
Price	4 - 5	ESCOP, Motion re. excess property
	5 - 9	Legislative Subcommittee discussions
	18	RRC Report, Item C, W-39
	24 - 25	Dues for WAESD
Rasmussen	10	Committee of Nine, Motion re. 1964 CRF reserve
	17	RRC Report, Item B, Clearance of Chemicals for Minor Uses . . .
	19	RRC Report, Item D, W-5
	20	RRC Report, Item D, W-52
	21	RRC Report, Item E, IR-2, Amendment, and W-58 addendum
Rosenberg	10	Committee of Nine, Motion re. 1964 CRF reserve
	17	RRC Report, Item B, Clearance of Chemicals for Minor Uses . . .
	21	RRC Report, Item E, IR-2, Amendment, and W-58 addendum
	30	Locations for 1964 Meetings
Thorne	20 - 21	RRC Report, Item D, W-65, 66, 67, 68, 73, et al.
	22	RRC Report, Item E, W--, Water Transfer

<u>For Specific Attention of</u>	<u>Page No.</u>	<u>Sidehead or Other Identification</u>
Thorne (cont'd.)	25	Publication of Regional Benchmark Soil Maps, motion.
	30	Locations for 1964 Meetings
Wilson	22	RRC Report, Item E, W-6
Wheeler	4 - 5	ESCOP, Motion re. excess property

Also attached is the table you requested showing estimated total costs of regional meetings, based on 1960 transportation fares. Cost relationships among places seem to have been unaffected by some decline in transportation costs (due to new, shorter routes and more air coach services) since 1960. Consequently, you may find this form of direct use in considering approval of meeting places proposed by the committees you advise.

Also, you may find the form convenient for estimating the amount of P&C funds your Station personnel have spent up to a certain time or will need after a certain time within each fiscal year. However, for this latter use, you may wish to revise the column of estimated trip costs for your Station in line with actual experience since (1) transportation costs have declined since 1960; (2) your per diem allowances may differ from those used in this table (\$12 per day); (3) your personnel may be able to make their trips serve more than one regional purpose per trip; and (4) I may have overlooked more economical transportation routing possibilities for certain of the origin-destination combinations shown.

Attachments



MINUTES OF  
WESTERN DIRECTORS' MEETING

University of California Conference Center  
Lake Arrowhead, California

March 26-28, 1963

The meeting was called to order at 8:30 a.m. by Chairman Frevert. The following were present during all or part of the meeting:

R. K. Frevert	Arizona
D. F. McAlister	Arizona
A. M. Boyce	California
F. N. Briggs	California
S. H. Cameron	California
E. G. Linsley	California
M. L. Peterson	California
W. R. Pritchard	California
D. W. Bohmont	Colorado
L. H. Watts	Colorado
S. S. Wheeler	Colorado
M. M. Rosenberg	Hawaii
R. D. Ensign	Idaho
J. E. Kraus	Idaho
J. A. Asleson	Montana
J. E. Adams	Nevada
R. E. Ely	Nevada
P. J. Leyendecker	New Mexico
M. L. Wilson	New Mexico
R. M. Alexander	Oregon
R. W. Henderson	Oregon
F. E. Price	Oregon
D. W. Thorne	Utah
M. T. Buchanan	Washington
L. L. Madsen	Washington
L. W. Rasmussen	Washington
N. W. Hilston	Wyoming
T. C. Byerly	CSESS
N. F. Farris	CSESS
E. D. Eaton	Department of Interior
E. T. York	Federal Extension Service
J. O. Gerald	Recording Secretary

Introductions

Frevert introduced Associate Director D. F. McAlister of the Arizona Station; E. D. Eaton, Department of Interior; and M. L. Peterson, Dean and Director, University of California. The group congratulated Peterson upon his appointment to the Deanship at California.

Correction &  
Approval of  
November 1962  
Minutes

The Recording Secretary read a correction to the November 1962 Minutes to show that the motion on Page 10, that the Summer meeting of the Western Directors be held at Fort Collins, was passed.

Thorne moved, Rosenberg seconded approval of the Minutes as corrected. Passed.

Clarification  
of August 1962  
Nominations

Price reported that Western Directors had nominated Buchanan to a full term on ESCOP at the August 1962 meeting, while, in fact, no vacancy existed, and that Price had been nominated to fill the unexpired term created by Huffman's resignation, while, in fact, his own term was to run through 1963. Elections, as held by the Experiment Station Section, in November 1962, were in order and Price suggests that the nominating committee, which will report in June 1963, be instructed to nominate someone to fill the position Price now holds and a second person to complete the one-year remaining of Huffman's term.

Initiation of  
New Members

Thorne asked that any persons seeking admittance to the Western Directors Association stand up and pay their respects to the group. Despite some efforts to "steal first base," McAlister and Wilson were duly initiated.

Comments of  
CSESS Repre-  
sentative

Byerly reported on a number of activities of CSESS personnel since the November meeting of Directors and reviewed the status of various legislative proposals of interest to Experiment Stations. He noted, in particular, that there is concern in Congress and elsewhere about the degree of coordination of research in the Department of Agriculture and at the Stations, and also that Congress has reviewed the manner in which earmarked funds for weed research have been used. He stated that the regional research procedure was considered a fine mechanism for coordination of the research of the several Stations.

Byerly mentioned that the Department of Agriculture is now reporting all projects on Form 20 and that all Federal and State projects now can be included in the science information exchange made possible by this procedure. He requested that all states use Form 20 for reporting their State and Federal projects. This system is also useful for research coordination and prevention of unplanned duplication of experiments.

Byerly mentioned a panel of the President's Science Advisory Committee which was appointed to review agricultural research, and actions which may be forthcoming at the Congressional and Departmental level in response to some recommendations of such groups. He suggested that all Directors will be interested in a report of this particular panel, should copies become available for distribution to them.

Byerly reported some difficulties he has experienced in describing the structure and organization of Agricultural Experiment Stations to Congressional Committees and other interested public officials. In order to more adequately describe these aspects

of the Agricultural Experiment Stations, and in order to assure himself and others that the agricultural research program in total is being coordinated and effectively conducted, he needs information on structure. He did report, based on a sample survey, that the Agricultural Experiment Stations are not restricted to the Colleges of Agriculture nor, in all cases, to the A & M Colleges or State Universities. He found that the Stations actually were dispersed throughout the Colleges of the State Universities. He also commented that perhaps only one-third of the total funds being used for agricultural research, by persons at least nominally employed by the Experiment Stations, are received and managed in a manner that yields information to CSESS pertinent to the fact of coordination. He pointed out that coordination within the institution is a problem which must be solved by that institution but that he must be cognizant that coordination within the institutions does exist.

Byerly further noted that coordination of Hatch, Grant and other research must be done if a contribution from a particular research undertaking is to be credited to the program supporting the research. He noted in this regard that current granting programs of various federal agencies and private foundations may tend to disorient some of the best research talents away from projects financed through the Hatch fund, and warned Directors to be on guard to protect the professional competence of their Stations. He reiterated his need to know, (1) current situation on funds and funding practices; (2) methods of coordinating research at the institutional level; (3) what means are used for crediting results to the appropriate funding program, and (4) steps being taken to insure the retention of competence within the Stations.

Byerly further discussed various aspects of this problem of assuring the Congress and others that coordination of the total research job is being accomplished, and that duplication is being prevented. He noted that various federal granting programs have been defended before Congress as being for the conduct of basic research, but pointed out that many of these are basic only in that they are oriented within academic disciplines across commodity lines rather than being oriented toward commodities in cross disciplinary projects.

Byerly discussed some of the areas for research which, in his opinion, may need emphasis in 1965 and future years. He noted, in particular, the problems of land, water, and people, as producers and consumers, and noted that basic research is needed in all these areas. Efficiency in production, processing and marketing was also mentioned.

Byerly commented on the Anderson Bill to establish water research institutions. He noted that this Bill emulates the Hatch Act in dispersing research activities to all states and that it further emulates the Section 204(b) of the Hatch Act, as amended, of 1955, which provides for mission-oriented research. He also commented upon the Forestry Act, the Facilities Bill, and other Bills currently being considered in Congress.

Byerly described the new Office of Management Services which has been established to provide management services of various types for 17 agencies within the Department, including CSESS. Dr. C. F. Kiefer has been appointed Director of this office and he will report to Assistant Secretary for Administration Joseph M. Robertson. Byerly stated that this office will be in charge of the examination of Station accounts, and also that Mr. Wolf, and his two assistants, who have been stationed in CSESS, will now be carried on the table of organization for OMS. He noted that financial records in the Stations should be current year accounts and that adjustments of accounts following the close of the fiscal year would be of no direct concern to OMS. He also stated that Mr. Ward W. Konkle will be in OMS functioning as CSESS information liaison specialist or, in brief, as the Editor of the new CSESS periodical.

Byerly stated that OMS and CSESS will jointly sponsor and conduct a workshop for Directors and Administrative Assistants. Current plans are to hold this workshop in September or October of this year. Directors will be notified in the summer of final plans and dates.

Regional  
Research  
Activities

Farris commented upon the status of the revised Manual of Procedures. It will be reviewed by the Committee of Nine and should be published very soon. Farris reported that it will reflect both the Ensign plan and the new RRF allotment procedures which are to become effective 7/1/63. Farris indicated that CSESS will now take responsibility for duplicating copies of approved regional projects; one signed copy to be supplied to each Director and the Recording Secretary. He stated that regions need forward only one copy of projects recommended to the Committee of Nine; heretofore, the number forwarded has been three.

Farris stated that CSESS does not need the complete state contributing project outline which may be required for local purposes. All that CSESS will require is the Form 20. He also reported that additional participation in an approved regional project will not require revision of the project as such; rather the technical committee will accept the proposed additional work; prepare an addendum to the regional project; and forward this to CSESS for approval. The channel for an addendum will be specified in the Manual.

ESCAP

Price reported that ESCAP has discussed how its membership should be distributed and will reach decision soon regarding membership policy. He also reported that ESCAP is considering the desirability of increasing the term of Legislative Subcommittee members from two to four years.

Price reported on the possibility that Experiment Stations might be able to acquire excess Federal property rather than having to wait until such property is declared surplus. E. T. York, Administrator, Federal Extension Service, described the method which is being considered for permitting local Extension

Services to acquire such property. He pointed out that excess property so acquired would have to be carried on inventory and redeclared as excess property in the event the need for it by the Service should vanish.

Thorne moved, Peterson seconded, that Western Directors recommend to their representatives on ESCOP that they bring the matter to attention of ESCOP and request that CSESS be asked to determine what procedures would be necessary to grant Experiment Stations the right to acquire excess property. Passed.

Legislative  
Subcommittee

Buchanan discussed various attitudes he has come up against in providing information to Congress and other groups about the research program of agricultural experiment stations. He reported that the most prevalent attitude is that research at stations is devoted almost wholly to means for increasing production possibilities. This attitude would be a favorable one for increased support of agricultural research at stations if there were shortages of agricultural commodities and products. In view of present surpluses and underemployment of agricultural resources, however, the attitude results in a tendency for support to decline.

Buchanan reported on attempts made in the past to inform various groups that agricultural experiment station research is not of benefit only to commercial agriculture. These have included attempts to show that consumers have been the primary beneficiaries of increases in production, processing, and marketing efficiencies. This attempt was not completely successful because of the large government price support operations. Also, many direct and indirect problems for consumers, noncommercial agriculture, and other segments of the public have been created as a result of certain advances in production efficiency, notably that of residual effects alleged for certain chemical applications in agriculture and the expansion of adjustment needs in noncommercial agriculture.

Buchanan also commented upon the view of many that experiment station research is primarily of an applied type, using currently known facts to develop new methods, and the view that advances in knowledge will come more abundantly from increasing grants outside the Hatch Act than would result from increasing appropriations for station use.

Buchanan suggested a number of possibilities Directors might consider for countering or changing such attitudes. One possibility would be to argue that costs of doing research have risen and that an alerted public is placing more demands for agricultural research on stations; that the Hatch formula distributes funds among stations in a pattern which is correlated with agricultural problems needing research; and that individual Station Directors will, as in the past, devote increased funds to problems in greatest need of research at the local, regional and national level, through their traditional Hatch, regional and interregional or centralized research procedures.

A second possibility mentioned was that of informing the public concerned that increases in funds appropriated under the Hatch Act, as amended of 1955, would be devoted to research on major regional and national problems related to agriculture as identified and defined by Directors individually and collectively, and that attacks on these problems would be concerted efforts. These concerted efforts would be achieved by identifying and defining a few major areas at a point in time at the regional and national levels and informing Directors of these needs for their individual consideration in approving and funding research at their stations. Such approach requires that problem areas be identified in advance for the information of the public, and that individual Directors (and regional and national associations of Directors) follow through in approving and supporting such areas of research.

A third possibility would be similar to the one above, except that Stations would agree to support regional and/or national teams or centers for attack on selected major problems. This possibility would imply that appropriations would be outside the Hatch Act but administered to specific purposes by CSESS with advice and recommendations of Directors. This would be similar to regional laboratories, CRF projects, Section 204(b) funds, etc.

A fourth possibility would be to seek increases in appropriations earmarked for specific projects or areas; for example, on weed control.

Buchanan asked if Western Directors had any particular views in regard to the approach or approaches the Legislative Subcommittee should take regarding these possibilities.

Thorne moved, McAlister seconded, that primary emphasis be given to the second approach mentioned but not to the exclusion of the other three possible approaches. Following discussion of the last approach mentioned by Buchanan, the motion failed to pass.

Rosenberg moved, Hilston seconded, that primary emphasis be given to the second approach but not to the exclusion of the first or third approaches mentioned, the last approach to be excluded by the Subcommittee as an undesirable one. This motion passed.

Following further discussion of the meaning of the actions taken and of what posture the Western members of the Legislative Subcommittee, and of ESCOP, are to take in response to the actions, it was suggested that the Chairman appoint a committee to consider research areas needing emphasis at the Stations and to report back to the group. Frevert appointed Ensign, Chairman; Peterson and Rosenberg, and asked that Price and Buchanan meet with this committee, if feasible.

At a following session, Ensign reported for the committee appointed to review the discussions concerning Legislative

Subcommittee activities and considerations and gave a summary of the research areas currently being emphasized and needing further emphasis and financial support at the several Stations. He proposed that these areas of research might be ones for which Western Directors would favor consideration by the Legislative Subcommittee. These were:

A. Consumer Protection

1. Biological control, agricultural toxicology and chemical residue research.
2. Air, soil and water pollution.
3. Animal and human health.
4. Insects and parasites affecting man.
5. Foods and human nutrition.

B. Efficiency of Production, Marketing and Processing.

C. Adjustments - Social and Economic.

D. Resource Use in Conservation

1. Air
2. Water
3. Land
4. Soil
5. Recreation
6. Etc.

Ensign discussed what was implied by these areas of research. He pointed out that Stations have done considerable research in all these areas in the past; but that problems continually appear and that many problems continue on the scene because of insufficient funds with which to mount concentrated attacks on these problems. He noted that the areas of research contain something of interest and direct benefit to consumers, to commercial farmers, to marginal farm operators and to those concerned about the future of agriculture and resource developments. Only one of the four areas is aimed directly at benefiting commercial agriculture in a cost reducing way.

Wheeler asked if any priority was intended in the ordering given to the areas of research. Ensign replied that the committee had ordered the areas in terms of needed emphasis and the relative magnitudes of research programs.

Buchanan asked if the Legislative Subcommittee should take the position that increased support for the total range of research areas is immediately needed, or should just one area be stressed at the present. Alternatively, should one area be chosen each year as the one needing additional support? No consensus was reached.

Several Directors suggested that Extension Directors should also consider these questions and that Experiment Station and Extension Directors should be in agreement as to their common areas requiring additional support. It was agreed that the Legislative Subcommittee members of both groups would meet while in session here, and Buchanan and Price were directed to report back on these discussions at a later session.

In further discussion of the areas of research, outlined by the committee, Pritchard suggested that they clearly show that Experiment Stations are not concentrating their research efforts only on the production problems of commercial agriculture but rather that they have been and will continue to stress research of interest to all parts of the public.

Buchanan asked if the President's Science Advisory Committee, and similar groups, should review the program of research and projections of research needs that ESCOP and the Legislative Subcommittee may decide to support. It was pointed out that such groups are concerned with the total scientific research program of the Nation and the fact of basic scientific research underway at Stations outside the area of problems confronting commercial agriculture in production techniques and costs, must be made known to such groups.

Henderson pointed out that development of a program of research for the future must not be done on a hit or miss proposition; that creating ideas for research and expressing these ideas in understandable and integrated theses; and that providing descriptions of such programs of research sponsoring groups, require manpower. He suggested that Experiment Stations, Legislative Subcommittee, ESCOP, or some such group, must gear up to do this job. It was suggested that some research foundation or other grant might be available for the purpose of developing a program for the future.

In summarizing the discussions to this point, Buchanan stated it to be his feeling that Western Directors had expressed a consensus that he and Price, as Legislative Subcommittee members of the West, recommend to ESCOP that an Experiment Station program of research for the future be developed by ESCOP or some group it might authorize, and that such program then be presented to various non-agriculture, non-Experiment Station oriented groups for review prior to presentation to the Budget Bureau and Congress as the proposed program of the Agricultural Experiment Stations.

At a later session, Buchanan reported back concerning discussions he and Price had with the Western members of ECOP (Extension Committee on Organization and Policy). He introduced Lowell H. Watts, a member of ECOP from the West, who discussed Western Extension Directors' views regarding these matters.

Watts reported that the general Extension program is now included in the appropriation budgets and that there is need for

expansion of financial support for regular Extension activities; nonetheless, he considers that there are other areas not being emphasized in Extension's program at present which must be developed if Extension is to fulfill its responsibilities to the people of the United States. He felt that ESCOP and ECOP should work together in defining what areas of Extension and research might be in most need of emphasis and that agreement on areas common to both might be highly beneficial. He reported it to be the consensus of Western Extension Directors that the area needing emphasis in the Western States in Extension programs is the dissemination of information to the public concerning resource development possibilities.

Rosenberg noted that Extension seems to be approaching rural areas development as a problem of resource development, whereas Experiment Station Directors are tending to approach rural areas development as a process of adjustments of both social and economic proportions.

#### ESMRAC

Alexander reported that ESMRAC will meet in April and that the primary item on the agenda will be to consider possibility of requesting an increase in Section 204(b) funding. He requested Byerly to comment upon the situation with regard to the marketing research provision.

Byerly reported that there are some 39 projects now in consideration for funding from Section 204(b) but that funds are insufficient to support them. He stated that in view of the fact that some states cannot meet marketing requirements on regular Hatch funds, he does not consider increases in Section 204(b) funds to be justified. He reported that Northeastern Directors had expressed a consensus that Section 204(b) funding and marketing research definitions remain as they are.

Price reminded Directors that the group had considered similar questions in the past and the consensus had been that, if increases in Section 204(b) funds were likely to detract from the chances of increases in funds for regular Hatch grants, then Western Directors would not favor increases in Section 204(b) funding. He stated that he did not believe such relationship necessarily exists.

#### Committee of Nine

Rosenberg called on Rasmussen to report on the November 1962 meeting of the Committee of Nine. Rasmussen reported that the adoption of the proposed method of RRF allotment by all four regional Associations of Directors permitted the Committee of Nine to recommend the method to CSESS at the time of the November meeting; because of this the Manual of Procedures was not recommended for publication but was held up for the revision required by the new method.

Rasmussen commented on Committee of Nine discussions concerning the Ensign plan and how preparation of outlines will be affected by this procedure. He pointed out that it will now be necessary for technical committee representatives to be prepared to discuss

participation at the time of research planning. He noted that Directors should send responsible representatives and should be prepared to support the commitments made by such representatives.

Rasmussen called attention to the 1964 allocations of RRF recommended by the Committee of Nine and distributed to Directors under date of February 14, 1963, CSESS-SL-2241.

Rosenberg asked if Directors had any recommendations for projects to be funded from the \$250,000 CRF reserve fund in the event the one million increase in Federal appropriations recommended in the President's budget should be received. He noted that the proposal of the ESCOP Residues Subcommittee regarding clearances of chemicals for minor uses would have to be financed from this reserve if approved.

Rosenberg moved, Price seconded that the March 1962 proposal of Western Directors for CRF supported projects be re-endorsed for the 1964 fiscal year [See Western Directors' Minutes, March 1962, page 19].

Rasmussen reported on the procedures used in developing CRF-1, Weed Research, and on the annual re-evaluation to which contributing projects are subjected. He will report further on CRF-1 status at the June 1963 meeting.

#### RRC Report

#### REPORT OF THE COMMITTEE ON REGIONAL RESEARCH

to

THE WESTERN DIRECTORS  
Lake Arrowhead, California  
March 26-28, 1963

The following were present at the March 23-24, 1963, meeting of the Regional Research Committee at Riverside, California:

J. A. Asleson  
N. W. Hilston  
R. E. Ely  
D. W. Bohmont  
A. M. Boyce  
J. O. Gerald, Recording Secretary

#### A. PROCEDURES FOR RECOMMENDING STATE TOTAL ALLOTMENTS OF REGIONAL RESEARCH FUNDS

RRC followed up on its discussion of December 1, 1962, relative to various bases or criteria Western Directors should take into consideration in recommending allotments of RRF for the 1963-64 fiscal year, and in the future. Criteria to be used in each of the other three regions, as well as those distributed to you under date of March 11, 1963, were evaluated by RRC for their justifications as criteria to be recommended.

RRC has chosen two criteria from among the many criteria logically consistent to some degree with the intended uses. These two criteria have in common a very strong argument for their selection. They have been generated by recent judgments of many hundreds of technical personnel, as well as the Western Directors, as to the distribution among the states in the Western Region of the needs and potentials for regional research. These criteria are: (1) the 1962-63 RRF state allotments, and (2) a five-year average of RRF state allotments. Both of these series have now been corrected to remove the funds assigned directly to individual stations in the past for support of facilities, supplies, and services devoted to overall regional project purposes. These series are shown in columns 2 and 3, respectively, of Table 2, attached to these Minutes, page 33.

RRC was cognizant of the charge from Directors at the November, 1962, meeting that it report "(1) What procedures in making this shift will be necessary if destruction of the good features of the current system is to be prevented, and (2) alternative ways by which state total allotments of RRF may be arrived at, or decided."

RRC's report of March 11, 1963, was intended to fulfill part (2) of that charge, and it is now recommending some of the procedures as required by part (1). RRC recommends that the following procedures be adopted to be effective for 1963-64 and for as long thereafter as the procedures find favor with the majority of the Western Directors:

1. Western Directors, upon recommendation of RRC at its annual Spring meeting, will determine what regional facilities, supplies and services, including travel of technical committee members and advisers, should be financed in the immediately following fiscal year under trust fund allotments and the amount of each such allotment. To provide some protection against overlooking or underfunding of essential needs, a portion of the regional research funds will be held as an unallocated reserve. If no such needs emerge prior to the annual Spring meeting, these funds will then be recommended for immediate allotment under Procedure 2 below to the several stations for use in the then current fiscal year.

/Ensign questioned the wisdom of taking funds for support of regional facilities, supplies and services "off the top" of the Western regional research fund allotment. RRC Chairman pointed out that this procedure was included in the Committee of Nine, CSESS plan which is to become effective 7/1/63 and is being followed in each of the other three regions. He also noted that this will be a simple and direct way by which Western Directors can provide support for such regional purposes.1/

2. Of the funds remaining in the regional research fund for allotment to the 12 Western States, Western Directors will

arrive at state total allotments for contributing research support to be determined as follows:

- (a) Each of the states shall be credited initially with an amount equal to the sum of RRF allotments it was granted for contributing project support in the 1962-63 fiscal year; except that, in the event the funds remaining for these purposes are less than in 1962-63, each state shall receive a proportionately smaller total allotment.

There was a consensus that protection of the 1962-63 allotments was desirable. However, there was question by Rosenberg, Buchanan, and others, if this should be treated as a "base" in future distributions of RRF or simply as minimum restrictions which would continue to affect the pattern of distribution only for so long as RRF increments are small relative to 1962-63 levels of allotments. See discussion under 2.(b). below also.

- (b) Any RRF in excess of the amounts required under Procedures 1 and 2.(a). above will be added to the initial state credits under 1.(a). in proportion to the five-year averages of RRF allotments for the 1959-63 fiscal years.

Rosenberg, Buchanan, and others, pointed out that past allotments of RRF were to projects in which there was a wide regional interest; i.e., for livestock and other major land uses fairly common to all the 12 Western States. Approval of such generally acceptable projects had resulted in a rather equalized pattern of RRF allotments among the 12 states, not similar to population or farm income dispersion. States having large proportions of their farm income from products not generally produced in other Western States have had, under past procedures, no opportunity to devote RRF to cooperative research for such products. Under the new procedures, it now would be feasible for these states to cooperate with producing states in other parts of the country, thereby qualifying for RRF support on such studies. They asked RRC to consider these conditions at a later time.

- (c) Western Directors will establish target amounts as guides to the several Directors for supporting research contributing to regional marketing projects. These will be established as follows:

- (1) 1962-63 marketing allotments, shown in Column 2 of Table 4, attached, page 35, or proportional amounts thereof, and
- (2) additional amounts as necessary to meet the RRF marketing requirement, such additional amounts to be in proportion to the state total allotments

arrived at in 2.(a). and 2.(b). above. Any Director not finding it feasible to allot all of his state's target amounts for marketing is to notify Directors prior to the annual Summer meetings so that decisions can then be reached as to how the regional requirements can be met.

Several Directors spoke in favor of the proposed "targets" for marketing, one or two expressing concern that their states would not be able to meet a proportional minimum marketing requirement. Others were concerned that the procedures in total were too complex and therefore favored no "targets" on marketing, other than proportional.<sup>7</sup>

3. Effective July 1, 1963, planning and coordination of cooperative regional research in the West will be authorized by the activation of the RRF administration project outline distributed to Directors on March 11, 1963, by RRC Chairman. An allotment of the RRF will be made on the basis of a Form 20 for each participating station in the regional research program to pay the necessary expenses of the administrative advisers, members of technical committees and other persons authorized by the administrative advisers and stations in attending authorized meetings of the technical committees, subcommittees, and coordinating committees of all of the regional projects approved for RRF support. Advisers and stations shall be guided by the policies of Western Directors WD Minutes, July 1961, pages 8-9; and, as amended, WD Minutes, March 1962, page 20/ regarding travel to be authorized. Stations shall be guided, but not bound, by these same policies in approving reimbursements of travel expenses from their RRF allotments. Reimbursements must be in accord with CSESS regulations which require that the travel be in connection with an approved regional project.

Planning and coordination trust funds will be allotted to the stations based on estimates of average regional trip costs for the several stations multiplied by the numbers of RRF-supported contributing research assignments and administrative adviserships at the several stations in the preceding fiscal year. Station Directors may request additional RRF for P&C purposes at later meetings if they find their initial allotments insufficient for reimbursing all regional trips of the personnel of their stations authorized in accord with Western Directors' policies. Such requests will be considered for funding from any unallocated reserves in the Western RRF.

In addition, an RRF allotment will be made to the Montana Station, or other station as desired by Western Directors, to provide for salary, travel and expenses pertinent to the office of the Recording Secretary, whose job description was adopted by Western Directors at their July 16-18, 1958, meeting WD Minutes, July 1958, pages 12-13/

/Asleson moved, Peterson seconded, adoption of the recommended procedures for use in 1963-64, and for as long thereafter as the procedures find favor with the majority of the Western Directors.

/Thorne commented that it was his impression that Western Directors were concerned in November 1962 about any adverse impacts such budgetary changes may have on the previous high standards of research cooperation. Asleson responded that RRC was not finished with the tasks called for by Part (1) of the November 1962 charge of Western Directors. However, he stated that RRC wanted to wait for the new Manual of Procedures before tackling these more difficult questions. Also, he noted that RRC had had a full agenda for the current meeting, and could not have accomplished more in the two days it was in session.

/Byerly asked if the marketing minimums were too stringent. He commented that a 20.6 percent minimum for research concerning a phase accounting for 62 percent of consumers' food dollars did not seem stringent to him. He asked if any of the states spending more than 20.6 percent of their 1962-63 RRF allotments for marketing wished to reduce relatively in 1963-64. No Director indicated that his station would so do.

/Byerly also commented on his concern that these proposed actions should not adversely affect the quality of regional research. He gave his opinion that meetings of technical committees have been very much worthwhile and expressed his hope that Directors will not withdraw financial support of regional travel for such purposes. In his opinion, administrative advisers and technical committees should not be required to recommend fund allotments, nor to have to plead for support by any station of contributing research essential to the regional effort.

/Upon question, the motion passed.

4. For 1963-64, the allotment to the Western Region of RRF is expected to be \$1,720,467. Of this sum, RRC recommends that \$50,115 be allotted for supporting regional facilities, supplies and services, as shown in Table 1, attached; that \$1,585,560 be allotted to states for the support of research contributing to approved regional projects of this or other regions, as shown in Table 2; that \$71,995 be allotted for the administration (P&C and Recording Secretary expenses) of the regional research program, as shown in Table 3; and, finally, that \$12,797 not be recommended for allotment at this time but be held as a reserve for contingencies. For information of Directors, Table 4 shows marketing and non-marketing contributing research targets for the several states; Table 5 shows comparisons of 1962-63 allotments and 1963-64 recommended allocations among the several major categories specified; and Table 6 summarizes the several types of allotment recommendations by states.

/Asleson moved, Leyendecker seconded, adoption of RRC's budget recommendations. Passed./

RRC recognizes that the procedures recommended will not resolve all conflicting rights, responsibilities, and desires of the several stations, nor will these procedures necessarily accurately reflect the needs and potentials for effective regional research in the several states.

Fund allotment criteria alone will not guarantee perpetuation of the good features of the system now in use. Many other variables will perhaps be more important to the success of regional research than will the fund allotment criteria used. RRC is very much concerned that the criteria recommended cannot be proved to be ideal ones, and that perfect forecasts cannot be made of impacts of adoption of these on the good cooperative spirit and effective functioning of technical committees. It nonetheless is mindful that bad decisions made, or good decisions not made here today, need not be fatal to regional research in the West. Both the Regional Research Committee and Western Directors are continuing bodies and will constantly consider need for alteration, addition, or deletion of the procedures adopted.

/Following several other expressions of concern that technical committee planning, contributing project acceptance criteria, and other research functions not be permitted to decline in quality, Thorne moved, Pritchard seconded, that RRC consider means for maintaining and improving quality of regional research in the West; means for bringing contributing research acceptances to attention of Directors concerned; and other operational aspects of the regional research program which may be affected by the procedural changes adopted earlier. RRC was requested to report on these matters at the June 1963 meeting of Western Directors. Passed./

#### B. NEW PROJECT OUTLINES REVIEWED

WM-47, Locational and Product Competition Among Selected Horticultural Food Crops (a new project authorized in August 1962). RRC believes the outline for this project might be condensed somewhat; for example, the previous work and present status sections now set aside for each state's work could be combined. While RRC has some difficulties in seeing how the contributing projects can be brought into the total regional project, it nonetheless recommends approval of the project to begin 7/1/63 and to terminate 6/30/68.

The project is different from the project it is replacing, WM-17, Frozen Fruits and Vegetables Marketing and consequently is assigned the new number WM-47. RRC requests the technical committee to consolidate the previous work, present status, and procedures for

the several states. It also requests the committee to clarify the manner in which the work will be tied into a regional effort, and to insert a page for approval signatures.

/Asleson moved, Wheeler seconded, approval of the outline, subject to revisions of the outline suggested above being made and the revised outline being submitted to RRC for approval on or before May 1, 1963.

/Asleson discussed problems which RRC felt might arise in absence of specific instructions on project outlines if different outlines are initially approved under the new "Ensign plan." He commented that RRC considered the WM-37 replacement outline to be in appropriate form but the above outline to reflect a continuation of earlier forms, on a miniature scale. The distinction between "contributing research" versus the old form, "contributing project," was commented upon by Asleson, Ensign, and Farris, but hard and fast rules have not yet been established.

/Alexander mentioned that several factors accounted for the particular form in which the project was described. Among these was the fact that he, as adviser, had recommended the forms used for WM-33, Meat Quality; and WM-38, Cooperatives, which were approved in 1962, with commendation for the outline form by both RRC and the Committee of Nine. Another factor was the differing statuses of work on the several state assignments, thus requiring separate treatment in the description.

/Farris commented that the outline might be unnecessarily long, but that in his judgment all of the information normally required by CSESS was included in the outline. The outline, if required in all cases, would nonetheless tend to circumvent the intent of the "Ensign proposal" to reduce the amount of information required from committees for approval of their plans, in his opinion.

/Upon question, the motion failed to pass.

/Asleson moved, Rosenberg seconded, approval of the outline, as submitted, for activation 7/1/63.  
Passed.

WM-48, Livestock Marketing Efficiency and Pricing in the West (a new project authorized in August 1962). This outline reflected good use of the information accumulated under WM-37, Livestock Transportation; and WM-39, Direct Marketing of Livestock. It also represents a vital area of research. RRC recommends its approval to 6/30/68 as WM-48.

/Asleson moved, Hilston seconded, adoption of the recommendation. Passed.

WM-49, Variation in Producer Prices of Western Cotton (a new project authorized in August 1962). RRC notes that only two states and ERS are participating in this project. Active participation of all these will be vital to any continued work in this area, and wider participation through bringing Texas or other states into the project would seem warranted. RRC recommends approval to 6/30/66 as WM-49.

/Asleson moved, Ely seconded, approval. Leyendecker commented that both California and Texas have been invited to participate in the project. Passed.

WM-50, Intraregional Competition in Lumber and Plywood Marketing in the Western United States (a new project authorized in August 1962). RRC notes that 7 states, and perhaps more, will be cooperating in this project dealing primarily with one product, whereas each state in WM-17 is treating one or more products alone. Further, RRC notes that data only through 1962 are proposed for analysis. Consequently, RRC believes the committee should make every effort to complete the project in three years rather than the five proposed. RRC also believes the committee should consult with members of WM-47 on methods of analysis, sources of data, and other procedural matters. Perhaps joint meetings would be beneficial to this committee also. RRC recommends approval to 6/30/66 as WM-50.

/Asleson moved, Henderson seconded, approval. Passed.

Clearances of Chemicals for Minor Uses on Agricultural Commodities as a Public Service. RRC reviewed this project submitted for review as an interregional or Central Research Fund project by the Chemical Residues Subcommittee of ESCOP. The proposed work is very urgently needed. RRC recommends that Western Directors approve the project for funding by the Committee of Nine as an Interregional or Central Research Fund project.

/Asleson moved, Peterson seconded, approval. Passed.

/Farris and others asked if there were any preference as to whether the project be activated as an interregional or a central research project.

/Asleson moved, Thorne seconded, that Western Directors recommend to the Committee of Nine that, if this project is approved, it be activated as a CRF project. Passed.

### C. REVISED PROJECT OUTLINES REVIEWED

W-39, The Effects of Fluorides on Plants, Animals, and Soils. The revision of the W-39 project reviewed by RRC, entitled, The Effects of Fluorides on Plants, Animals, and Soils, implies a very broad attack on a very large problem. Objectives of this project limit the approval somewhat with procedures indicating primary concern with plants, a small amount with soils and more with animals. A rather extensive bibliography is included but none is cited in the previous work section. RRC recommends that the project be returned to the technical committee and requests that the committee more clearly specify the problem to be attacked, revise the title to more clearly specify the research to be undertaken, and more adequately justify the research as a regional project. RRC also suggests that the technical committee consider deleting Objective 4, since it appears that this could be incorporated in the procedures for Objective 1. The technical committee needs to consider and show how the proposed work will add to the information now available.

RRC recommends extension of the current project to 6/30/64.

/Asleson moved, Leyendecker seconded, adoption of RRC recommendations. Passed./

W-56, The Interrelation of Nematodes and other Pathogens in Plant Disease Complexes. This outline represents needed work and seems to be satisfactorily planned. However, the format in which the plans are specified is complex, and should be clarified. RRC recommends approval of the revision to 6/30/68, subject to a re-writing of the outline to put it in better form. It should be resubmitted to RRC by May 1, 1963, for review and forwarding to the Committee of Nine.

/Asleson moved, Buchanan seconded, adoption of the recommendation. Passed.

/Buchanan noted that the title implies that nematodes are pathogens./

### D. PROPOSALS FOR REVISIONS, REPLACEMENTS, ETC.

General Comments: RRC wishes to note that it has no intention of causing technical committees to put major effort into preparing proposals for revisions, new projects, etc. It merely wants one- or two-page statements indicating, in general, the objectives and justifications for the proposed works.

Likely participation in projects resulting from such proposals cannot be known at this stage, and RRC recognizes

that many proposals coming to Directors now will not be considered for approval later because of insufficient participation. Technical committees also should recognize that approval of a proposal by no means assures eventual approval of the outline. However, RRC believes committees and others should continue to submit such proposals for the consideration of RRC and Directors before undertaking outline preparation. This is one means through which merits of areas of work may be considered aside from questions of participation and other aspects of ongoing projects.

- W-5, The Interrelationship of Agents Associated with Respiratory Infection of Chickens and Turkeys. This continues to be a problem of importance in the West and in the Nation. RRC recommends that this committee be authorized to proceed with project preparation for review at the March 1964 meeting of Directors.

/Asleson moved, Kraus seconded, adoption of the recommendation. Passed./

- W-7, Selection for Hatchability of Turkey Eggs at Different Altitudes. RRC is not certain of the magnitude of the regional problem reflected in this proposal. Nonetheless, it is justified as a regional project because it would be difficult if not impossible to achieve the objectives under a single station project. Consequently, RRC recommends approval of the proposal to revise W-7 as indicated.

/Asleson moved, Rosenberg seconded, approval. Passed./

- W- , Development and Evaluation of Range and Ranch Management Decision Making in a Changing Economic Environment. This is proposed as a replacement for W-16, Rangeland Economics, which is due to expire 6/30/64. There is extensive interest throughout the region in this area of study, and RRC recommends that Leyendecker be appointed as Administrative Adviser to organize a technical committee to plan the work for activation 7/1/64.

/Asleson moved, Wilson seconded, approval. Passed./

- W-51, Factors Limiting the Flow of Sub-Soil Water in the Immediate Proximity of and Into Drainage Facilities. This revision proposal will build on the work of W-51 and will use the instrumentation and other equipment being bought this year from CRF released funds. RRC recommends approval for this revision.

/Action deferred./

W-52, Biochemistry of Herbicide Action. RRC recommends approval for this revision, but suggests that this committee consider the desirability of meeting jointly with W-63 for coordination purposes.

/Asleson moved, Ely seconded, approval. Passed./

W-65, Hydraulics of Surface Irrigation. The necessity for regional research approach in this topic was not evident. RRC recommends, nonetheless, that the committee be authorized to proceed with revision if it satisfies itself that a regional project is essential for the successful conduct of this work.

/Action deferred./

W-66, Physical Properties of Soil Crusts, Fragipans, and Duripans. Technical committee membership overlaps with W-68 and the relatively low opinion for this proposal by WSWRC argues against approval of this proposed revision. Further, the regionality of the approach to this study is hard to visualize. Nonetheless, it is an important problem and the proposal indicates rather specifically what the committee proposes to study. RRC recommends approval.

/Action deferred./

W-67, Water-Soil-Plant Relations. This is a very good area for study, and WSWRC rates it highly among the many proposals considered at its last sessions. RRC recommends approval, but urges the committee to select a specific problem within the extremely broad area described. Failure to do so will result in rejection of the outline when eventually submitted.

/Action deferred./

W-68, Prediction of Soil Water Movement. This is a good area but, as above, the committee will have to be selective in preparing an outline. RRC recommends approval.

/Action deferred./

W-73, Functional Relationships Between Precipitation Characteristics, Soil Cover, and Soil Surface Factors and Infiltration and Evapo-Transpiration. When W-32 was revised in 1960 as W-73, Directors approved it for a three-year life with critical review to be done at that time. This was because of the fear that the project objectives could not be achieved. The revision proposal indicates that the committee has been unable to relate relevant variables. Consequently, RRC recommends that Directors withhold authorization to

revise at this time, pending receipt of the critical review that is due next spring.

/Asleson moved, Hilston seconded adoption. Passed./

New WSWRC Proposals on Clay Mineralogy and Water Quality were reviewed by RRC. In the opinion of RRC, this period of transition when participation and other factors essential for effective regional work are subject to considerable stress would be an inopportune time to activate new soil and water projects. RRC recommends that authorization to proceed with planning these new projects not be granted.

/Action deferred./

/Following presentation of all these WSWRC proposals, Asleson moved, Briggs seconded, that the W-51, W-65, W-67, W-68, and W--, Water Quality, proposals be approved, but that W-66, W-73, and W--, Clay Mineralogy, proposals not be approved. Several Directors asked about WSWRC ratings of these proposals, and about probable participation in such a large number of projects. Asleson and Briggs concurred in amending the motion as follows: Western Directors hereby record all of the WSWRC proposals, but request that WSWRC Adviser determine extent of probable participation in the several proposals, final consideration and recommendation on proposals to be made by RRC at the June 1963 meeting. Motion as amended, Passed./

#### E. OTHER PROJECT ACTIONS AND NOTES

IR-2, Amendment, Detection of Latent Viruses of Apple and Pear. RRC believes the proposed amendment represents needed work, and recommends that it be approved to 6/30/68.

/Asleson moved, Kraus seconded, adoption. Passed./

W-58, Addendum, Forage Crop Production. RRC reviewed the addendum prepared by this committee at the request of the Committee of Nine. RRC recommends that it be forwarded to the Secretary of the Committee of Nine.

/No action needed./

WM-23 Reactivation, Wool Marketing. RRC reviewed the proposal that the former WM-23 technical committee be re-grouped and a manuscript committee activated. RRC believes that individual states should carry their work out as planned and thereby meet their state responsibilities. However, the magnitude of the regional effort that would be required to put together a regional report which is of questionable value in the minds of some of the former committee members does not justify reactivation and funding of the regional project. RRC recommends that the request for reactivation of the

of the project be denied and that no trust funds for writing a regional report be granted.

/Asleson moved, Leyendecker seconded, adoption. Passed./

W-50 Critical Review, Stresses and Performance of Hens. RRC wishes to thank the committee for this review of progress.

W- , Economic Institutions of Water Transfer. RRC considered the WAERC request that the administrative adviser appointed in August 1962 again seek sufficient participation interest to justify organization of a technical committee. RRC concurs, but recommends that the adviser defer such course of action until after 7/1/63 so that more firm indications of intent to participate can be gathered.

/Asleson moved, Leyendecker seconded, adoption. Passed./

W-6, New Plants. RRC considered the request of the adviser to be relieved of this assignment due to his new duties with the University of California. RRC recommends that Wilson be appointed July 1, 1963, to serve as adviser.

/Asleson moved, Leyendecker seconded, adoption. Passed.

/Peterson noted that the interregional coordinating committee is meeting soon at Pullman. He suggested that Wilson attend this meeting even though it is occurring prior to July 1./

W-12, W-46, W-60, W-63, W-64, W-69, W-70, W-75, WM-16, WM-20, WM-39, WM-40, and WM-43 are all due to terminate 6/30/64. If any of these committees wish to continue their work through revision, or to replace the projects, proposals should be forwarded to RRC for consideration at its next meeting.

#### F. SUMMARY

##### Actions on Projects Due to Terminate 6/30/63:

W-39, extended to 6/30/64.

W-56, revision approved, subject to clarification of project outline form.

W-59, to terminate without replacement or revision.

W-62, to terminate with replacement by W-76, approved November 1962 for activation 7/1/63.

WM-17, replacement by WM-47, approved.

WM-37, replacement by WM-48, approved.

WM-41, replacement by WM-49, approved.

Actions on Projects Due to Terminate 6/30/64:

W-5 , revision proposal approved.  
W-7 , revision proposal approved.  
W-12 , no proposal submitted.  
W-16 , replacement proposal approved.  
W-46 , no proposal submitted.  
W-51 , action on proposal deferred.  
W-52 , revision proposal approved.  
W-60 , no proposal submitted.  
W-63 , no proposal submitted.  
W-64 , no proposal submitted.  
W-65 , action on proposal deferred.  
W-66 , action on proposal deferred.  
W-67 , action on proposal deferred.  
W-68 , action on proposal deferred.  
W-69 , no proposal submitted.  
W-70 , no proposal submitted.  
W-73 , action on proposal deferred.  
W-75 , no proposal submitted.  
WM-16, no proposal submitted.  
WM-20, no proposal submitted.  
WM-39, no proposal submitted.  
WM-40, no proposal submitted.  
WM-42, replacement project WM-50, approved for  
activation 7/1/63.  
WM-43, no proposal submitted.

Projects Due to Terminate 6/30/65:

W-31, W-50, W-71, WM-26, and WM-38.

Research and  
Related Activi-  
ties in the  
Department of  
Interior

Frevert called upon Mr. E. D. Eaton, Resource Program Specialist of the Department of Interior, for comments concerning activities of that Department. Eaton noted that the Department of Interior is now 150 years old and that it is not a newcomer to cooperative research with Agricultural Experiment Stations. It received direct legislative authority to work with Experiment Stations in projects of common concern in 1926. Eaton complimented the status that agricultural scientists have held and still hold within the area of scientific research in the United States.

Eaton discussed various developments leading ultimately to the Anderson Bill which proposes to establish water research institutes in each of the several states. This included public awareness of the problem reaching back to 1806 when Congress asked the President to report on water resource developments needed in the United States. He noted that concern by the public about water shortages, as such, has arisen primarily since 1954. Droughts since that year have caused about 25 percent of the people of the United States to experience various forms of water rationing. Also, he noted Congressional Hearings were held throughout the United States by the United States Congress Select Committee on National Water Resources and the conclusion

of that committee was that virtually all readily available water of acceptable quality was already in use in 1961. The projection by this same committee was that needs by 1980 would be doubled.

Development of water resources to meet 1980 needs under current technology of use would require many hundreds of billions of dollars. It has come to be recognized that available water must be used much more effectively than in the past if dislocation of cities, railroads, farming centers and other economic activities, is to be prevented. This is the research assignment involved in the program of the Nation to meet our water needs for the future. Congress then suggested that the President submit a program of coordinated research to Congress.

Eaton commented upon the role of various foundations, academies, and Federal agencies in defining and clarifying this research job and on various reports and Hearings available to Directors which stress these tasks. He suggested that Farris supply copies of certain publications to Directors for their study. Among these are the Hearings conducted on the Anderson Bill, containing, in particular, the testimony of universities concerning their interests, plans, and capabilities to develop and train technical personnel for staffing the research positions which will be required to supply the information needed.

Eaton noted that the Anderson Bill proposes to emulate the Hatch system of grants, but that such grants will not be directly to Agricultural Experiment Stations, except as certain states may designate their Stations to operate jointly as water research institutes and Experiment Stations. Eaton suggested that industries using water and discharging polluted water and material into streams are very much concerned about the state of technology in control of water pollution, and that such industries within certain of the Western States can be expected to support requests by the universities for state appropriated funds to be used for matching Federally appropriated funds as required under the Anderson Bill, and might directly contribute in the form of grants to water research in the states.

Upon question by Thorne, Eaton discussed briefly, activities of the Department of Interior with regard to public land policy; in particular, as related to the problems of multiple use of public lands.

The Chairman thanked Mr. Eaton for a stimulating discussion.

Dues for  
WAESD

Thorne reported on the findings of the committee appointed in August 1962 to study means whereby Western Directors might assemble a fund to be used in furthering general purposes of the Association. He reported that 11, and perhaps 12, states have determined that they can legally pay dues or make contributions to WAESD fund to be administered by a designated Station under rules established by WAESD. He also reported that the committee

had determined that approximately \$2,000 to \$2,400 per year would be required to support, in reasonable measure, purposes currently in mind.

Thorne moved, Wheeler seconded, that Western Directors approve in principle the collection of dues by WAESD and instruct their officers to work out a plan of operation. Buchanan spoke against passage of the motion. Price and others spoke in favor. The motion passed.

The Chairman appointed Buchanan and Price to work out a plan of operation for review at the June 1963 meeting and asked the Recording Secretary to provide assistance to them.

Publication of  
Regional  
Benchmark  
Soil Maps

Thorne discussed the intentions of the soil survey workgroup of WSWRC to publish a map of Western soils on a 1- to 2.5-million scale along with a report describing the various soils. The report is now in rough draft and should be completed by October 1, 1963.

Thorne noted that the publication will be a resource publication of primary value to research workers and others for planning work of various types. The maps cover the 11 Western States. Soil Conservation Service is providing cartography.

This workgroup needs final authorization from Western Directors before arrangements for publication can be completed. They expect demand for the map and bulletin to be approximately ten to fifteen thousand copies and these will cost approximately \$1.00 per copy. The magnitude of the publication job has made it impossible for the workgroup to find a Station that will assume financial responsibility for the publication in the absence of firm commitments to purchase from fiscally-responsible agencies.

He suggested two possibilities for providing assurance to a Station that its financial outlay on the publication will be recoverable; (1) have each State assume some responsibility for part of the total cost, either through a firm purchase order or through a direct contribution into a reserve fund, or (2) use the RRF reserve established earlier at this meeting as the guarantee.

Following several expressions of views, Thorne moved, Buchanan seconded, that Western Directors go on record as favoring the publication of such maps and bulletins, the expense to be borne by the several Stations, with information concerning costs to be circulated for final decision at the June 1963 meeting. Passed.

Solids Not  
Fat

Buchanan reported on the non-RRF, non-numbered project, Heritability of Solids, Not-Fat of Milk. He reported that this project is not terminated, just brewing. The committee is making certain computations of secondary data and will attempt to arrive at certain selections for initial attempts at breeding for non-fat solids production in the near future.

Approval of  
Meeting of  
Home Economics  
Administrators

Frevert called attention to the letter from the Chairman of Western Home Economics Research Administrators group, requesting that Western Directors approve a meeting of this group in Tucson, Arizona, for the spring of 1963.

Wheeler moved, Alexander seconded, approval for the meeting.  
Passed.

Coordination  
of Research  
Under the  
Forestry Re-  
search Act

Thorne reported that he had discussed the means for coordinating Experiment Station research in forestry with the research to be conducted under the Forestry Act with officials of the Forest Service and others. He mentioned a possibility of having various forestry research administrators participate in meetings of Western Directors, of having collaborator conferences, and of having state committees to coordinate activities and prevent duplication.

He noted for the record that CSESS will handle the funds allotments but that these allotments will not necessarily be to the Agricultural Experiment Stations. Governors of the several states have been surveyed to determine legal recipient of the funds for the states. He mentioned that a national committee to plan and authorize research, and, in general, to further the purposes of the Act, has been established, and there is some feeling that Experiment Stations should be represented on this committee.

Vaux was to have participated in these discussions but found it not possible to be present prior to adjournment. He agreed to provide a written report to be included in the Minutes and the Chairman instructed that such report be included. The report by Vaux follows:

"Statement on cooperation and coordination of Experiment  
Station research with the Forest Service under the  
Forestry Research Act

"In view of my inability to reach the Lake Arrowhead meeting of the Western Directors prior to its adjournment, the Directors may be interested in the following information bearing on item 6 e. of the Arrowhead agenda, concerning cooperation and coordination of forestry research.

"The basis for coordination of state programs developed under the Forestry Research Act now exists in general form. The legislation itself provides for 'a national advisory board of not less than seven officials of the forestry schools of the State-certified eligible colleges and universities chosen by a majority of such schools.' The Act further directs the Secretary to appoint an advisory committee which will 'give equal representation to Federal-State agencies concerned with developing and utilizing the Nation's forest resources and to the forest industries.' The Board and the Committee thus established would appear to provide a

framework for coordination of effort. Presumably the U. S. Forest Service will be directly represented on the committee when it is appointed. In addition, the Commission on Forestry at Land Grant and Other State Institutions was established in 1961 to provide an agency for cooperative effort and coordination among the institutions concerned with the program which has now begun to develop. In its work, the Commission has consulted the Forest Service and may be expected to continue such consultation.

"In addition to the national bodies referred to above which are in a position to fulfill coordinating functions with respect to the program, a large amount of formal and informal state and regional coordination between Forest Service and state forestry research already exists. A number of examples of this kind of coordination may be cited.

#### "Statewide research plans.

"In California, the Pacific Southwest Forest and Range Experiment Station of the Forest Service, the School of Forestry in the Agricultural Experiment Station, and forest administrative agencies of both state and federal governments joined in a committee which in 1958 produced a wildland research plan for the state. The plan was prepared in such a way that federal and state research workers in each subject matter area were brought together to appraise needs and identify accomplishments. Since 1958 research planning by both the Forest Service and the School has been guided by the plan. Currently the plan is being brought up to date by procedures which will again bring together Forest Service and University research workers in areas of common research interest.

#### "Membership on research committees.

"At the California Station each Experiment Station project is provided with a research committee which receives annual progress reports on the project. It is our practice to include on the research committee members of the Forest Service research staff whose interests are related to the project.

#### "Station advisory committees.

"At Oregon there are advisory committees for the Forest Research Division of the Agricultural Experiment Station and the Forest Service's director of the Pacific Northwest Forest and Range Experiment Station is a voting member of these advisory committees. Similarly, the Dean of the Oregon State

School of Forestry is a member of the advisory board of the Pacific Northwest Forest and Range Experiment Station.

"Regional work conferences.

Research workers in forest entomology hold regional work conferences at least once a year at which Forest Service and state research workers meet to discuss problems of mutual interest. Somewhat comparable cooperative and coordinating frameworks exist in the form of the Western Fire Research Council, the Western Forest Pest Control Action Council, and the Western Forest Tree Improvement Council.

"The foregoing examples may suggest that coordination and cooperation at the level of the individual research worker is already well developed and goes a long way towards insuring appropriate interchange between Forest Service and state Experiment Station personnel in respect to the overall forestry research program. When the National Advisory Board provided for under Section 5 of the Forestry Research Act is appointed I would expect that it would give formal attention to the question of securing appropriate coordination with the Forest Service at a national level. I would be happy to report further on this matter at a future meeting of the Western Directors. Meantime if any Director would like additional information about any of the arrangements described above I would be glad to supply it.

"Henry J. Vaux"

Resolutions of  
Recognition  
& Gratitude

Wheeler presented two resolutions from the Resolutions Committee, composed of himself, as Chairman, and Kraus. The resolutions follow:

"WHEREAS Director James Adams of Nevada will be retiring July 1, 1963, and

"WHEREAS Dean Adams has made outstanding contributions in the fields of soil chemistry and agronomy, and

"WHEREAS he has had a long and distinguished career as an administrator of agricultural research and education in Mississippi, Texas, and Nevada, and

"WHEREAS he has contributed significantly to agriculture in the State of Nevada, and

"WHEREAS Dean and Mrs. Adams have been gracious hosts to the Association of Western Experiment Station Directors on many occasions,

"NOW, THEREFORE, BE IT RESOLVED that the Association extend to them their sincere appreciation and thanks;

"BE IT FURTHER RESOLVED that the Association appoint Dean Adams as Director, Emeritus, of the Association with all of the rights and privileges pertaining thereto, and

"FINALLY, BE IT RESOLVED that an official copy of this resolution be sent to Dean and Mrs. Adams with our best wishes."

Wheeler moved, Kraus seconded adoption of the resolution. Passed, unanimously, by applause.

Adams responded to this resolution expressing his appreciation for the honor bestowed upon him by the Western Directors and assured Directors that they would be held in fond memory whatever his location may be after June 30. He also took this occasion to announce jointly with Wheeler of Colorado that Dr. Dale W. Bohmont, Associate Director of the Colorado Agricultural Experiment Station will be replacing him as Dean and Director at Nevada on July 1, 1963.

"WHEREAS Director Fred Briggs of California will be retiring July 1, 1963, and

"WHEREAS Dean Briggs has made outstanding contributions in the field of genetics and crop breeding which have laid the background for plant breeding methods widely adopted throughout the world, and

"WHEREAS he has provided strong leadership in the development of an agricultural research and education center on the Davis campus of the University of California, and

"WHEREAS Dean and Mrs. Briggs have been gracious hosts to the Association of Western Experiment Station Directors on many occasions,

"NOW, THEREFORE, BE IT RESOLVED that the Association extend to them their sincere appreciation and thanks;

"BE IT FURTHER RESOLVED that the Association appoint Dean Briggs as Director, Emeritus, of the Association with all of the rights and privileges pertaining thereto, and

"FINALLY, BE IT RESOLVED that an official copy of this resolution be sent to Dean and Mrs. Briggs with our best wishes."

Wheeler moved, Kraus seconded, adoption of the resolution. Passed, unanimously, with applause.

Briggs expressed his appreciation to Directors. He reported that he has found it not so simple to retire; while many others have retired, they cannot pass on the learning to those who follow them. He stated that the greatest lesson of history is that you never learn from history.

Arrangements  
for June 1963  
Meeting of  
Western  
Directors

Wheeler reported that Colorado will make arrangements for accommodations for the June meeting of Western Directors at Fort Collins. He asked if Directors wish to start their meetings Wednesday noon, June 19, or Thursday morning, June 20, and at what time they would like to adjourn.

Buchanan moved, Price seconded, that the meeting start at noon, June 19, and end at noon, June 21. Passed.

Locations for  
1964 Meetings

Frevert reminded Directors of the invitation from Utah to meet there in the Summer of 1963, supplanted by the Directors, to meet in Fort Collins. Frevert suggested that a place for the Spring meeting of 1964 should be selected at this time. He invited the group to meet in Tucson.

Rosenberg reported that Hawaii Directors had attended meetings of Western Directors in each of the 11 states, once, or more frequently, in the past but that to date Hawaii has not had the pleasure of hosting a meeting of this group. He noted that Hawaii participates in some 16 regional research projects of the Western Region and trains many students from the 11 Western States. He suggested that Western Directors should go on record as being in favor of meeting in Hawaii in the Spring of 1964; that Hawaii will be extremely appreciative of the help it can obtain from a review by the Directors of the Hawaii Station and its program of research; and that Directors may expect to benefit from experiences gained in a tour of Hawaiian agriculture.

Rosenberg moved, Henderson seconded, that Western Directors meet in Hawaii in the Spring of 1964. Wheeler stated that it was entirely appropriate for the group to accept the invitation of the Hawaii Station but that certain aspects of accepting such invitation presented problems. Price suggested that the individuals of the group might undertake to resolve any problems presented. The motion passed.

There was a consensus that the 1964 Summer meeting should be held in Utah, since Directors had earlier accepted Thorne's invitation for 1963.

Appreciations  
to Host  
Institution

Leyendecker moved, Thorne seconded, that Western Directors express their appreciation to Boyce, Peterson, Cameron and others from California for their services in making arrangements and in providing a very pleasant stay in California, and that Western Directors express their thanks to Mrs. Jean Reardon, Manager of Residential Conference Center, and to her staff, for the pleasant

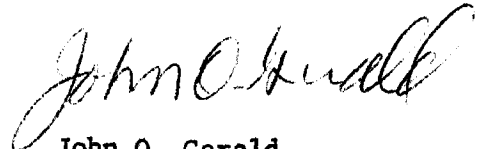
service and congenial atmosphere within which to work. The motion was passed with applause.

It was also moved and seconded, and passed with applause, that Western Directors again express their appreciation to members of the Regional Research Committee for their hard work and very excellent recommendations on matters requiring regional consideration.

Adjournment

The meeting adjourned.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "John O. Gerald".

John O. Gerald  
Recording Secretary

**Table 1. 1963-64 RRF Trust Allotments (excluding P&C and Recording Secretary Allotments), Recommended by Western Directors, March 26-28, 1963.  
(No increase and \$1.0m. Increase Levels.)**

Project and Needs						Allot to	Amount
(1)						(2)	(3)
1.	W-6,	New Plants,	Plant introduction	substation		Arizona	\$ 1,000
2.	W-6,	"	"	"	"	Hawaii	750
3.	W-6,	"	"	"	"	Montana	1,000
4.	W-6,	"	"	"	"	Oregon	500
5.	W-6,	"	"	"	station	Washington	34,900
6.	W-57,	Amino Acid Util.,	Amino Acid pool			Arizona	500
7.	W-60,	Textiles,	Statistical services			Colorado	700
8.	W-61,	Sheep Breeding,	Statistical services			Washington	765
9.	WM-39,	48,	Livestock Marketing,	Coordinator		Washington	6,000
10.	WM-42,	Timber Processors,	Writing regional report			Oregon	4,000
11.	Total, regional facilities, supplies and services					XX	\$50,115

Table 2. 1963-64 RRF Allotments to States for Support of Contributing Research,  
Recommended by Western Directors, March 26-28, 1963.  
(No Increase and \$1.0m. Increase Levels.)

State	Basis for Allotment Recommendations <sup>a/</sup>			1963-64 total allotment for contributing re- search support <sup>d/</sup>
	1962-63 allotment, adjusted <sup>b/</sup>	Percentage of Increase over 1962-63 <sup>c/</sup>	Increase over 1962-63	
(1)	(2)	(3)	(4)	(5)
Arizona	\$ 138,717	7,840	\$ 1,568	\$ 140,285
California	228,887	14,573	2,915	231,802
Colorado	186,237	11,741	2,348	188,585
Hawaii	63,800	3,760	752	64,552
Idaho	111,860	7,169	1,434	113,294
Montana	121,637	8,316	1,663	123,300
Nevada	67,705	4,261	852	68,557
New Mexico	73,165	4,981	996	74,161
Oregon	184,162	11,192	2,238	186,400
Utah	132,582	8,730	1,746	134,328
Washington	153,610	10,143	2,029	155,639
Wyoming	103,198	7,294	1,459	104,657
Total	\$1,565,560	100.000	\$20,000	\$1,585,560

- <sup>a/</sup> Total allotment (Col. 5) equals: 1962-63 allotment, adjusted (Col. 2); plus percentage of increase over 1962-63 (Col. 3) times total increase over 1962-63 in RRF for contributing research support (total of \$20,000 shown at bottom of Col. 4).
- <sup>b/</sup> Contributing project allotments in 1962-63 less those funds used for support of regional facilities, supplies and services.
- <sup>c/</sup> Contributing project allotments in 1959-63 less those funds used for support of regional facilities, supplies and services, expressed as percent of 12 state total.
- <sup>d/</sup> To be divided between contributing research to approved regional marketing and nonmarketing projects as indicated in Table 4.

Table 3. Initial 1963-64 RRF Allotments for P&C and Recording Secretary, Recommended by Western Directors, March 26-28, 1963.  
(No Increase and \$1.0m. Increase Levels.)

State	Basis for Initial Allotment Recommendation <sup>a/</sup>			Recommended Initial Allotment
	Average regional trip cost estimate	Authorized Travelers in 1962-63	Recording Secretary Trust	
(1)	(2)	(3)	(4)	(5)
Arizona	\$145	43	-	\$ 6,235
California	130	61	-	7,930
Colorado	115	44	-	5,060
Hawaii	380	23	-	8,740
Idaho	145	35	-	5,075
Montana	155	39	\$4,200	10,245
Nevada	115	26	-	2,990
New Mexico	150	26	-	3,900
Oregon	130	49	-	6,370
Utah	120	38	-	4,560
Washington	150	44	-	6,600
Wyoming	130	33	-	4,290
Total	XX	461	\$4,200	\$71,995

<sup>a/</sup> Recommended allotment (Col. 5) equals: average regional trip cost estimate (Col. 2) times authorized travelers in 1962-63 (Col. 3); plus Recording Secretary trust (Col. 4). Requests for augmenting these initial allotments from the \$12,797 reserve for contingencies will be considered at November 1963 and Spring 1964 meetings of RRC and Western Directors.

Table 4. 1963-64 "Target" Allotments of RRF to Marketing and Nonmarketing Contributing Research, as agreed upon by Western Directors, March 26-28, 1963.<sup>a/</sup>

State	No Increase over 1962-63			\$1.0m. Increase over 1962-63		
	Marketing (Min.)	Non- marketing (Max.)	Total Allotment	Marketing (Min.)	Non- marketing (Max.)	Total Allotment
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Arizona	\$ 31,550	\$ 108,735	\$ 140,285	\$ 32,667	\$ 107,618	\$ 140,285
California	56,450	175,352	231,802	58,295	173,507	231,802
Colorado	45,050	143,535	188,585	46,551	142,034	188,585
Hawaii	12,700	51,852	64,552	13,214	51,338	64,552
Idaho	29,700	83,594	113,294	30,602	82,692	113,294
Montana	23,700	99,600	123,300	24,682	98,618	123,300
Nevada	10,200	58,357	68,557	10,746	57,811	68,557
New Mexico	19,050	55,111	74,161	19,640	54,521	74,161
Oregon	42,750	143,650	186,400	44,234	142,166	186,400
Utah	13,900	120,428	134,328	14,969	119,359	134,328
Washington	49,050	106,589	155,639	50,289	105,350	155,639
Wyoming	15,600	89,057	104,657	16,433	88,224	104,657
Total	\$349,700 <sup>b/</sup>	\$1,235,860	\$1,585,560	\$362,322 <sup>c/</sup>	\$1,223,238	\$1,585,560

<sup>a/</sup> See RRC Report, pages 10-15, for criteria used in establishing targets.

<sup>b/</sup> Minimum Western RRF marketing requirement at no increase level is \$374,564. \$10,000 marketing trusts; plus \$14,872 /20.66 percent of administrative project budget of \$71,995<sup>7</sup>; plus above "targets" of \$349,700; equals \$374,572.

<sup>c/</sup> Minimum Western RRF marketing requirement at \$1.0m. increase level is \$387,194. \$10,000 marketing trusts; plus \$14,872 /20.66 percent of administrative project budget of \$71,995<sup>7</sup>; plus above "targets" of \$362,322; equals \$387,194.

Table 5. Allotments for 1962-63 and Allocations of the Regional Research Fund Allotment to the Western Region for 1963-64, Recommended by Western Directors, March 26-28, 1963. (No Increase and \$1.0m. Increase Levels.)

Item	1962-63 Allotments	1963-64 Recommended Allocations
1. Support of regional facilities (See Table 1)	\$ 65,615	\$ 50,115 <sup>a/</sup>
2. Support of contributing research (See Table 2)	1,565,560	1,585,560 <sup>b/</sup>
3. Administration - P&C & Rec. Sec. (See Table 3)	86,842	71,995
4. Reserves for contingencies (P&C, etc.)	0	12,797
5. Total Western Allotment of RRF	\$1,718,017	\$1,720,467 <sup>c/</sup>

a/ \$15,500 reduction from 1962-63 came about as follows: In 1963-64, drop W-27 trust to California, \$9,600; drop W-61 trust to Washington, \$7,400; drop WM-26 trust to Oregon, \$3,000; total reduction, \$20,000; add W-57 trust to Arizona (formerly paid from residual P&C funds), \$500; add WM-42 trust to Oregon, \$4,000; total addition, \$4,500; net reduction, \$15,500.

b/ \$20,000 increase over 1962-63 came about as follows: Increased Western RRF allotment, \$2,450; reduction in trust needs, \$15,500; reduction in initial P&C allotments, \$14,847; increase in reserves for contingencies (set aside primarily for augmenting P&C funds), \$12,797; net increase for support of contributing research, \$20,000.

c/ For explanation of this item, see CSESS-SL-2241, dated February 14, 1963.

Table 6. Summary of RRF Allotment Recommendations made by Western Directors  
March 26-28, 1963. (No Increase and \$1.0m. Increase Levels.)

State	Trusts	Administration	Contributing Research	Total
Arizona	\$ 1,500	\$ 6,235	\$ 140,285	\$ 148,020
California	0	7,930	231,802	239,732
Colorado	700	5,060	188,585	194,345
Hawaii	750	8,740	64,552	74,042
Idaho	0	5,075	113,294	118,369
Montana	1,000	10,245	123,300	134,545
Nevada	0	2,990	68,557	71,547
New Mexico	0	3,900	74,161	78,061
Oregon	4,500	6,370	186,400	197,270
Utah	0	4,560	134,328	138,888
Washington	41,665	6,600	155,639	203,904
Wyoming	0	4,290	104,657	108,947
Subtotal	\$50,115	\$71,995	\$1,585,560	\$1,707,670
Unallocated	XX	XX	XX	12,797
Total Western RRF Allotment			XX	\$1,720,467

**A Form for Estimating Total Transportation and Per Diem Costs for Regional Meetings in the West (Technical Committees, etc.), two days in Meeting**

	Origins of Travelers												Estimated Total Costs a/ (12)
	Tuc- son (1)	Berke- ley (1)	Fort Collins (1)	Hono- lulu (1)	Mos- cow (1)	Boze- man (1)	Reno (1)	Las Cruces (1)	Corval- lis (1)	Logan (1)	Pull- man (1)	Lara- mie (1)	
	Estimated cost of per diem and roundtrip transportation, per trip b/												
No. Attending	\$ 47	\$119	\$128	\$359	\$223	\$224	\$142	\$ 90	\$211	\$153	\$223	\$140	(\$2059)
Meeting Places:	0	140	149	370	244	245	162	80	231	174	244	157	( 2196)
Phoenix	140	0	183	309	176	207	59	183	124	136	176	195	( 1888)
Tucson	150	43	176	325	168	200	52	202	118	128	168	175	( 1905)
Berkeley	91	80	161	306	245	200	99	143	171	129	245	176	( 2046)
Davis	107	96	168	319	207	217	109	159	181	137	207	179	( 2086)
Los Angeles	144	45	169	322	161	193	45	196	112	122	161	168	( 1838)
Riverside	136	5	180	305	173	203	56	180	121	132	173	191	( 1855)
Sacramento	129	160	45	439	172	130	134	127	187	101	172	60	( 1856)
San Francisco	149	180	0	459	192	150	154	147	207	121	192	43	( 1994)
Denver	197	103	144	350	73	144	92	217	94	91	73	138	( 1716)
Fort Collins	244	176	192	365	0	119	140	264	126	138	0	185	( 1949)
Boise	190	152	138	428	131	88	123	210	146	49	131	131	( 1917)
Moscow	194	156	141	363	100	118	119	213	121	80	100	134	( 1839)
Pocatello	245	207	147	403	119	0	177	244	158	104	119	126	( 2049)
Twin Falls	100	98	138	343	171	172	95	144	189	100	171	147	( 1868)
Bozeman	162	59	154	336	140	177	0	206	132	106	140	153	( 1765)
Las Vegas	80	183	141	423	264	244	206	0	273	193	264	152	( 2423)
Reno	231	124	207	324	126	158	132	273	0	153	126	200	( 2054)
Las Cruces	214	107	189	306	109	141	137	254	45	136	109	182	( 1929)
Corvallis	174	136	121	412	138	104	106	193	153	0	138	114	( 1789)
Portland	152	114	100	390	117	118	85	172	132	46	117	93	( 1636)
Logan	244	176	192	365	0	119	140	264	126	138	0	185	( 1949)
Salt Lake City	249	124	191	306	86	130	145	249	68	137	86	184	( 1955)
Pullman	223	129	176	324	78	112	130	235	67	130	78	170	( 1852)
Seattle	157	195	40	458	185	126	153	152	200	114	185	0	( 1965)
Yakima													
Laramie													

a/ Estimated total costs of a meeting at a particular location is the summation of "number attending" times "trip cost" across all columns. The example of group constituency is one representative per state, so the total cost is a simple addition across each meeting-place row.

b/ These costs were estimated from secondary data and are not claimed to be "typical." Joint travel and other such items known to occur frequently were not considered in these estimates. Transportation by air coach, first class, then rail, and, finally, by private automobile was the order followed in deriving transportation costs. Per diem was computed at \$12 per day and included allowances for travel time.

MINUTES OF A JOINT MEETING OF  
WESTERN AGRICULTURAL EXPERIMENT STATION DIRECTORS  
and  
WESTERN EXTENSION DIRECTORS

University of California Conference Center  
Lake Arrowhead, California

March 25, 1963

The meeting was called to order at 9 a.m. on March 25, by Dr. George B. Alcorn, Chairman of Western Extension Directors. The meeting was attended by Extension and Experiment Station Directors of the Western States and others.

<u>State or Agency</u>	<u>Experiment Station</u>	<u>Extension</u>
Alaska		A. S. Buswell
Arizona	R. K. Frevert	H. R. Baker
	D. F. McAlister	
California	A. M. Boyce	G. B. Alcorn, Jr.
	F. N. Briggs	H. W. Schwabin
	S. H. Cameron	
	E. G. Linsley	
	M. L. Peterson	
	W. R. Pritchard	
Colorado	D. W. Bohmont	S. A. Bice
	S. S. Wheeler	L. H. Watts
Hawaii	M. M. Rosenberg	
Idaho	R. D. Ensign	C. O. Youngstrom
	J. E. Kraus	
Montana	J. A. Asleson	T. S. Aasheim
Nevada	R. E. Ely	J. E. Adams
		C. Creel
New Mexico	P. J. Leyendecker	A. E. Triviz
	M. L. Wilson	
Oregon	R. M. Alexander	G. M. Lear
	R. W. Henderson	B. E. Berger
	F. E. Price	
Utah	D. W. Thorne	W. H. Bennett
Washington	M. T. Buchanan	C. A. Svinth
	L. W. Rasmussen	L. L. Madsen
Wyoming	N. W. Hilston	
CSESS	T. C. Byerly	
	N. F. Farris	
FES		E. T. York
Others:		
WURDD, ARS	R. L. Olson	
	G. O. Kohler	
	E. A. Beavens	
Recording Secretary	J. O. Gerald	

Activities of  
WURDD

"New  
Developments"

The Chairman presented Dr. R. L. Olson, Assistant Director, Western Utilization Research Laboratory, to tell the group of recent developments at the Lab. Olson extended Dr. Copley's regrets for being unable to attend. He reported that 1962-63 had been a banner year for utilization research following increases in appropriations for such research, the first substantial increase in 12 years or so. The Western Lab found itself in the position of being able to add approximately 100 employees. About 50 of the scientist positions have been filled. The pay increases, voted by Congress last year for federal employees, helped some in this recruitment but cutbacks in programs of various industrial concerns in their biology and chemistry programs, in particular, had relieved scientists for other employment. The Lab was able to negotiate 11 new contracts, nine new projects and expanded five existing projects substantially. All allotments of increased funds have been made on commodity basis among the several branches in the Lab. The largest increases were devoted to wheat utilization research; in particular, means for improving hard red winter wheat for bread-making purposes. The approach being taken is that of treating hard red winter wheat to step up the oxidization process; however, Olson noted that this will affect export possibilities for some countries where treatment of wheat is forbidden.

The second most significant step-up in research activities, as a result of the current increases, is in wool. Olson reported that while the process for pre-shrunk and crease resistant wool developed at Albany has now been commercialized, there is, nonetheless, constant need for improvement of these processes because of extremely tough competition from synthetics. WURDD is attempting to understand what occurs in these processes so that they may be improved. Contract research is the primary emphasis here.

For fruits and vegetables, the Lab will emphasize the development of new processes to permit the expansion of markets for desert grapefruit and grapes; also fruit and vegetable flavor research, quality stabilization research and research to determine if the allergy-producing chemical of the castor bean can be removed, are being expanded.

For poultry, primary emphasis will be in dehydrating egg products and means for protection of dehydrated egg products from Salmonella. Such products must be thoroughly cooked to kill Salmonella, or, alternatively, the Salmonella must be prevented from entering the product; also, there will be some increase in studies of tenderness in frozen meat.

Olson reported that the Lab has considered the possibility of making grants for research, rather than having to contract, as such; as yet, no such authorization has been given but it may be possible to do so eventually.

Olson also mentioned the new field station in Hawaii and numerous other research activities. He reported that the Collaborators' Conference on "Technology of Agricultural Product Development for the Export Market," was very successful. He noted that utilization research is directed in considerable measure toward developing new foods and processes which can help expand the foreign markets for United States agricultural products now in surplus. A conference at Lincoln, Nebraska was concerned with wheat utilization research and other similar conferences are now in the planning stage for wheat growing areas. There were a number of questions from Directors about specific aspects of the expanded research program.

"Improved Forage Products"

Alcorn presented Dr. G. O. Kohler, Chief, Forage Crops Research Laboratory of WURDD. Dr. Kohler reported upon the research in progress in his branch. The primary objective of this research is to improve the stability and availability of fat soluble nutrients in alfalfa hay and pellets and of other forage plants. He reported that an anti-oxidant has been developed which slows down oxidation by two-thirds. This proved satisfactory for United States commercial channels but not for export.

In its attempts to develop an anti-oxidant, the Laboratory is now searching for identification of the acids in alfalfa and for processes by which dehydrated alfalfa meal can be screened to improve its stability. Simultaneously, a process for separating finer elements of alfalfa meal for feeding mono-gastric animals from the fibrous elements which can be treated for feeding to ruminants is being developed.

The study of the acid constituents of alfalfa is being done using gas chromatography analysis of samples of alfalfa taken at various degrees of maturity and from various areas of the country. He reported several findings to date, including the high relationship between estrogenic material and location of production. He also reported studies which showed that an estrogenic content of about 100 parts per million seemed to be the optimum ratio for weight gains in weather lambs.

"Fruit and Vegetable Chemistry Laboratory at Pasadena"

Alcorn introduced Dr. E. A. Beavens, in charge of WURDD's program of research at the Fruit and Vegetable Chemistry Laboratory at Pasadena, California. Dr. Beavens commented on the history of the Lab noting that it was established some 38 years prior to the establishment of the Regional Laboratory at Albany. It is located adjacent to the Campus of California Institute of Technology in Pasadena. The Laboratory has 19 scientists.

The primary commodity studied is citrus but, in addition, some effort is devoted to walnuts, lima beans, dates and other such crops. Dr. Beavens noted that these commodities are ones which are not in surplus at the national market level, but rather are ones for which marketing orders operate. Support for the research is provided in considerable measure by funds collected under these marketing orders.

Dr. Beavens reported on various research conducted for citrus. He noted that some 500 compounds have been found in citrus. Nature separates these compounds to various elements, such as skin, membrane, seed, pulp, and juice. When peeled and eaten as a dessert fruit, the individual receives only the compounds contained in the pulp and juice. However, with commercial extraction of juice, these compounds may become mixed. This gives rise to new chemical activity in the extracted juice and opportunity for harmful activity to begin. Much research on extraction processes, chemical treatment of juice, and necessary storage and marketing conditions for the control of harmful or unpalatable chemical activities has been conducted.

Dr. Beavens also reported on studies designed to detect foreign matter additives to various citrus juices and oils. New methods of analysis can detect the presence of such additives but the composition of many additives cannot be determined.

Beavens also reported on various methods developed for preventing or removing the bitter taste from grapefruit juice. This bitter material can be incubated, subjected to chemical reaction and broken down into its various elements. It has been found that the material can be treated and changed into a saccharin-like sweetener.

Various processes have been developed at the Lab for the prevention of the development of rancidity in cracked walnuts and for the removal of the flatulence property of the lima bean. A process for preparation of "instant" lima beans has been developed.

The Chairman thanked the members of the Western Utilization Research and Development Division for their part in the program. He also explained the procedure to be followed for the remainder of the day's program.

Experiment Sta-  
tion-Extension  
Opportunities  
and Problems

To introduce discussion on opportunities and problems involving research and extension, Alcorn introduced A. E. Triviz, Director of Extension from New Mexico.

"Borderline Re-  
search - Extension  
Activities  
in Basic and  
Applied Research"

Triviz commented upon the primary function of the Experiment Station as set forth in the original Hatch Act. One of these functions was to disseminate information concerning technical aspects of agricultural production. The Smith-Lever Act established the Extension Service on a co-equal basis with the Stations to assist in this dissemination of information.

Triviz stated that, in his opinion, basic research is a responsibility of the Experiment Station but that Extension should participate in deciding what basic research will best fill gaps in knowledge for application to problems of practical agriculture. He noted that findings of basic research must fill practical needs if the findings are to be of use to the general

public. Since Extension comes most directly in contact with farmers, it has knowledge of problems with which farmers must cope.

For applied research, Triviz stated it to be his opinion that application of Extension versus Station personnel to this research must be an administrative decision on most effective use of resources. In New Mexico, a Department of Agricultural Services was established in the College of Agriculture and has the primary responsibility for concentrated efforts on demonstration projects. The program includes variety and fertilizer demonstrations and many other services. The large number of demonstrations conducted by this Service produce results which are of research merit but, at the same time, provide demonstrations of past research findings.

Triviz summarized as follows: (1) there needs to be close cooperation between research and Extension personnel; both are a part of the same university and pulling as a team gets the results of research placed into use; (2) basic research is the job of the researcher but Extension can assist in guiding such research to the fundamental needs and problems in the field; (3) applied research can be done by the Experiment Station or by a combination of Extension and research personnel depending on each state's situation; (4) it is a good policy to have field demonstrations of proven research results; these lead to a fast adaptation of results in the field.

Alcorn presented M. L. Peterson, Director of the California Agricultural Experiment Station, to discuss experiences that California has had in research-extension sharing of responsibilities in this area. Peterson stated that the primary fields of the Experiment Station and Extension Service are well defined but that any problems which occur are "borderline." In California, there are no strong fences between Extension and Experiment Stations, nor is there desire for any. California administrators' view is that any experiment put in the field has demonstrational value and any demonstration in the field has research merit.

Peterson noted that in California, County Extension staffs are highly specialized; however, Extension workers at the state level do engage in research on occasion. The Extension specialist bridges the gap between the researcher and the county staff.

At any one time in California, there will be between 20 and 40 projects being done cooperatively by research and Extension personnel. Peterson commented that Experiment Station personnel cannot devote all their energies to basic research nor can the Extension Service be expected to conduct all applied research. In his opinion, abrogation by the Experiment Station

of its original purpose of problem solving would result in the setting up of a third agency for the conduct of applied research in California.

The Experiment Station and Extension Service in California have tried to stay clear of direct commercial services. Fertilizer tests, soil tests, and other commercial applications of research techniques are left to commercial laboratories.

Peterson commented upon the initiation, organization and conduct of team projects, using a recent study of pear decline as an example. When this problem arose in California, there was no knowledge of what disciplines might be involved in the solution of the problem. A team representing five or six departments within the university and both research and Extension personnel of these departments was set up to plan and conduct a cross-disciplinary program of research. Funds for the study were appropriated by the State Legislature as an earmarked research fund. These funds were retained in the Director's office and assigned to paying bills from the various departments. He noted that this was in one sense an unusual project. Most Extension-research cooperative projects have been formed and conducted cooperatively without suggestion, coercion or direct reimbursement of either Extension or research or of the various departments involved in the studies. He noted that in California, it is the responsibility of the Department Chairmen to create and maintain a good climate for cross-transfer of competences.

"Joint Appointments, Coordination of College of Agriculture Events, etc."

Alcorn introduced G. M. Lear of the Oregon Extension Service. Director Lear discussed the problem of joint appointments to research and extension. He noted that the types of skills required by extension and research may not be compatible; if not, specialization to the separate functions may be more efficient. Specialization in both research and extension, however, will require that the specialists be capable of performing their own liaison with the other group.

Lear commented also on the problem of professional recognition for extension workers not on joint appointments. Nonetheless, Extension may be a full time job and professional recognition should be achievable within the ranks of fellow workers.

He noted that the planning of field days, workshops, short courses, etc., should be a joint venture of research and Extension. Leadership responsibility must be on the Department Chairman and publicity before and after and the credits to be claimed by each group must be decided by the Chairman.

S. S. Wheeler, Director of the Agricultural Experiment Station in Colorado, stated that the question of joint appointment in Colorado is resolved by reference to the interests of the individual concerned. If an extension person specializes in a

field where he can contribute by serving in research undertakings, he is given a joint appointment and may be project leader on the research. Wheeler also commented on the problem of determining representation of the university at commodity organization meetings. Requests are usually for technically trained persons who can summarize available knowledge of interest to the organization. This leads to some jealousies between extension and research personnel but to no real conflicts as such. It was noted that various informed individuals in all states wish to have direct access to research workers.

"Rural Areas  
Development"

At this point, Director R. K. Frevert of Arizona, Chairman of the Western Association of Agricultural Experiment Station Directors, assumed Chairmanship of the program. He introduced Dr. Youngstrom of the Federal Extension Service in Idaho, to discuss the College of Agriculture's role in Government adjustment programs.

Youngstrom noted that the educational needs of the community involved in the adjustment program are (1) understanding of the nature of the agricultural development problem; (2) understanding of the kind of adjustments necessary in use of resources, and (3) understanding of alternative means for making adjustments.

The role of the college is to provide information needs and to develop an extension program to disseminate such information. He noted two types of problems in agriculture for which adequate information is not yet available and for which Experiment Stations must provide in their research program. One of these is the development of alternative adjustments for poverty sectors of agriculture; another is information concerning alternative price and income stabilization policies.

Frevert then introduced F. E. Price, Dean of the College of Agriculture and Director of the Agricultural Experiment Station at Oregon, who discussed the College of Agriculture's role in Government adjustment programs as viewed from the Experiment Station position.

Price noted that, in Oregon, the College of Agriculture rarely directs problems of this nature to the teaching staff and asked if it should not reconsider this practice. He noted that Rural Areas Development is a new term for an old process, mentioning, as examples, the development of many farming areas in the West and of readjustments in farming enterprises in response to changes in economic forces. He reported that the Oregon State University provided information to apple growers in a particular area of Oregon which resulted in their shifting over to the production of pears. Another area is now shifting from hay and feed production to seed crops, based on economic information provided by Oregon State University and on provision of technical production information.

Price stated that, in his view, national leadership can stimulate the Colleges of Agriculture to review facts carefully relative to needs for further rural area changes, but that each state must evaluate its own situation. Further, the National RAD Program has caused Oregon researchers to look at rural areas in total, including the towns and communities servicing farm needs and not just at the farm enterprise combinations and developments. The current RAD Programs in Oregon are built primarily on economic research and other community studies made prior to the advent of the National RAD Program. Price stated that, in his opinion, this is the way it has to be. Research vision provides information which may become useful at some time in the future. Problems arise and must be resolved in such a short span of time that research often cannot be done rapidly enough to help incurrently.

"Cross Transfer  
of Competences"

T. S. Aasheim, Director of Extension in Montana, discussed the involvement of research personnel in extension type activities in Montana. The College of Agriculture has three units - research, teaching, and extension - and each unit is entitled to develop, maintain, and service contacts with the public. He also noted that they have responsibility to provide service directly to the public. Nonetheless, extension specialists gain competences in their area of responsibility that will provide satisfactory service to the public and consequently feel less need to refer contacts directly to research workers. He stated that it may be necessary to develop some scheme whereby researchers will not be bypassed in servicing the needs of the public for information in the future. Montana does now use research workers as resource people in various meetings and extension bears the costs of travel for such purposes.

A. M. Boyce, Dean of the College of Agriculture, Riverside Campus, University of California, reported that on his campus every researcher develops a clientele among his field contacts. Also, these researchers interpret the results of their research, both to extension specialists and to commodity groups. He reported that many groups in Southern California insist upon direct access to research workers since many of the extension specialists are conducting research. No problem of duplication of service exists.

"Maintaining  
Support"

Frevort next introduced the topic Maintaining Adequate Financial Support for Extension and Experiment Station Programs. He introduced M. T. Buchanan, Director of Washington Experiment Stations. By request, Buchanan's paper has been reproduced and is attached hereto.

L. W. Watts, Director of Extension, Colorado, spoke on the subject of how to coordinate the national effort of the legislative committees of ESCOP and ECOP. He asked what plans can extension and experiment stations draw that will correlate their

use of incremental funds. He expressed some doubt that extension and research objectives could be correlated sufficiently well to permit a unified approach to obtaining support for the program. Long-term needs of extension and experiment stations are being looked at in executive hearings, but conclusions reached are not necessarily being presented to Congressional Committees concerned with current appropriations.

"Evaluation  
Programs"

R. M. Alexander, Assistant Director of the Oregon Station, spoke on research evaluation of methods and procedures used in extension programs. He noted that there are primarily three areas; (1) basic research on motivations, values and ideas; (2) applied research on how people accept new ideas - how to determine audiences for publications, etc.; and (3) evaluations of extension programs. There was discussion relative to the role of experiment stations in this area and of means for reconciling differences between extension and research in evaluations of extension programs. He noted that some basic research is underway on such issues in Iowa, North Carolina, and a few other locations outside the West.

"Home Economics"

C. A. Svinth, Director of the Cooperative Extension Service at Washington, and N. W. Hilston, Dean and Director of Experiment Station in Wyoming, spoke on the experiment station and extension service roles in the development of more effective programs in Home Economics. Svinth reported that management of family resources is now considered to be the function of Home Economics. He noted that the county home demonstration agents are tending to work primarily with organized groups and asked if perhaps this was resulting in undesirable bypassing of non-group associated individuals. Hilston stated that Home Economics extension and teaching programs must be reinforced by research. He discussed certain problems of acquiring and retaining persons in the Home Economics area well qualified to extend the frontiers of knowledge.

"Future  
Direction"

J. E. Kraus, Dean and Director of the Experiment Station in Idaho, spoke relative to the future direction of research and extension activities. He noted that future direction will be determined in considerable measure by the level of funding and the source of funds. He mentioned that research currently being executed needs to be evaluated as to whether it really answers the "whys" and "hows" of the problems, or if it's concerned primarily with the "whats."

He mentioned reorganizations currently underway and being contemplated that tend to disperse the research activities of interest to agriculture. Such reorganizations follow changes in sources of funds or precede changes in attempts to get funds from certain sources. He questioned if the long-run interests of agriculture will be as well served as they have been up to the present with financial support from "agriculture sources."

He also questioned if research dollars are being used as effectively as they might be under a system of single appointments for research only.

W. H. Bennett, Dean of General Extension at Utah State University, compared the Land-Grant Program of instruction, research and extension, combined into a College of Agriculture with joint appointments, with the system followed in Alberta, Canada, where teaching and research are carried out in separate organizations. He expressed his opinion that the Land-Grant system is much more effective for the program in total than the Alberta system.

**"Discussion"**

In general discussion, question was raised if scientific endeavors may not be at a peak in popularity. Certain articles and other attacks on scientific organizations and endeavors may portend serious questions for the future of experiment stations and extension services.

Boyce stated that, in his opinion, scientific effort and support will not be diminished so long as returns from such efforts are as great as they are currently and, in particular, for so long as unfriendly nations achieve scientific goals which, in the absence of deterrent achievements, might lead to our destruction.

Price commented that he had appreciated the program held and encouraged the group not to go away discouraged. He noted that many areas outside of agriculture have a long way to go in catching up to the scientific base supporting American agriculture. He noted that while the structure and system of state and local taxes may be inadequate to support expansion from state funds, there are numerous other sources of funds and that he was not depressed by the support situation facing experiment stations and extension services.

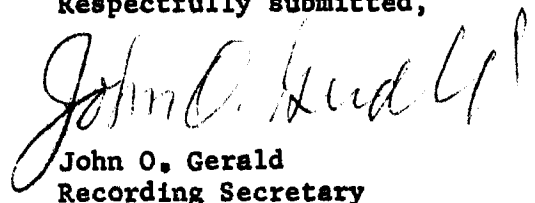
**"Appreciations"**

Speakers, Chairmen and program planners were thanked by spontaneous applause and there were numerous expressions of interest in holding other joint meetings in the future.

**"Adjournment"**

The meeting adjourned.

Respectfully submitted,

  
John O. Gerald  
Recording Secretary

## MAINTAINING ADEQUATE FINANCIAL SUPPORT FOR OUR PROGRAMS

by

M. T. Buchanan

Joint Extension Service/Experiment Station Session

Lake Arrowhead, California

March 25, 1963

Director Watts and I are delighted to attempt to delineate a few areas that may stimulate your discussion on this topic. In correspondence we agreed that he would mention some things we might do ourselves to put our case in as favorable a light as possible. My principal assignment is to point up some external factors that may impinge on prospective future support for agricultural research and extension.

In our presentation, Lowell will be talking primarily about Extension and I will be talking principally about research. This is what each of us knows best. In most of the items, however, the principles will be interchangeable.

The interpretation of the title "Maintaining Adequate Financial Support for our Programs" will make considerable difference to both our discussions. For this reason, a few introductory comments on this seem appropriate.

Should we place the emphasis on the word "maintaining" or on "adequate," and if the latter, does adequate mean continuing growth? Is it our hope to "maintain" the present level of operations and hence be satisfied to obtain a few dollars of increase each year to meet increased costs? Or do we really hope to achieve a substantially increasing level of support?

If we mean the former, our task may not be particularly difficult. Our programs are well established and the normal tendency would be for support to continue more or less at the same level without great activity on our part. If our goal is to grow, however, we may need to strike out in some new, well-chosen and well-thought-out directions.

So during our discussion session, let us decide what we mean by, "Maintaining Adequate Financial Support for Our Programs."

During the remainder of the time assigned to me I should like to point up some areas for discussion under the headings of priorities, public relations, and what do we do about it.

### PRIORITIES

During our recent budget hearings in Olympia, our President was making the point he seems to have to repeat every session; namely, that approximately half of the expenditures of Washington State University have little to do with student instruction. Thus, if the Legislators want to compute a figure that is representative of costs per student, they should first subtract from our request items such as Agricultural Extension, Agricultural research and industrial research that have little to do with student instruction. During the questioning period that followed, one of the senators asked our President what priority he placed on the

various programs undertaken at Washington State University. The President explained that all of the programs are undertaken as a result of federal or state legislation and that all are equally important. The senator then went on to say that the state is faced with very urgent needs in primary, secondary, and higher education and that perhaps the programs in agricultural and industrial research and extension could be reduced in order to meet this more critical need.

This question and comment, coming on top of a prior action by the Governor, whose budget message proposed some growth in the instructional part of WSU's activities but maintenance of status quo in the other, raises one question of priority. That is, what priority will Legislators attach to appropriations for on-campus teaching as compared with appropriations for agricultural research and agricultural extension?

When we get into the discussion period no doubt some of you will have observations to make on this particular question of priorities. As we have reviewed our budget hearings in our state we have speculated on (a) how strong the feeling is that such a shift be made; (b) whether this is something that works like a pendulum swinging first one direction and then the other. Our President's reaction is that no further cut in our appropriations will be made this time but that there is likely to be a continuation and strengthening of the philosophy that first priority in growth will go to the teaching of students, and that state appropriations for research and extension are likely to be held at present levels. Whereas, Dr. Madsen and I contended that we remembered clearly biennia in which the agricultural research and extension parts of the WSU budget "carried" the rest, Dr. French says this has not been so at our institution since 1952. Such a situation, he contends, if it prevailed in the past, is likely not to prevail again because of the increasing importance attached to education per se, because of the decline in rural population and its representation, and because the general public is "fed up" with agriculture. This is as a result, he says, of their dissatisfaction with costly farm programs and of the continuous bickering among organization and commodity groups.

A second question of priority is with respect to the support of science as compared with "agricultural science." This question becomes most important for federal funds as the United States Government is now the principal provider of funds for scientific research and development.

No doubt many of you have seen the reports in the February 1, 1963, issue of Science and in other publications pertaining to the tremendous increases for support of science requested by the President for fiscal 1964. These total \$2.7 billion. While most of this is scheduled for the National Aeronautics and Space Administration, both National Institutes of Health and National Science Foundations are scheduled for increases far in excess of the current total appropriation for support of agricultural research and extension. The increase recommended for agriculture is so insignificant in comparison that it is not even mentioned.

In 1940, total Federal Government support of scientific research and development was \$74 million; in 1964 it will exceed \$15 billions. Thus, we can truly say that there has been a continuing explosion in federal spending for scientific research and development.

Such increases, however, have not been characteristic of expenditures for agricultural research. While the expenditures of the Federal Government for scientific

research as a whole were increasing 200-fold, support for agricultural research less than doubled in actual dollars and barely held its own in purchasing power. And, whereas in 1940, support to agricultural research represented 41 percent of total federal expenditures for all research, in 1964, federal expenditures for agricultural research will represent only 0.6 percent of total federal spending for science.

A third area for priority consideration is that within the USDA itself. Traditionally the research, educational, and service for agriculture arm of the United States Government, the USDA has become, in effect, the administrative unit for surplus commodity, storage, and welfare programs. Less than 2 percent of the expenditures of the USDA are now dedicated to research and education.

One Congressman's opinion of this is given in the following quotation from the Hearings before the Sub-Committee of the Committee on Appropriations, House of Representatives, 87th Congress, Second Session, Part V, Page 355. Mr. Horan makes the following statement:

"Mark, I do not know whether I ought to mention this or not, . . . I think we are wasting money in agriculture, but certainly not on experiment stations or land-grant colleges . . . If we could get away from expensive administration costs of our farm programs, we would not have any trouble with these budget items."

#### PUBLIC RELATIONS

With the environment the best ever for science and education, why must we struggle so hard to hold our own in agricultural research and extension?

I suspect there will be a lot of ideas expressed on this during our discussion period. No doubt each of us has done a lot of thinking on this topic.

While it probably is true that there is some reduced tendency to appropriate funds for a special interest group, such as agriculture is, it occurs to me that our major difficulty is that farm leaders and Congressmen have determined, rightly or wrongly, that the highest priority desire of the agricultural community is for the various forms of action and special interest programs that presently comprise 98 percent of the USDA budget. One can hardly argue that the Government is not spending tremendous sums on behalf of agriculture. The USDA budget gets up to \$6 - \$8, sometimes approaching \$10 billion dollars per year. Would not more of this large total be allocated to research and extension if farm people really believed that research and education were most important to them? Hard as it is to take when we can demonstrate a several hundred percent return to basic research, a 30, 40, or 50 percent return to applied research and education, and very small returns to many of the direct action price control and related programs, it must be that the farmers really want the latter more than they do the former. I doubt very much that those who seek to represent farmers in Congress would determine these kinds of priorities unless they felt they were reflecting the desires of their constituents. So perhaps our own public relations are not as good as they should be.

There is also something of a "reverse spin" to this ball for the reason that as the general public becomes critical of "agriculture" we, in agricultural research and education who represent something less than 2 percent of the department's budget, are "lumped" with the rest of it.

Lowell will have more to say on this topic and how we might improve our public relations with agricultural and other groups.

#### WHAT DO WE DO ABOUT IT?

Generally speaking, there appear to be two major roads that we might follow in our attempts to increase support to agricultural research and education. One of these is to improve our position with the agricultural community and the other is to interest the general public in our competencies. To a limited extent we can travel both roads simultaneously. There are some hazards in each separately, as well as in attempting to do both.

Experience with local, state and national farm and commodity groups would seem to indicate that they are most interested in, and would be most pleased, with quite specific, practical, applied research and individual service activities. This goes against the grain for a scientist and an administrator of research who sees better answers from a more basic approach. Similarly, I am told the day-to-day service approach is not popular with Extension administrators who see the "adult education" approach as more desirable.

Other hazards in this approach include the frustrations from disputes among commodity groups concerning the particular approaches for particular commodities when there is not enough money to go around -- and the greater hazard that this type of bickering, itself, will have a wholly undesirable influence on the general public's attitude toward support of agriculture, including agricultural research and extension.

The idea that the best long-term answers, and also the best body of information from which to obtain short-term ones, will accrue to greater support to basic research is popular among experiment station workers. We would use economic plants and animals for experimental purposes but we would align our activities more nearly to the basic disciplines than to the commodities involved. We would not depart from problems of importance to agriculture, but we would seek to solve these by the employment of more nearly basic approaches.

We can show that the research work done in the past, though primarily agricultural-ly oriented, has resulted in greater benefits to consumers than to farmers. The more basic approach envisioned would perhaps be still further in this direction.

Similarly for Extension, much can be made of the argument that problems of communities do not differentiate themselves nicely into agricultural and non-agricultural ones. It would be nice for the resources of the total University to be brought to bear on problems of people in rural areas. By the same token, there are many matters of adult education, 4-H Club activities, and the like, that city people want the same as rural people do. We find it difficult to say that they are less entitled to them than farm people are.

Thus for both research and Extension, there is a tendency on our part to desire to broaden our scope and horizons, perhaps beyond that which would be looked on with equal favor by our traditional constituency.

But, as we go down this road still further, if this is the one we elect to follow, will there be reason any longer for a college of agriculture, an agricultural experiment station, or an agricultural extension service in a land-grant university?

In science we would soon be approaching the realm of the parent disciplines. In extension, the methodology and subject matter would be perhaps representative of the total university and no longer appropriately called "agricultural." Similarly in the training of students, one might ask the question "What is an agriculturist?" and "How do we train a professional agriculturist?"

There is also the very pertinent question, "Will such a task result in increased or decreased funds?" Would we not get more support by trying to follow the lead of our constituents?

We are going part way down the road to integration with the rest of the University already in research, in that many of our competent scientists are receiving substantial grants from National Institutes of Health, National Science Foundation, Atomic Energy Commission, Department of Defense, and other such research supporting agencies, both public and private. What are the pros and cons of this approach?

There is also a fairly rapid growth in gift and grant funds from farm and commodity groups to support particular research in which they are interested. What are the pros and cons of this?

#### CONCLUSION

It is evident that a number of changes are occurring around us. Many of these changes will go on whether or not we take action. To the extent that we do take wise action, we may be able to turn some of these changes in more favorable directions.

The challenges merit our best attention and we shall be discussing these in more detail in Fort Collins in June. Meanwhile, I hope the items mentioned above will stimulate our thinking today.