

MINUTES OF  
MEETING OF THE WESTERN DIRECTORS  
Corvallis and Ocean Lake, Oregon  
July 9-11, 1959

The meeting was called to order by Chairman Myers at 8:45 a.m., July 9, in the Memorial Union Building, Oregon State College, Corvallis, Oregon. The following were present for all or part of the meeting:

Harold E. Myers	Arizona
R. K. Frevert	Arizona
Paul F. Sharp	California
F. N. Briggs	California (Davis)
D. E. Jasper	California (Davis)
S. S. Wheeler	Colorado
Morton M. Rosenberg	Hawaii
R. D. Ensign	Idaho
Roy E. Huffman	Montana
J. A. Asleson	Montana
C. E. Fleming	Nevada
Robert H. Black	New Mexico
Albert S. Curry	New Mexico
F. E. Price	Oregon
R. M. Alexander	Oregon
George H. Barnes	Oregon
R. W. Henderson	Oregon
W. F. McCulloch	Oregon
M. Popovich	Oregon
Wynne Thorne	Utah
Mark T. Buchanan	Washington
Lowell W. Rasmussen	Washington
N. W. Hilston	Wyoming
E. L. Peterson	Assistant Secretary of Agriculture
Omer W. Herrmann	AMS
Byron T. Shaw	ARS
E. C. Elting	ARS
N. F. Farris	ARS (SESD)
J. Wadleigh	ARS
M. J. Copley	ARS (Regional Laboratory, Albany, Calif.)
R. W. Cowlin	Forest Service
Robert H. Ruth	Forest Service
Robert E. Olson	Recording Secretary

Dean Price welcomed the group on behalf of Oregon State College and explained arrangements for the meeting. Dr. Popovich, Dean of Administration at Oregon State College made a few comments and indicated his interest in meeting with the group.

Approval  
Minutes of  
March 1959

Buchanan moved, Price seconded, that reading of the Minutes of March 1959 be dispensed with and that they be approved as distributed. Passed.

Assistant  
Secretary  
Peterson's  
Comments

E. L. Peterson, Assistant Secretary of Agriculture, discussed cooperative research relationships and problems of keeping channels of communication clear. He suggested agencies of States coordinate their approach to the Department in research matters and indicated the land grant institution is the logical coordinating agency.

Secretary Peterson referred to proposals to put utilization research on a crash basis. He explained the provisions of H.R. 7576 which would set up a commission appointed by the President, and confirmed by the Senate. The commission would make recommendations to Congress and to the Secretary of Agriculture on initiation, termination and direction of research. Secretary Peterson indicated opposition to the bill.

He discussed the budgetary situation and indicated need for reasonable relationship between grants and direct Federal research. He commented on increased earmarking of line items in the budget by the Congress.

Public  
Benefits  
from  
Agricultural  
Research

There was discussion of need for better communications with the public on the importance of benefits to all as a result of research in Agriculture.

It was pointed out that the main beneficiaries of agricultural research are the general public, as studies show much of the gain is passed on to consumers and to marketing firms and their employees. There would be a problem of maintaining support of producers if these facts were strongly emphasized. It was suggested by some that it would be well to develop this theme in articles for printing in some of the popular nationwide magazines. Need for a sustained continuing program was mentioned. Adverse effect of public opinion of agricultural surplus on support for agricultural research was emphasized.

Comments of  
Dr. Shaw

Dr. Byron T. Shaw, Administrator of the Agricultural Research Service, discussed desire of the service for close and effective cooperation with the States in agricultural research and willingness to iron out problems that may arise.

Plans are to occupy the soil and water research laboratory at Tempe, Arizona by late July 1959. The laboratory is about 85 percent complete.

Research  
Increases  
and  
Decreases  
1960

Shaw discussed some of the items of particular interest to the West in the following tabulation.

UNITED STATES DEPARTMENT OF AGRICULTURE  
Research Increases and Decreases, Fiscal Year 1960

AGRICULTURAL RESEARCH SERVICE:

Salaries and Expenses:

Farm Research:

For research on humane slaughter methods .....	+\$100,000		
For construction and improvement of physical facilities at the National Arboretum .....	+200,000		
To provide laboratory facilities for crops research at Logan, Utah .....	+600,000		
For special needs, including research on mushrooms (\$10,000), grapevine virus diseases (\$30,000), hog diseases (\$30,000), and soil and water conservation (\$30,000) .....	+100,000		
For research on cotton mechanization and ginning at the Delta Expt. Sta., Stoneville, Miss. ....	+200,000		
For breeding research on corn and grain sorghums .....	+100,000		
For development of Coastal Bermuda pellets .....	+100,000		
For research on apple breeding in the Southeast .	+25,000		
To construct laboratory facilities for research on cotton boll weevil at State College, Miss. ..	+1,100,000		
To construct laboratory facilities for research on grain insects:			
Tifton, Georgia .....	+550,000		
Brookings, South Dakota .....	+550,000	+1,100,000	
For soil and water conservation research at--			
Tempe, Arizona .....	+127,450		
Oxford, Mississippi .....	+87,700		
Northwest hydrology research watershed .....	+150,000		
Watkinsville, Georgia .....	+264,100	a/	
Morris, Minnesota .....	+148,900	b/	
Weslaco, Texas .....	+171,600	c/	
Brawley, California .....	+25,000		
Riesel, Texas .....	+128,450	d/	
Coshocton, Ohio .....	+59,900	e/	
Danville, Vermont .....	+37,800		
Reno, Nevada .....	+10,000		
Unallocated .....	+25,000	+1,235,900	
General reduction .....	-138,400	f/	+4,722,500
Utilization Research and Development:			
Utilization research on sweetpotatoes .....	+100,000		
General reduction .....	-49,700	f/	+50,300
Home Economics Research:			
General reduction .....			-8,400f/

**AGRICULTURAL RESEARCH SERVICE--Continued**

**Salaries and Expenses--Continued**

Administration of Payments to States, and Research  
in Alaska, Puerto Rico and Virgin Islands:

General reduction .....	-7,200	f/
<b>TOTAL, AGRICULTURAL RESEARCH SERVICE .....</b>	<b>+4,757,200</b>	<b>g/</b>

**AGRICULTURAL MARKETING SERVICE:**

Decrease in consumer surveys .....	-144,600	
For research on cotton quality, Clemson, S. C. .	+75,000	h/
General reduction .....	-22,000	
<b>TOTAL, AGRICULTURAL MARKETING SERVICE .....</b>	<b>-91,600</b>	

**FOREST SERVICE:**

Elimination of non-recurring item provided in 1959 for construction of research facilities .....	-2,500,000	
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**FARMER COOPERATIVE SERVICE:**

General reduction .....	-2,000	
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**LIBRARY:**

For additional library services related to research in- cluding comprehensive review of the library collection to eliminate unnecessary material and to provide adequately for preservation of valuable agricultural publications, and increased costs of land-grant college and university contract services .....	+26,000	
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<b>NET RESEARCH INCREASE, FISCAL YEAR 1960 .....</b>	<b>+2,189,600</b>	
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a/ Includes \$145,000 for equipment.

b/ Includes \$50,000 for use in eastern South Dakota.

c/ Includes \$100,000 for equipment.

d/ Includes \$75,000 for improvements.

e/ Includes \$35,000 for improvements.

f/ General reduction from amount appropriated in 1959. The 1959 research funds reflect a 5% cut in pay costs of \$203,710. General reduction in 1960 is a further 5% cut in such costs of \$203,700, making a total cut of \$407,410.

g/ Excludes (1) \$50,000 for cotton quality evaluation at Clemson, South Carolina, to be transferred to AMS, and (2) \$1,000,000 reappropriated from 1959 in Special Fund for research, for labor under contracts, cooperative agreements, or temporary or permanent employment.

h/ Includes \$50,000 for cotton quality evaluation at Clemson, South Carolina, to be transferred from ARS.

Prepared in ARS-BFD, Budgetary Reports, July 7, 1959, Table No. 274

ARS Manuscripts  
Published at  
State Stations

Dr. Shaw explained the new policies on procedure for handling publication of manuscripts prepared by ARS authors for printing at State Experiment Stations. Memorandum to be issued follows:

UNITED STATES DEPARTMENT OF AGRICULTURE  
Agricultural Research Service  
Washington 25, D. C.

7/2/59

TEMPORARY CIRCULAR 59-100

To: All Divisions and Field Stations  
From: B. T. Shaw, Administrator  
Subject: Method of Handling ARS Manuscripts Intended for Publication by State Experiment Stations

I PURPOSE

This TC outlines procedures for obtaining final editorial clearance of ARS-authored manuscripts intended for publication by state experiment stations.

II PROCEDURES

A Editors of state experiment stations have authority, in consultation with authors, for final editing of ARS manuscripts accepted by them for publication.

B. After ARS Division clearance of the manuscript, authority will be delegated to the author to approve editorial adjustments of ARS contributions intended for publication in an experiment station publication.

C ARS authors and administrators will cooperate with deadline procedures established by editors of state experiment stations.

D ARS authors will furnish ribbon copies of all manuscripts to experiment station editors.

E Good cooperative relations require that experiment station publications authored or coauthored by ARS personnel clearly indicate recognition of the cooperation.

/s/ B. T. Shaw

Price commented on problems which seem to have come up recently on release of progress reports.

Shaw stated that all ARS researchers are now authorized to release results from their own work but not the findings of others. ARS will issue a memorandum covering this.

Comments of  
Dr. Herrmann

Dr. Omer Herrmann, Deputy Administrator of the Agricultural Marketing Service, commented on cooperative research conducted by AMS. Some contracts are made by AMS with agencies in the States other than experiment stations. AMS personnel have been instructed to report all such proposals to the Office of the Administrator so that Directors can be informed.

New Areas  
of Research  
for AMS

Herrmann stated AMS plans to begin research or increase emphasis in the following research areas:

1. Measurements of quality and grades and standards
2. Market Integration - to be done by a counterpart of ARS pioneering research group
3. Economics of new and extended uses
4. Market structure and organization

Other  
Developments  
AMS

Herrmann discussed new activities other than research including:

1. Organization of regional conferences for extension marketing specialists
2. Cattle on feed reports
3. Cling peach estimates
4. Caneberry estimates
5. Agricultural estimates for Alaska

He stated AMS emphasis is on an inter-disciplinary team approach to marketing research.

1960  
Collaborators'  
Conference,  
Regional  
Laboratory

The four past conferences have covered the following topics:

- 1956 - Instrumentation and New Tools for Research
- 1957 - Measurement of Quality in Food Products
- 1958 - Forages
- 1959 - Poultry and Eggs

Dr. Copley discussed the five topics he proposed for the 1960 conference in his letter of June 5, 1959 to Chairman Myers.

1. Chromatographic Separations
2. Wool Research
3. Fruit Processing Research
4. Potatoes
5. Sugar Beets

Poll of the Directors indicated the first choice of the group was "Chromatographic Separations". Copley indicated plans will be made to discuss this topic at the 1960 conference.

Sharp moved, Black seconded, that a director be appointed to represent the Western Directors at the Collaborators' Conference on Chromatographic Separations at the Western Utilization Research Division, Albany, California. Passed.

Regional  
Soil and Water  
Research

Dr. Wadleigh discussed experiences with several regional soil and water projects in the country and cited varying results. Some regional projects have been excellent, some disappointing. ARS would like to participate in all regions but does not feel formal documentation is important.

He emphasized the value of work groups and discussions to ARS personnel and willingness to report on any ARS projects desired by technical committees.

Thorne expressed the view that participation of ARS in regional projects would be, in many instances, a more effective means of coordination than the present system of inviting State Collaborators to ARS laboratories. Communication among the specialists working on specific phases would be facilitated.

Frevert said cooperation includes more than reporting on research being conducted. There should be joint planning and working together.

Wadleigh indicated means of cooperation in a given instance depends much on the nature of the work and personality of individuals.

Memorandum of  
Understanding  
on  
Soil and Water  
Research

Elting asked about the action of the Western Directors in March 1959 relative to the Memorandum of Understanding of 1954 with the Department of Agriculture, indicating some misunderstanding of this in the Department. (March 1959 Minutes, pp 5-6.) Discussion of the March motions made the intent of the Western Directors clear. The Memorandum establishing the National Soil Research Committee will not be renewed. The Western Regional Soil and Water Research Committee is authorized to continue without formal documentation. This arrangement for the regional committee was satisfactory to Shaw and Wadleigh.

Summary  
Soil and Water  
Discussion

Shaw summarized the principal points of the discussion on cooperation on soil and water research as follows:

1. ARS desires cooperate with regional projects in soil and water in all regions

2. ARS is agreeable to having part of its research documented to show participation in regional projects to the extent desired by technical committees.
3. Line projects of national scope have not been suitable for regional contributing projects. ARS memorandum specifying submission of those line projects suitable for regional contributing projects to technical committees will be revised to include parts of line projects which may be suitable contributions to regional projects.
4. ARS is quite willing for its representative to discuss other parts of research projects not documented as regional research but which technical committees want to discuss.

ESCOP  
Report

Curry reported on the following matters from ESCOP:

1. Extension research -- ESCOP not sympathetic to recommendation of Western Directors. (Minutes of March 1959, p. 9.)
2. Home economists are compiling list of sources of grants to be distributed to Directors when completed.
3. Progress reports to USDA Advisory Committees will now be distributed to experiment station directors. Five copies, more on request.
4. An interagency research Council has been established by the Federal Government. Secretary Peterson explained the "Federal Council on Science and Technology" established by The President consists of policy officials from 8 Departments and agencies.
5. SESD is preparing summary of the history of ESCOP.
6. Small business grants for research will be made to only one institution per State.
7. Reference to ESCOP discussion of utilization research, and Directors' Workshop reported elsewhere in these Minutes as separate items.

Fleming mentioned possibility experiment station directors meet with Land Grant College Association every two years has been discussed in ESCOP.



NSF  
Liaison  
Committee

Question of status of liaison committee with National Science Foundation came up /Buchanan is a member/. Curry indicated this committee was not discussed by ESCOP at last meeting. Elting indicated committee has not met but has been active.

Legislative  
Subcommittee

Myers summarized the activities of the legislative subcommittee during the year. Several Directors commented favorably on the work done by Dean Myers, chairman of the subcommittee, and his group.

SESD  
Workshops

Elting reported plans for a workshop for experiment station fiscal officers and business managers to be held October 5-7, 1959; also a workshop for experiment station administrators on October 14-16. New directors and new associate and assistant directors are particularly invited but all who are interested would be welcome.

Comprehensive  
Reviews

Regarding plans for continuation of comprehensive reviews during the fall and winter of 1959-60, Elting reported that some 20 requests had been accepted to date and that a few more requests could still be considered to be conducted during that period.

Federal  
Contributions  
to Regional  
Research

Elting reported plans to amend Administrative Memorandum No. 110.3, Policy with Respect to Regional Research Projects, to facilitate the participation of Federal research agencies in cooperative regional research, including the documentation of such participation. It was hoped that this amendment would not only improve Department participation but would assure full and proper credit for such Department participation both in project structure and in annual progress reports.

Wheeler asked who is responsible for submitting joint projects to the technical committees. Shaw stated this is the responsibility of the ARS Division concerned. Price asked if it would be appropriate for State workers to suggest Federal participation in regional projects. Shaw concurred. Consensus of the group was that there could be mutual agreement on this. Buchanan suggested the Manual for Cooperative Regional Research be revised to include a statement on procedure relative to Federal contributing projects.

Federal Employees  
on Technical  
Committees as  
State Representative

Myers asked if there were any objections to Federal employees representing States on Technical Committees. Shaw indicated no objection.

Request to  
IRM-1

Elting also called attention to a request from Senator Ellender, chairman of the Senate Committee on Agriculture and Forestry, for the assistance of the IRM-1 Technical Committee, in cooperation with the staff of the Senate Committee, in preparing objective economic report on probable market supplies and prices for the major farm products and other related items for the period 1960-65.

Support for  
New  
Research

Elting reported that a number of communications to Members of Congress, requesting their support for an increase item in the Federal grants for forestry research and soil and water research for fiscal year 1961, were being referred to the Department for comment.

Range  
Research  
Compilation

Elting reported that as a result of the questionnaire response showing a very strong interest in the proposed compilation of progress reports on range research, SESD was preparing to undertake this activity at least for the coming year. All stations were urged to make their annual progress reports available since the value of the compilation would depend on the quality of progress reports submitted by the participating States.

Forestry  
Research

Cowlin reported evaluation of forestry research being done suggests more emphasis needs to be placed on basic research. Wheeler suggested attention be devoted to specifying type of research best suited for State Agricultural Experiment Stations and type best suited for Forest Service experiment stations.

McCulloch discussed needs for research in forestry stressing

1. Benefits of close association with agricultural experiment stations
2. Importance of research needs for trees on small ownerships
3. Importance of forest industry in States like Oregon
4. Need for research program
5. Need for graduate students and relationship between research and graduate training program

Biological  
Control  
of Weeds

Sharp stated he had sent to each Director a list of weeds to be considered and requested serious consideration of the list with respect to its completeness and for conflict of interest. After receiving suggestions Sharp will circulate a new list. There is possibility of using 480 funds for foreign exploratory work.

Shaw stated that ARS will give this area priority in use of 480 funds. Three insects show promise on Scotch Broom, but there is disagreement over the importance of Scotch Broom in holding soil in some areas and whether it should be eliminated.

Ensign suggested the list should be referred to the W-64 Technical Committee on Weed Control.

Consensus was that after Sharp receives Directors' replies he will circulate a new list.

O F F I C E   M E M O R A N D U M   -

UNITED STATES GOVERNMENT

TO : H. W. Marston, Assistant Director  
Foreign Contracts and Grants Program

Date: June 26, 1959

FROM : W. B. Ennis, Jr., Chairman  
Subcommittee on Biological Control of Weeds

SUBJECT: Biological control of weeds under Public Law 480

The list of weeds submitted with your memorandum of May 4, 1959, was circulated to each member of the Subcommittee on Biological Control of Weeds, Agriculture - Interior Weed Committee, to evaluate in accordance with your request.

Summarizations of the Subcommittee evaluations are attached. Priority ratings of 10 indicate that the weed is serious and that biological control measures should be considered whereas zero ratings indicate that the plant should not be considered as a weed. Intermediate ratings place the weeds in appropriate priority groups of relative importance. The class ratings reflect the Subcommittee's view as to whether or not conflict of interest might develop in the event a biological control program was undertaken.

Several additional weeds were listed by certain members of the Subcommittee which may be worthy of study under the PL 480 program. A conflict of interest was considered likely to occur in the case of the Opuntia spp. and Eichornia crassipes. These additional weeds are as follows:

Cactus - Opuntia spp.

Saltoedar - Tamarix pentandra

Field bindweed - Convolvulus arvensis

Camelthorn - Alhagi camelorum

Mexican whorled milkweed - Asclepias mexicana

Leafy spurge - Euphorbia esula

Canada thistle - Cirsium arvense

Poison hemlock - Cicuta spp.

Poison-ivy - Rhus Toxicodendron

Cattail - Typha spp.

Water hemlock - Concium spp.

Alligator weed - Alternanthera philoxeroides

Water-hyacinth - Eichornia crassipes

Nutgrass - Cyperus spp.

Witchweed - Striga asiatica

Water-stargrass - Heteranthera dubia

Sago pondweed - Potamogeton spp.

Naiad - Najas spp.

Parrotfeather - Myriophyllum brasiliense

Wild onion - Allium spp.

No attempt was made to develop and evaluate a comprehensive list of cropland, pasture and aquatic weeds that might be considered in a biological control program.

Attachment

cc: Members of Subcommittee  
M. G. Weiss

	<u>Priority Ratings 1/</u>						<u>Average</u>
Puncture Vine - <u>Tribulus terrestris</u>	10	8	10	-	9	10	9.4
Gorse - <u>Ulex europaeus</u>	10	9	10	7	10	10	9.3
Medusa Head - <u>Elymus Caput-medusae</u>	10	6	10	-	10	10	9.2
Tansy Ragwort - <u>Senecio jacobaea</u>	8	8	10	-	8	10	8.8
Russian Knapweed - <u>Centaurea repens</u>	10	8	10	5	8	10	8.5
Dwarf Mistletoe - <u>Arceuthobium pusillum</u>	10	8	10	-	9	5	8.4
French Tamarisk - <u>Tamarix gallica</u>	5	5	10	10	9	10	8.1
Scotch-broom - <u>Cytisus scoparius</u>	10	10	10	2	8	7	7.8
Goatgrass - <u>Aegilops triucialis</u>	10	4	8	-	9	7	7.6
Mediterranean Sage - <u>Salvia aethiopis</u>	8	6	8	-	9	7	7.6
Hoary Cress - <u>Cardaria draba</u>	5	7	10	6	10	7	7.5
Napa Thistle or Tocalote- <u>Centaurea melitensis</u>	10	4	7	-	8	8	7.4
Toadflax - <u>Linaria dalmatica</u>	10	6	5	6	7	10	7.3
Yellow Star Thistle - <u>Centaurea solstitialis</u>	10	4	8	4	8	8	7.0
Purple Star Thistle - <u>Centaurea calcitrapa</u>	10	4	8	3	8	8	6.8
Sow Thistle - <u>Sonchus oleraceus</u>	5	2	8	-	8	9	6.4
Poison Oak - <u>Rhus diversiloba</u>	0	5	10	-	8	8	6.2
Sow Thistle - <u>Sonchus asper</u>	5	2	8	4	8	9	6.0
Devil's thorn - <u>Emex spinosa</u>	5	3	6	-	-	8	5.5
Cat's Ear - <u>Hypochoeris glabra</u>	5	1	7	-	-	7	5.0

1/ A priority of 10 indicates that the weed presents a serious problem whereas a rating of 0 indicates that the plant should not be considered as a weed.

Class Ratings 2/

Puncture Vine - <u>Tribulus terrestris</u>	1	1	1	1	1
Gorse - <u>Ulex europaeus</u>	11	1	1	1	1
Medusa Head - <u>Elymus Caput-medusae</u>	1	1	1	1	1
Tansy Ragwort - <u>Senecio jacobaea</u>	1	1	1	1	1
Russian Knapweed - <u>Centaurea repens</u>	1	1	1	1	1
Dwarf Mistletoe - <u>Arceuthobium pusillum</u>	1	1	1	1	1
French Tamarisk - <u>Tamarix gallica</u>	11	11	1	1	11
Scotch-broom - <u>Cytisus scoparius</u>	11	11	11	111	11
Goatgrass - <u>Aegilops triucialis</u>	1	1	1	1	1
Mediterranean Sage - <u>Salvia aethiopsis</u>	11	1	1	1	1
Hoary Cress - <u>Cardaria draba</u>	1	1	1	1	1
Napa Thistle or Tocalote- <u>Centaurea melitensis</u>	1	1	1	1	1
Toadflax - <u>Linaria dalmatica</u>	1	1	1	1	1
Yellow Star Thistle - <u>Centaurea solstitialis</u>	1	1	1	1	1
Purple Star Thistle - <u>Centaurea calcitrapa</u>	1	1	1	1	1
Sow Thistle - <u>Sonchus oleraceus</u>	1	1	1	1	1
Poison Oak - <u>Rhus diversiloba</u>	11	1	1	1	11
Sow Thistle - <u>Sonchus asper</u>	1	1	1	1	1
Devil's thorn - <u>Emex spinosa</u>	1	1	1	1	1
Cat's Ear - <u>Hypochoeris glabra</u>	1	1	1	1	1

- 2/ Plant considered as weed, no conflict of interest envisioned 1  
 Plant considered as weed but conflict of interest envisioned if biological agents introduced 11  
 Plant has valuable uses and biological control should not be undertaken 111

Records  
and  
Expense  
Accounts

Copies of the minutes of technical committee meetings have not always been sent to Directors for each project. The same applies to original regional project, contributing projects, any subsequent revisions, and Annual reports.

Regarding expense accounts, the procedure adopted by the Western Directors requires the signature of the Director of the technical committee member's home State, as well as the certification, perhaps by the accounting officer, that the expense account has been audited and found allowable under the University's travel regulations.

The Secretary was requested to prepare a memorandum covering the above points for circulation to all Directors.

Reallocation  
1959-60  
Budget  
W-64

Wheeler moved, Fleming seconded that the recommendation of the W-64 Technical Committee, as stated in the letter of June 9, 1959 from Kraus to Myers, to reallocate the \$2,000 assigned to Colorado for 1959-60 as follows: California \$450; Montana \$350; Idaho \$400; Oregon \$400; Washington \$400. Passed.

Breeding  
for  
Solids Not Fat

Buchanan distributed plans of the group for tabulation of data. He reported the group favors semi-informal cooperation and does not recommend an interregional project.

STATE COLLEGE OF WASHINGTON  
Department of Dairy Science  
Pullman, Washington

April 20, 1959

Mr. Robert E. Olson  
Western Agricultural Experiment Station  
211 Post Office Building  
Berkeley 1, California

Dear Mr. Olson:

As far as I can learn the following Western Experiment Stations are working on the heritability of solids-not-fat.

<u>Station</u>	<u>Date Work Initiated</u>	<u>Cattle Numbers</u>	<u>Test Used</u>	<u>Sampling Intervals</u>
Utah	October 1958	75 Holstein 25 Jerseys	Western Lactometer	monthly
Oregon	January 1958	400 Cows	Mojonnier	4-6 week intervals
Oregon	June 1958	Unknown Holsteins and Jerseys	Mojonnier	monthly

Idaho	Several years	75 dam-daughter comparisons on Holsteins and Jerseys	Mojonnier	monthly
Washington	4 years	48 Holsteins 25 Jerseys 25 Guernseys	Gravometric	monthly

Preliminary results indicates that the Watson lactometer or the Golding sub-surface hydrometer will give total solids values with - 0.21 to + 0.31 of the gravometric determination of the same sample in 95 per cent of the cases. I would guess that the formal titration or dye binding estimates of protein would give similar values.

Personally, I would guess that nationally solids-not-fat tests are being run now on 5,000 cows. We need to standardize techniques and procedures so the pooled data can be analyzed. It would appear to me that everybody is trying to run the program.

The copy of the project you enclosed has been sent to me by Ralston, Laban, McGilliard and Bazley.

I would like to suggest that the Western Directors request the American Dairy Science Association to call a meeting of interested people at their June Meeting in Urbana and set up a project.

Very truly yours,

/s/ A. O. Shaw  
A. O. Shaw, Chairman  
Department of Dairy Science

MONTANA STATE COLLEGE  
Agricultural Experiment Station  
Bozeman

June 8, 1959

Mr. Robert E. Olson, Recording Secretary  
Western Directors  
Agricultural Marketing Service  
211 Post Office Building  
Berkeley 1, California

Dear Mr. Olson:

Reference is made to your letter of January 16, relative to the proposal of Dr. Hodgson concerning plans for a survey of a large number of dairy cows for the purpose of studying inheritance for percent of solids not fat in milk and his suggested need for a regional committee to co-ordinate the efforts throughout the country in this field of research. Also to the action of the Western Directors, which designated that the Western Section of the American Dairy Science Association consider Hodgson's proposal at its next meeting and make recommendations to the Western Directors.



The Board of Directors of the Western Section of the American Dairy Science Association felt that the thing to do in this case was to survey the Dairy Departments of the eleven western states relative to their desires concerning Dr. Hodgson's proposals. Consequently, on April 16, a letter and a copy of the tentative Inter-regional Research Project outline, which Dr. Hodgson proposed, was sent to each department head of the Dairy Departments of the eleven western states asking that they consider the matter with their staff and inform us relative to their interest in this particular area of research.

We have received replies from the University of Wyoming, Utah State Agricultural College, University of Arizona, State College of Washington, Oregon State College, University of Idaho, and Montana State College, indicating that they are interested in this area of research and would take an active part should a regional project be developed in this area.

Considering that at least six states have indicated an active interest in this particular area of research, it is the recommendation of the Board of Directors of the Western Division of the American Dairy Science Association that the Western Directors create a regional committee, a member of which will meet with other regions to co-ordinate the efforts in this field of research and also that the Western Directors give favorable consideration to any proposal which may be made for the creation of a Western Regional Project for the purpose of studying inheritance for per cent solids not fat in milk.

As chairman of the Western Section of the American Dairy Science Association, I should like to appoint Dr. A. O. Shaw of the State College of Washington to represent the Western Section in any meetings that might be called to co-ordinate the efforts in this area. I should also like to suggest that should the Western Directors create a regional committee that Dr. Shaw be named as one of the members of such a committee.

I believe that we have obtained as good an expression of the interest in this area of research by surveying the eleven western states as we could obtain by any action of the Western Section of the American Dairy Science Association at its meeting in July in Tucson, Arizona. Inasmuch as five states have indicated an active interest and a willingness to participate and no states have expressed any opposition to this project, we believe that the Western Directors should give favorable consideration to this matter.

Very truly yours,

J. C. BOYD, Head  
Department of Dairy Industry

Summary of action taken at A.D.S.A. meeting  
Urbana, Illinois, June, 1959  
(not official from notes taken at meetings)

1. It was recommended that regional projects be set up with a regional co-ordinator rather than interregional projects.

2. The following were elected:

S. N. Gaunt, University of Massachusetts, Chairman  
J. E. Legates, North Carolina State College  
W. J. Tyler, University of Wisconsin  
N. D. Bayley, U.S.D.A. Beltsville, Secretary  
A. O. Shaw, Washington State College

3. The committee will:

- a. Serve as an interim-committee.
- b. Promote projects within the region.
- c. Work with project leaders to coordinate efforts.
- d. Implement and coordinate national program.
- e. Develop quantitative methods for analysis of milk constituents.
- f. Study protein content of milk.

4. The committee tentatively agreed that the Watson lactometer or the Golding subsurface hydrometer were the only practical field tests at present. Other methods should be studied (formal titration).

5. The committee will:

- a. Prepare a complete review of literature to be released in December, and
- b. test 25 cows of each of the five breeds for solids-not-fat. Solids-not-fat will be determined quantitatively by the Watson lactometer and the Golding subsurface hydrometer. These data will be pooled and analyzed. The committee will meet in December and recommend one or both of the tests.

6. Work completed or in progress by regions will be summarized and studied.

7. A card lay-out for pooling data on a national basis will be developed.

Moved by Buchanan, seconded by Jasper, that the Western Directors encourage the Dairy scientists to proceed with the development of a Regional Project on the heritability of solids not fat, without an allocation of funds at the present time. Usual regional research procedures would be followed including the assignment of an administrative advisor and members of the technical committee. In the event a new procedure is developed to cover regional projects to which no funds are assigned this project may be included. Passed.

Regional  
Projects  
Without  
RRF

Jasper moved, Frevert seconded, that the Committee on Regional Research consider the possibility of a new series of projects without numbering or regional research funds and make recommendation at next meeting. Passed.

White  
Muscle  
Disease

Alexander reported on meeting of workers at Boise. A subcommittee is drafting a proposal. Shaw asked how serious is white muscle disease. Discussion indicated seriousness varied greatly by area.

Joint  
Committee  
on  
Cooperative  
Research

Frevert presented 11 principles suggested at the recent meeting and 12 questions.

PRINCIPLES INVOLVED IN FEDERAL-STATE COOPERATION IN AGRICULTURAL RESEARCH

1. That the Agricultural Research Service and the State Agricultural Experiment Stations are individually responsible for accounting for the research results from the moneys appropriated or allocated to them.
2. That the ARS is primarily responsible for research on problems of national and regional concern to agriculture and on those problems involving relationships between the United States Government and the governments of other nations.
3. That the State Agricultural Experiment Stations are primarily responsible for research on problems within the borders of their respective States, and for such regional research as is of importance to the area. Statements 2 and 3 are not intended to be mutually exclusive.
4. That basic research is a responsibility both of the ARS and the State Experiment Stations and should be advanced in each institution and in each area so far as feasible.
5. That ARS and the State Agricultural Experiment Stations will cooperate, on a voluntary basis, in research whenever cooperative action will be more effective than separate action (regional research will usually be cooperative).
6. That joint planning should be an essential phase of cooperation.
7. ARS and the State Agricultural Experiment Stations will continue to share facilities to the extent that their respective primary responsibilities permit, and will share the operating costs of such facilities as may be mutually agreed upon.
8. ARS and the State Experiment Stations will examine each of their locations with respect to the possibility of effective concentration of Federal and State personnel.
9. That locations for regional concentration will, so far as possible, be mutually agreed upon by the States in the region and ARS.
10. That ARS will continue its policy, wherever possible, of relieving research workers of administrative management responsibility so that they may concentrate their full efforts on research and gain recognition for research performance.

11. That ARS and the State Experiment Stations individually and jointly have responsibility for the evaluation of action, regulatory and economic programs with respect to their effectiveness and their consequences.

#### QUESTIONS

1. To what extent is concentration of research desirable?
2. If we recognize and can agree that in some areas, some problems, it is desirable, does it follow it is desirable in all areas? Can we agree in principle? To what extent must we examine problem by problem, area by area?
3. To what extent and in what areas of scientific endeavor is it desirable that centralization of effort take place, and in which areas is decentralized effort more effective in promoting the general welfare and in developing the most productive effort in the long run?
4. To what extent does the problem of project leadership, especially in teams consisting of both ARS and State personnel, require examination and definition?
5. Should the special survey type of approach to specified problem areas (such as corn insects, the boll weevil, facility needs for soil and water conservation research, etc.) be adopted as an effective mechanism for determining total program needs and possible areas of cooperation?
6. To what extent can the State Agricultural Experiment Stations furnish buildings and facilities for undertaking basic and other lines of research involving different disciplines?
7. Under what conditions are Federal facilities on or adjacent to Land-Grant College campuses desirable?
8. Should a sharp distinction be drawn between regional laboratory, regional research center, and cooperative regional research?
9. Are we using cooperative relations to the fullest extent to further basic research?
10. To what extent can and should ARS agencies engage in the training of graduate students?
11. To what extent should the training of research scientists enter into the planning of our research program?
12. How can we plan our research program to further the training of research scientists?

Price and Wheeler questioned appropriateness of evaluating State Regulatory Programs. Elting suggested deletion of the word "regulatory" in point 11. Rosenberg suggested item 10 was mainly an internal item with ARS. Sharp said item 2 might be expanded to include physical facilities beyond the ability of any individual State to finance.

Send  
Comments  
to Frevert

Consensus was that each Director should answer questions 1-12 and comment on the principles. Comments to be sent Frevert before next committee meeting. The committee meets again September 28-29, 1959 and will report to the experiment station section in November.

Supporting  
Great Plains  
Research

Wheeler discussed the request of the Great Plains Research Committee as summarized in the following quotation from the minutes of that committee.

Recommendation from the Great Plains Research Committee

"Motion by Black, and seconded by Vaughn, that in recognition of the importance of coordinated research on problems of the Plains, and the difficulties involved in obtaining funds for regional research from the allotments of the three regions involved, the Great Plains Research Committee recommends to each of the three regional associations of station directors that regional funds be allotted for Great Plains research; that these funds be pooled for financing projects approved by the Great Plains Research Committee; that the Research Committee recommend to the respective regional associations of directors, the distribution of the pooled funds; that it is recognized that this action may necessitate adjustments in the allotments for the Plains' States in support of other regional projects in which they now participate; and that the decision as to the source and amount of adjustment in the present use of regional research funds thus involved will be made by agreement of the participating Plains' States within the three associations. Motion carried.

It was agreed that the following members of the Research Committee should discuss the above motion with their respective associations of regional directors:

Wheeler	(Western)
Beck	(North Central)
Hildreth	(Southern)

"Motion by Wheeler, seconded by Bentley, that the Chairman of the Research Committee should meet with the Committee of Nine as soon as possible for the purpose of explaining further, the views of the Research Committee with respect to regional research on the problems of the Plains. Motion carried."

A series of Great Plains projects is now financed without RRF, but this is inadequate and the problem is how to implement the research. Attention was called to three general ways.

1. Allocating funds to Great Plains research - in effect a fifth region
2. Carry on as now but States in each of the three regions submit contributing projects to parallel regional projects
3. States involved set aside other money to carry on the Great Plains projects.

No action was taken.

Interregional  
Projects

Curry moved, Rosenberg seconded, that the Western Directors abide by the recommendation of the Committee of Nine relative to increases in funds for 1960-61 for IRM-1 and IR-2. Passed.

Requests were IRM-1, \$6,100 increase and IR-2, \$6,000. Committee of Nine recommended no increase at No Increment and 3.5 Million Increment levels and 10 percent at 7 and 14 Million Increment levels.

WAERC

Huffman reported that the WAERC recommended nine new projects as follows:

1. Cost and efficiency in the use of bulk containers for handling of agricultural commodities
2. The impact of changing market organization and structure on the production, processing, distribution and pricing of milk in the Western States
3. Product and market characteristics affecting the promotion of agricultural products
4. Methods of marketing and pricing water resources as a means of allocation and as sources of revenue
5. Shrinkage and regain in marketing Western cattle
6. The impact of the coordination and integration of marketing, processing and production activities by commercial firms on Western food and agricultural industries
7. Economics of on-farm use of irrigation water
8. Appraisal of processes of economic development with emphasis on the organization and policies of agricultural industries
9. Economics of the land market and values

Water  
Pricing

Question whether marketing and pricing of water would qualify as marketing project. Elting expressed doubt but no definite conclusion can be reached unless specific proposal were submitted.

W-48  
Weather

Asleson requested advice on status of the project for the future. After considerable discussion consensus was to continue support as Great Plains project.

Henderson moved, Ensign seconded, that action taken by Directors November 1957, page 10, relative to prohibiting W-48 Technical Committee using RRF for punching cards be rescinded and that decision regarding use of funds be left up to best judgment of technical committee. Passed.

Sharp moved, Fleming seconded, that the Administrative Advisor for W-48 consult with the Administrative Advisor of the similar North Central regional project relative to a joint meeting of the two technical committees as soon as practicable. Passed.

Interested Southern States should be encouraged to participate.

WM-36  
Dairy

Huffman moved, Rosenberg seconded, that WM-36 be extended through June 30, 1961. Passed.

Utilization  
Research

Sharp discussed the report of the Committee on Utilization Research. Principal point discussed, other than those included in summary to follow, was question of definition of utilization research. Committee took broader view than does ARS in defining what constitutes utilization research.

\* RECOMMENDATIONS OF THE COMMITTEE ON UTILIZATION RESEARCH  
to  
The Directors, Western Agricultural Experiment Stations

The Committee recognized that domestic consumption of food per capita is not likely to increase except through upgrading of the diet and therefore recommends that research undertaken to encourage increased utilization of agricultural products should be primarily directed toward utilization of agricultural products for non-food industrial products. The Committee noted that many technically feasible proposals for industrial use of agricultural products are unsound economically. In order for agricultural raw materials to find significantly large utilization in industry, they must be relatively inexpensive to produce, available in very large volumes, or capable of being cheaply aggregated into very large volumes and suitable for conversion through processing into a variety of end products.

Shifts in food consumption which improve the nutritional quality of the diet also result in greater utilization of agricultural resources for production of a given quantity of food. The Committee believes that research relating to utilization of farm crops by animals should be included in a program of utilization research.

The Committee recognized the possibility of a Government program to establish decentralized national food reserves that would be accessible to the population in case of national emergency. It is recommended that research be initiated to provide information on the suitability of various foods for long-time storage, packaging materials, and methods of storage, taking into account limitations on refrigerated storages available, to assist those who may be responsible for planning

\* The Committee, which consists of representatives of the Agricultural Experiment Stations of the 11 Western States and Hawaii, met at Berkeley, California, June 15-16, 1959.

such a program. This research would contribute greatly to the national defense as well as to the utilization of agricultural products.

The Committee recommends that additional research undertaken should take account of existing programs, personnel, and facilities. In planning the program the Committee suggests that plans be made to fulfill the need for training of graduate students in order to provide more qualified personnel to carry on the work. The work and responsibilities of the Agricultural Experiment Stations are broad and varied so that probably a utilization research program cannot be focused on only one or two projects. The Committee thinks that much emphasis should be placed on basic research, but does not advocate concentration on fundamental research to the exclusion of applied or developmental research, where the nature of the problem, the available personnel, and facilities make the latter feasible.

The Committee believes that some aspects of the program of utilization research can be more efficiently and effectively done by the Agricultural Experiment Stations than other aspects. For example, five general areas for utilization research were suggested.

1. Analysis of the constituents of farm crops.
2. Separation of farm products by mechanical or chemical processes and discovery of ways of utilizing the resulting fractions, possibly using fractions from more than one agricultural product.
3. Selection and breeding of crops for characteristics potentially suitable for industrial utilization.
4. Finding and improving new crops which might be grown as an alternative to crops in surplus, with emphasis on crops that have non-food industrial uses.
5. Research aimed at utilizing land now producing surplus crops for economical production of livestock.

The Committee believes that areas 3, 4 and 5 are most adapted for research in Agricultural Experiment Stations, but their work need not be limited to those areas. The Regional Laboratories are well equipped and staffed to study the first two general areas but there is need to supplement their work by additional research in Experiment Stations when this is feasible.

The Committee recommends that existing research in plant improvement be modified as follows: In research aimed at improvement of plants through selection and breeding the objective of finding and developing varieties superior for industrial utilization should be added to the objectives of improved yield, suitability for use or processing as food and resistance to disease and pests. The Committee suggests that research on increased utilization be organized around the principal constituents of agricultural products instead of specific agricultural commodities. Industries which potentially may use farm crops for industrial purposes will be thinking in terms of the constituents rather than the particular crops from which they may be derived.



The Committee believes that the idea of separating a part or parts with relatively high value from an agricultural commodity, leaving a residual portion which may be used for such things as feed or fertilizer, is an approach which may contribute to economically feasible utilization. It was noted that new uses of agricultural products may come into competition with existing uses and the Committee believes that the aim should be to develop ways of producing from agricultural resources, things which are now produced from natural resources subject to exhaustion in the future.

The Committee recommends research on integrated use of forest, range and agricultural land for crop and livestock production with some emphasis on possibilities for dual use of certain lands for livestock and forestry.

The Committee recommends emphasis on fundamental analysis of the components of agricultural crops and suggests the following areas as subjects for research aimed at increasing utilization of the primary components.

### CELLULOSE

Cellulose is the product of the soil which is available in the largest quantities and relatively less research attention has been given to its use than to fats and proteins.

1. Developing annual crops for production of cellulose - use of trees primarily for production of structural materials. It is recognized that not all of this material available from forest production is presently harvested and used and that comparative costs are vital in governing the source of the raw material.
2. Agricultural products as a source of raw material for a complete line of construction materials.
3. Means of making farm fiber impervious to moisture.
4. Means of handling and transporting farm crops in bulk at low cost as a factor in assembling large quantities of material for industrial use.
5. Controlled decomposition of cellulose by breaking down through irradiation.
6. Conversion of low-grade cellulose to other materials by micro-biological organisms.
7. Harvesting crops from acreage by micro-biological animals to convert cellulose to other compounds.
8. Development of cushioning material from vegetable matter.
9. Use of vegetable fiber embedded in plastic or other material to provide strength.
10. Consideration of plants heretofore considered as weeds, as possible sources of large quantities of cellulose (high yield).

11. Use of vegetable fiber in lieu of horsehair in furniture construction.
12. Cellulose from farm crops for paper and packaging material.
13. Additional products from fermentation processes - starting materials need to be cheap.
14. Development of markets for full use of potential production from forest lands held in small tracts usually related to ranching or farming operations.
15. Use of lignin as structural material.
16. As inexpensive chemical for waterproofing adobe bricks.
17. Use of vegetable fibers in lieu of excelsior.
18. Insulation material from farm crops - need to get lower density without reducing strength.
19. Conversion of cellulose to oil through heat and high pressure.
20. Throw-away blankets and clothing for special uses such as survival kits and camping.
21. Disposable cooking utensils.

#### PROTEIN

1. Paper coating from gluten - product less expensive than casein but superior to coatings derived from starch.
2. Improve qualities and processing of proteins for use in paints and lacquer.
3. Animal protein as a source of strength in construction materials.
4. Legume or grass for animal feed with high protein adapted to lands now used for growing crops in surplus.
5. Elimination of toxicity of cottonseed meal through breeding or processing.
6. Use of leather in wall coverings and rugs.
7. Fortification of fertilizer, manure and sewage wastes with nitrogen derived from protein in crops.
8. Improved quality of proteins, i.e. by wetting cereals and by adding enzymes.
9. Protein compounds used for adding to wine and medicines, as material for fighting oil fires, and as a foaming material for oil processing.

10. Improved film for microfilming purposes.
11. Forage which holds protein when rained upon after drying.

#### FATS AND OILS

1. Breeding new types of oil plants especially promising - isolate characteristics of safflower and castor oil for possible modification of other plants.
2. Improve oils for use in paints aiming at qualities comparable to rubber based paints.
3. Development of foam and structural materials from agricultural oils (castor bean oil e.g.).
4. Testing oil content of various plants by areas - fast and accurate procedure needed - W-6 Committee on New Plants could consider this suggestion.
5. Process to make oils impervious to moisture.
6. Development of other forms of oil impervious to moisture, tasteless, capable of solidification and non-toxic.

#### STARCH

1. Improved yields of starch from plants, particularly starches with desirable characteristics for industrial use such as tanning and sizing agents.
2. Plant roots as a source of useful materials.

#### ANTIBIOTIC AGENTS

1. Search for and isolation of antibiotic agents from higher plants and testing their effectiveness.
2. Adding antibiotic organic material to fertilizer for control of diseases.
3. Development of antibiotic materials for application to forest lands for disease control.

#### ENZYMES

1. Fundamental research on the possibilities of altering characteristics of plants by control of enzymes.

The Committee recommends continued attention to 'defensive research' in order to maintain competitive position of existing farm products.

Report of  
R.R.C.

Rosenberg moved, Jasper seconded, that the recommendations of the technical committees for W-16, W-42, W-54, W-59 and W-62 be accepted at the no increase level. Passed.

Fleming moved, Frevert seconded, that the recommendations of the R.R.C. be accepted at the no increase level for W projects. Passed.

3.5 Million  
Level

Rosenberg moved, Curry seconded, that \$2,075 be deducted from the \$60,550 assigned to Forestry. Passed.

Forestry  
Meeting

Frevert moved, Sharp seconded, that the Directors authorize meeting of representatives of the States at State expense to submit project proposals for consideration at the November meeting of the Directors. Passed.

Ensign moved, Jasper seconded, that Dean Vaux be designated as a coordinator to bring together forestry research personnel of Western Region to make project recommendations (including brief Regional Outline) to use possible increases for future (1960-61) forestry production and marketing (to include utilization) research. The research personnel should plan project to use approximately the following funds:

	<u>3.5 M</u>	<u>Increase Level</u>	
		<u>7 M</u>	<u>14 M</u>
Non-Marketing	\$58,475	\$118,075	\$240,100
Marketing	*	15,900	48,050

\* Tentative allocation of \$35,500 to WM-42, Initial Processors of Timber, for 1960-61 at the 3.5 Million level. Could some of this be better allocated?

It is recommended that these project recommendations, by title and brief project outline, be submitted to each Western Director not later than November 1, 1959.

Jasper moved, Rosenberg seconded, that the recommendations for non-marketing at the 3.5 million level be accepted as amended. Passed.

7 Million  
Increment

Buchanan moved, Rosenberg seconded, that \$1,700 unallocated and \$3,000 deducted from W- , Water Yield, total \$4,700, be added to W-6, New Plants, to cover increased costs. Passed.

Fleming moved, Rosenberg seconded, that the recommendations of the R.R.C. for non-marketing at 7 million level, as amended, be accepted. Passed.

14 Million  
Increment

Black moved, Buchanan seconded, that the Directors approve adjusted figure at the 14 million level for non-marketing combining other soil with soil and water research. Passed.

Ensign moved, Rosenberg seconded, that W-70 be assigned to the project on Economics of Water Use (title not definite) and Director Huffman be designated as Administrative Advisor and that numbers and administrative advisors not be assigned to other proposed new project areas of non-marketing research for 1960-61 until November 1959 or March 1960 consideration or until such time as we have more definite information on status of increase in appropriations. Passed.

Thorne moved, Huffman seconded, that projects "Impact of Changing Marketing Organization and Structure on the Production, Processing, Distribution and Pricing of Milk in the Western States" and "Production and Marketing Characteristics Affecting the Promotion of Agricultural Products" as proposed (see page 34) not be approved and that the economists use the funds (\$11,200) set up for these projects on a new proposal in the area of economics of promotion and utilization of agricultural products. Passed.

Black moved, Ensign seconded, to terminate WM-34 and that a new project dealing with the technical aspects of industrial utilization of agricultural products be assigned WM-45 number with Dr. Sharp as Administrative Advisor.

Rosenberg moved, Buchanan seconded, that the Directors approve the recommendations of the R.R.C. for marketing at the no increase level as amended. Passed.

Huffman moved, Ensign seconded, that the Directors accept the recommendation of the R.R.C. for marketing at the 7 million level amended to assign all utilization funds to WM-45. Passed.

Buchanan moved, Asleson seconded, that the recommendations of the R.R.C. at the 14 million level be accepted as amended. The amendment provides \$60,500 for utilization research and \$48,050 for forestry research. Projects in these areas will be developed by groups to be brought together by Sharp and Vaux, respectively. The forestry projects are to cover utilization and marketing. The committee to consider these matters for forestry will meet with the committee to consider forestry production matters. Passed.

Knoblauch  
Letter

The Recording Secretary read the following letter to the group:

March 20, 1959

Dean Harold E. Myers  
College of Agriculture  
University of Arizona  
Tucson, Arizona

Dear Harold:

I want to express through you my special thanks to all the Experiment Station Directors of the Western Region for their thoughtfulness in sending special greetings to me at the time of your meeting in California. Perhaps the Secretary could include my thanks in the minutes of the meeting or express my appreciation at your forthcoming summer meeting in Oregon.

Since the original plans called for my being with you at your meeting the significance of your greeting becomes more meaningful.

I am making very good progress and hope to be back at the job by the time of the ESCOP meeting.

With kindest personal regards, I am

Sincerely yours,

/s/ Harold Knoblauch

Chairman Myers stated that he has also received a letter from Dean Kraus expressing his appreciation to the Directors for their expression of sympathy.

Family  
Life  
Group

Thorne reported a group interested in family life and child development would like advice on whether to attempt to develop a regional project. There was discussion to the effect that they were eligible to submit a specific proposal for consideration in assignment of RRF. Price suggested a more promising source of funds might be the United States Department of Health, Education and Welfare. Thorne stated application has been made to H.E.W.

Nominations

Sharp moved, Buchanan seconded, that the recommendations of the nominating committee be accepted. Passed.

Nominations for election in November 1959

- |                                |                    |
|--------------------------------|--------------------|
| Chairman                       | - Harold E. Myers  |
| Secretary                      | - Paul F. Sharp    |
| Committee on Regional Research | - L. W. Rasmussen  |
| Alternate                      | - J. A. Asleson    |
| ESCOP                          | - Robert H. Black  |
| Legislative Subcommittee       | - Mark T. Buchanan |
| Committee of Nine              | - M. M. Rosenberg  |
| Alternate                      | - D. E. Jasper     |
| ESMRAC Alternate               | - R. M. Alexander  |

Buchanan moved, Frevert seconded, that Dr. Elizabeth Dyar be nominated to serve on ESCOP in place of Mrs. Ward.  
Passed.

1960 Summer Meeting

Nominating Committee recommended acceptance of invitation of Washington and Idaho, probable place: Sun Valley, Idaho. Recommendation was unanimously approved.

1959 Fall Meeting

Price moved, Buchanan seconded, that the Secretary write Director Lewis requesting scheduling a meeting of Western Directors Tuesday evening during the land grant college meetings in St. Louis. Passed.

Committee of Nine

The Committee of Nine will meet Wednesday, November 11.

Administrative  
Advisors  
Assigned

W -70	- Huffman
WM-43	- Alexander
WM-44	- Huffman
WM-45	- Sharp

Agricultural  
Research  
Institute

Institute meets October 12 and 13. Hilston may be able to attend to represent Western Directors. He will inform Recording Secretary and Director Buchanan as soon as decision is made. Buchanan will attend if requested.

1960 Spring Meeting

The group agreed on dates of March 2, 3, 4, 1960 for the spring meeting at Las Cruces, New Mexico.

Appreciation

Rasmussen moved, Rosenberg seconded, that the Western Experiment Station Directors who met at Corvallis and Ocean Lake, Oregon July 9, 10 and 11, 1959 express their sincere thanks to Oregon State College and specifically to Dean Price, Directors Alexander, and Henderson, their wives and members of their staff for the fine hospitality, food, and arrangements which we enjoyed. The appreciation of the wives and children who were present is also extended to their hosts. We shall long remember the expressions of eager anticipation of some and anxious agony of others who ventured forth on the 4:00 a.m. salmon fishing trip.  
Passed.

RECOMMENDATIONS OF THE WESTERN DIRECTORS  
COMMITTEE ON REGIONAL RESEARCH (RRC)

TO: Western Experiment Station Directors

The Committee met on July 8, 1959. The following were present:

R. D. Ensign, Chairman  
M. M. Rosenberg  
R. H. Black  
N. F. Farris (SESD)  
R. E. Olson, Recording Secretary

1. The RRC requested that the recording secretary establish a table showing the status of each Western Regional project for the November 1959 meeting. The table is to include the following items: Project number and title, date of activation, date of revision, planned termination date, date of extension, if any, actual date of termination, date for 5 or 10 year review and notation of actions pending. It is suggested that the data include projects from the beginning and that the information be kept current. It is suggested that the administrative advisors send copies of correspondence referring to approvals, revisions, extensions and terminations of regional projects to the recording secretary.

2. According to the action of the Western Directors, March 2-4, 1959, administrative advisors were re-assigned to all western regional projects effective 1 July 1959. It is recommended that where the administrative advisor for a project has been changed, that the former administrative advisor should provide the new administrative advisor with his files pertaining to the project.

3. The following projects approved at the March meeting of the Western Directors and subsequently approved by the Committee of Nine at their June 9-12, 1959 meeting, are reiterated with the comments of the Committee of Nine below:

- W-12      Bean Improvement. A reference to the USDA-ARS line project ENT d19-12 should be added under objective (3).
- W-16      Range Economics. It is recommended that revision of the outline be considered in 2 or 3 years with a view to concentrating on the economic phase, and supporting only 2 or 3 appropriate projects for more effective accomplishment.
- W-59      Government Price and Income Policies. It is requested that the regional project outline be revised by November 1959 to clarify how the contributing projects tie together as a regional approach to the problem.
- W-62      Farm Power and Machinery Costs. The Cost of Owning and Operating Farm Power and Machinery Used for Seedbed Preparation and Tillage.
- W-63      Weed Control. Effect of Certain Climatic and Soil Factors on the Response of Plants to Herbicides.



- W -64 Stone Fruit Viruses. Coordination with the IR-2 Technical Committee is recommended.
- W -69 Rural Housing. Influences of the Sun on House Comfort, Durability, and Economy.
- WM-16 Maintaining Grain Marketability by Insect Control in Storage.
- WM-17 Frozen Fruits and Vegetables. 1. The objectives are broad, and a statement is needed describing the reason for the revision. 2. The term "and tastes" in the first objective has questionable meaning, whether in the sense of consumer's preferences or palatability, and should be clarified or replaced. 3. There is no bibliography and only one contributing outline refers to older previous research. More recent publications should be cited. 4. Coordination with the WM-26 Technical Committee should be maintained.
- WM-40 Procurement Policies and Practices of Large-Scale Food Retailers.

4. As indicated on page 29 of the minutes for the March meeting, closing out reports for the following projects were requested, but have not been received.

- WM-13 Wheat Prices and Policies  
 WM-15 Dairy Marketing  
 WM-18 Egg Marketing Organization  
 WM-19 Fruit and Vegetable Packing  
 WM-22 Sheep and Lamb Marketing  
 WM-25 New Marketing Technologies  
 WM-27 Shrinkage of Cattle and Sheep
- W -23 Forage Crops

Closing out reports for the following projects are requested upon completion.

- WM-24 Horticultural Specialty Crops
- W -33 Economics of Water Application

The closing out reports should include the following:

- (1) Summary of accomplishment.
- (2) Complete list of publications.
- (3) Critical analysis of the degree to which objectives have been accomplished.
- (4) Statement of uncompleted work, if any.

The closing out report should be distributed to each of the Western Directors, to SESD (1 copy), to the recording secretary and to each member of the technical committee.

10 year revisions have not been received for the following projects:

W-1 Beef Cattle Breeding  
W-6 New Plants

5. The RRC has received a proposed revision of W-48 entitled "Climatic and phenological patterns of the western region". It is the belief of RRC that this proposal should be discussed concurrently with Great Plains research since this area of weather research was first initiated as a Great Plains program. It is recommended that this project be developed in cooperation with research personnel of the Great Plains States and that when such a project is developed it be supported by Western Regional funds with the understanding that other regions of the Great Plains States will support a similar research study. At the present there are two projects NE-35 and NC-36 which need be coordinated with the revised weather project. It is the feeling of RRC that such a Great Plains project involving several states of three regions be planned and coordinated as a unit. The technical committee composed of representatives of the three regions should submit joint proposals and meet and plan research jointly.

6. Request for additional budgets by the IRM-1 and IR-2 Technical Committees was discussed briefly and the RRC suggests the matter be taken up in connection with the report from the Committee of Nine.

7. The RRC noted discrepancies between the recommendations of the Economics Council (WAERC), made in June 1959 and those of the technical committees for non-marketing economic projects made in March 1959 at the no-increase level. The recommendations are as follows:

<u>Project Number and Title</u>	<u>Technical Committee Recommendation</u>	<u>WAERC Recommendation</u>
W-16 Range Economics	\$22,500	\$19,500
W-42 Ground Water Laws	11,000	12,600
W-54 Farming Adjustment	31,215	30,965
W-59 Price and Income Policies	13,200	13,200
W-62 Farm Power and Machinery Costs	<u>16,850</u>	<u>18,500</u>
Total	\$94,765	\$94,765

The RRC is projecting the figures in the first column in its tentative budget at the no increase level for 1960-61.

8. The RRC accepted the recommendations of the WAERC on marketing economic projects at the no-increase level. The recommendation includes three proposed new projects to which numbers were assigned by the RRC as follows:

WM-43 Bulk Handling of Agricultural Products  
\*WM-44 Impact of Changing Marketing Organization and Structure on the Production, Processing, Distribution and Pricing of Milk in Western States  
\*WM-45 Production and Marketing Characteristics Affecting the Promotion of Agricultural Products

(\* Western Directors did not accept - see page 29.)

It is recommended that administrative advisors be appointed to these projects.

9. The amount of \$300 assigned to W-33, Economics of Water Application, was deleted from the 1960-61 budget.

10. The Committee received a proposal for a new project on the Economics of On-Farm Use of Irrigation Water, recommending a budget of \$500 at the no-increment level. This amount is not included in the tentative budget.

11. W-42 - Ground Water Law. According to the minutes of March 1958, the W-42 project was extended through June 30, 1960, 1 year beyond the original termination date. In March 1959 a request was received to extend the project until June 30, 1961. If this request is to be acted upon, the RRC requests that the technical committee provide formal justification for extension beyond June 30, 1960 for consideration at the November 1959 meeting. The budget recommended by the RRC projects support at the same level as 1959-60.

12. The RRC recommends the attached tentative budget for Western Regional Research Funds for 1960-61 with these comments.

#### No Increase over 1959-60

The Committee accepted the recommendation of WAERC on economic marketing projects and projected all other projects at the same level as 1959-60 except W-33, Economics of Water Application, was reduced from \$300 to 00 and W-61, Sheep Breeding, was increased by \$300.

#### 3.5 Million Increase

In line with the policy of ESCOP the increase in RRF for the Western Region was divided in the ratio of 5/14, 5/14 and 4/14 between soil and water research, forestry research and all other research. Twenty-one (21) percent of the amount for forestry was assigned to marketing.

All cuts made at the March 1959 meeting for W-1, W-25, W-43, W-47, W-51, W-53, W-55, W-56, W-61, and W-46 were restored at the 3.5 million increase level. However, this action resulted in an excess of \$2,075 recommended compared with the amount available for other research excluding soil and water and forestry. The Committee requests the comments of the Western Directors before recommending adjustment.

Increases recommended for forestry and soil and water research projects are included. Other projects are projected at the no increase levels.

#### 7 Million Increase

Non-Marketing: Increases requested at the "small" increase level were included for W-39, W-41, W-43, W-45, W-46, W-47, W-49, W-50, W-53, W-55 and W-63 and \$50 was added to W-62.

Marketing: The Committee recommends approval of the increases shown in the tabulation.

### 14 Million Increase

The RRC did not recommend distribution of \$65,250 assigned to other research excluding soil and water and forestry research and recommends distribution of marketing funds as tabulated.

The same principle was used to calculate the recommended amounts for forestry and soil and water research at the 7 and 14 million increment levels, as at the 3.5 million increment levels.

13. The RRC recommends its report be included in the minutes of the Western Directors.

1960-61  
 ALLOCATIONS TO WESTERN REGIONAL PROJECTS  
 RECOMMENDED TO THE WESTERN DIRECTORS  
 BY THE COMMITTEE ON REGIONAL RESEARCH (RRC)  
 JULY 1959  
 As Amended by Motions of the Western Directors

Project	1959-60	1960-61			
		No	3.5	7	14
		Increase:	Million	Million	Million
W - 1 Beef Cattle Breeding	77,200	77,200	82,300	82,300	82,300
W - 5 Poultry Disease	20,000	20,000	20,000	20,000	20,000
W - 6 New Plants	36,000	36,000	36,000	40,700	40,700
W - 7 Turkey Breeding	17,300	17,300	17,300	17,300	17,300
W -12 Bean Breeding	20,200	20,200	20,200	20,200	20,200
W -16 Range Economics	22,500	22,500	22,500	22,500	22,500
W -24 Cotton Mechanization	17,300	17,300	17,300	17,300	17,300
W -25 Rangeland Improvement	60,000	60,000	62,500	62,500	62,500
W -27 Sheep Vibriosis	35,170	35,170	35,170	35,170	35,170
W -31 Soil Nitrogen	33,300	33,300	36,000	40,000	40,000
W -32 Water Conservation	24,000	24,000	30,000	36,000	40,000
W -33 Econ. Water Application	300	0	0	0	0
W -34 Range Livestock Nutrition	56,000	56,000	56,000	56,000	56,000
W -35 Ruminant Parasites	50,900	50,900	50,900	50,900	51,900
W -37 Rangeland Grasshoppers	15,000	15,000	15,000	15,000	15,000
W -38 Fungus Root Diseases	30,300	30,300	30,300	30,300	30,300
W -39 Fluorine Effects	25,300	25,300	25,300	30,000	30,000
W -40 Breeding Forage Plants	25,000	25,000	25,000	25,000	25,000
W -41 Urinary Calculi	26,000	26,000	26,000	30,000	31,000
W -42 Ground Water Laws	11,000	11,000	14,000	14,000	15,000

Project	1959-60	1960-61			
		No	3.5	7	14
		Increase:	Million	Million	Million
W -43 Leguminus Forage Insects	19,000	19,000	19,500	21,400	24,400
W -44 Cholesterol Metabolism	33,000	33,000	33,000	33,000	33,000
W -45 Pesticide	21,615	21,615	21,615	25,250	25,250
W -46 Stresses Cattle & Sheep	23,000	23,000	23,000	25,000	32,000
W -47 Root Response	12,100	12,100	12,300	14,300	14,300
W -48 Weather and Crops	5,000	5,000	5,000	5,000	10,000
W -49 Cattle Breeding Failure	40,000	40,000	40,000	41,600	41,600
W -50 Stresses & Performance Hens	9,750	9,750	9,750	11,750	14,950
W -51 Drainage Design	2,000	2,000	20,000	20,000	25,000
W -52 Biochemistry Herbicidal Action	5,000	5,000	5,000	5,000	10,000
W -53 Grass Insects and Mites		--	5,000	6,200	6,200
W -54 Adjusting Farming	31,215	31,215	31,215	31,215	41,215
W -55 Fruit Virus Disease		--	2,800	6,000	6,000
W -56 Nematodes and Root Diseases	2,000	2,000	9,200	9,200	13,200
W -57 Amino Acid Utilization	43,000	43,000	43,000	43,000	43,000
W -58 Forage Crop Production	27,300	27,300	27,300	27,300	27,300
W -59 Price and Income Policy	13,200	13,200	13,200	13,200	15,200
W -60 Textiles	10,000	10,000	10,000	10,000	15,000
W -61 Sheep Breeding	10,000	10,300	16,200	16,200	26,200
W -62 Farm Power and Machinery Costs	16,850	16,850	16,850	16,900	16,900
W -63 Weed Control	40,000	40,000	46,000	49,950	49,950
W -64 Fruit Viruses	26,000	26,000	26,000	26,000	27,000

Project	1959-60	1960-61			
		No	3.5	7	14
		Increase:	Million	Million	Million
W -65 Irrigation Hydraulics	23,000	23,000	30,000	35,000	40,000
W -66 Soil Structure	24,500	24,500	30,000	30,000	40,000
W -67 Soil-Plant Water Relationships	34,500	34,500	40,000	45,000	50,000
W -68 Soil Moisture Movement	5,000	5,000	15,000	25,000	40,000
W -69 Housing	16,000	16,000	16,000	16,000	21,000
W -70 Econ. of On-Farm Use of Irrigation Water	--	--	18,000	20,500	25,000
W - Soil Minerology	--	--	--	--	30,000
W - Increasing Water Yields	--	--	--	40,000	115,075
W - Forestry	--	--	58,475	118,075	240,100
Total Other Research		1,095,800	1,265,175	1,432,210	1,771,010
MARKETING					
WM-16 Insect Control and Grain Marketability	16,800	16,800	16,800	16,800	16,800
WM-17 Frozen Fruits & Vegts.	29,000	25,000	25,000	25,000	28,000
WM-20 Hay and Feed	24,700	23,300	23,300	23,300	24,700
WM-23 Wool	25,000	25,000	25,000	25,000	25,000
WM-26 Consumer Purchases Fruits and Vegts.	16,000	16,000	16,000	20,000	20,000
WM-33 Meat	7,000	7,000	16,000	20,000	25,000
WM-35 Seed Marketing	10,000	10,000	10,000	10,000	10,000
WM-36 Dairy Consumption	34,700	30,500	30,500	30,500	34,700
WM-37 Livestock Transportation	34,950	28,250	28,250	28,250	29,950
WM-38 Mgt. and Org. Coops.	30,450	32,000	32,000	32,000	32,000
WM-39 Direct Buying Livestock	22,050	26,000	26,000	26,000	26,000

Project	1959-60	1960-61			
		No	3.5	7	14
		Increase: Million : Million : Million			
WM-40 Retail Procurement	31,800	29,200	29,200	29,200	31,800
WM-41 Cotton Marketing	5,200	5,200	5,200	5,200	5,200
WM-42 Initial Processors Timber	19,200	19,500	35,500	35,500	35,500
WM-43 Bulk Handling	--	12,900	12,900	12,900	17,900
WM-44 Promotion and Utiliza- tion New Products	--	11,200	11,200	11,200	26,200
WM-45 Utilization	--	--	20,000	40,500	60,500
WM- Forestry	--	--	--	15,900	48,050
Total		317,850	362,850	407,250	497,300
GRAND TOTAL		1,413,650	1,628,025	1,839,460	2,268,210