

MARK T. BUCHANAN Director-at-Large

### WESTERN ASSOCIATION OF AGRICULTURAL EXPERIMENT STATION DIRECTORS

OFFICE OF THE DIRECTOR-AT-LARGE

July 19, 1978

TO:

Western Directors

FROM:

Jill Moak

Administrative Analyst

SUBJECT:

Minutes of March 29-31, 1978 WDA Meeting

The minutes of the WDA spring meeting are enclosed. Please review and forward to me any suggestions for corrections or additions.

Enclosure

### DISTRIBUTION LIST

	٠	
/\ <b>~</b>	7	zona
ΛТ	1	4Ulla

L. W. Dewhirst

### California

J. B. Kendrick, Jr.

H. F. Heady

D. E. Schlegel

C. E. Hess

W. M. Dugger

### Colorado

J. P. Jordan

D. D. Johnson

H. F. McHugh

### Guam

W. P. Leon Guerrero

### Hawaii

W. R. Furtick

N. P. Kefford

### Idaho

R. J. Miller

A. M. Mullins

### Montana

J. A. Asleson

M. J. Burris

### Nevada

D. W. Bohmont

R. A. Young

### New Mexico

L. S. Pope

K. J. Lessman

### Oregon

J. R. Davis

W. H. Foote

B. E. Hawthorne

### Utah

D. J. Matthews

C. E. Clark

### Washington

L. L. Boyd

D. L. Oldenstadt

D. J. Lee

W. G. Huber

J. S. Robins

### Wyoming

H. J. Tuma

L. C. Ayres

### SEA

J. M. Nielson

### **ESCS**

A. S. Johnson

### FS

R. Z. Callaham

### SEA/CR

R. J. Aldrich

### SEA/FR

H C Cox

W. G. Chace

R. L. Olson

L. E. Myers

P. H. van Schaik

C. E. Evans

R. D. Plowman

S. N. Brooks

A. I. Morgan, Jr.

•

# MINUTES OF THE MEETING OF THE WESTERN ASSOCIATION OF AGRICULTURAL EXPERIMENT STATION DIRECTORS

Honolulu, Hawaii March 29-31, 1978

		4		
	I			

### SUMMARY OF ACTIONS

Western Association of Agricultural Experiment Station Directors

### March 29-31, 1978

1.	Approved the July 28-29, 1977 meeting minutes without corrections.	(p.	1)
2.	Heard report from the DAL.	(pp.	. 1-7
3.,	Heard report of Chairman/report of Executive Committee (pp. 7-12) and recommended that:		
	<ul><li>a. W. F. Keim (CO) be confirmed as a member of RPG-3</li><li>b. D. J. Lee (WA) be appointed SAES Co-chairman of RPG-5A</li></ul>	(p.	8)
	Food and Human Nutrition c. R. R. Rice (AZ) be appointed SAES Co-chairman and R. C. Youmans (OR) be appointed a member of RPG-5B People, Communities and	(p.	8)
	Institutions d. the rotation schedule for members and Co-chairmen of the western	(p.	
	RPG's listed on page 9 be adopted  e. the WDA Chairman and Chairman of RIC be eligible to serve two consecutive one-year terms in those offices and that the WDA	(p.	
	By-Laws be amended to reflect this change f. WDA approve proposed IR- project, Research Planning and Coordina- tion Through the ESCOP-USDA Liaison Office, in principle	(p.	9)
	g. the annual budget for the ESCOP-USDA Liaison Office should be approved by the four Regional Associations before submission to the Committee of Nine	•	10)
	h. WDA maintain WDAL office in Berkeley under daily administration of Administrative Analyst; DAL Buchanan establish an office in Washington D.C. following his tenure as Interim ESCOP-USDA Liaison Officer	-	10)
	i. off-the-top funding for western regional projects and IR projects remain at FY 1978 level; after FY 1979 Agricultural Appropriations Bill is passed, Executive Committee increase off-the-top allotment by an amount not to exceed the percentage increase in Hatch funds	s	10)
		(p.	11) 12)
4.	Heard SEA/Cooperative Research Report by R. J. Aldrich (p. 12); Committee of Nine Report by W. H. Foote (pp. 12-13); report on Resource and Commodity Analysis Program in Hawaii by W. R. Furtick (pp. 13-14); report on EPA Laboratory in Corvallis/IR-4 by W. M. Dugger and J. R. Davis (pp. 14-15) and recommended that proposal on redirection of the Northwest Biological Investigation Station be endorsed.		15)
5.	Regarding Title XIV and USDA Reorganization, heard Management Perspective report (pp. 15-19); Cooperative Research report (p. 19);	۲۰	-2,

- Staff Perspective report (p. 19); ESCS report (pp. 20-21).

  6. Heard ESCOP report (pp. 21-23); Interim Subcommittee of ESCOP report
- 6. Heard ESCOP report (pp. 21-23); Interim Subcommittee of ESCOP report (pp. 23-24); ESCOP Legislative Subcommittee Report (pp. 24-25).

- 7. Heard report on improvement of problem identification and research implementation (pp. 25-26).
- 8. Heard RIC report (Appendix D, pp. 53-68) and acted on RIC recommendations which:
  - approve revised project outline for W-45 effective from October 1, 1978 to September 30, 1983, recommending that the project seek participation from scientists in SEA/CR and FS and coordinate with W-82 (pp. D 53-54) permit W-82 to prepare a revised project outline, and recommend that the project seek participation from scientists in FS and coordinate with W-45 (p. D-54)permit W-84 to prepare a revised project outline which is more narrowly focussed, and recommend participation from other groups (p. D-54)d. approve revised project outline for W-102 effective from October 1, 1978 to September 30, 1983 (p. 0-55)approve revised project outline for W-126 with some additions e. to be effective from October 1, 1978 to September 30, 1983 (p. D-55)f. approve revised project outline for W-127 to be effective from October 1, 1978 to September 30, 1983, recommending that consideration be given to regional application of results (p. D-55)approve revised project outline for W-128 to be effective from g. October 1, 1978 to September 30, 1983 with some additions (p. D-56)h. approve revised project outline for W-130 to be effective from October 1, 1978 to September 30, 1983 with some additions (p. D-56)í. return project outline of W-131 to committee for rewriting (p. D-56)approve W- Clogging of Drainlines by Mechanical, Chemical and Biological Actions to be effective from October 1, 1978 to September 30, 1983 with Dr. J. van Schilfgaarde as lead-AA and (p. D-57)Dr. W. M. Dugger as Co-AA approve W- Optimization of the Use of Range and Complementary Forages for Red Meat Production, effective from October 1, 1978 to September 30, 1983, with Dr. L. W. Dewhirst as AA, providing the committee documents SEA/FR participation, includes PY and TY information, and requests FS participation (p. D-57)1. reject proposal for IR- Investigation into the Cause of High pH in Must and Wines (pp. D 57-58) m. extend WRCC-11 for three years until September 30, 1981 (p. D-58)extend WRCC-17 for three years until September 30, 1981 n. (p. D-58)establish WRCC-33 Land and Water Management for Control of Salinity in Western States, to be effective from October 1, 1978 to September 30, 1981 with Dr. D. D. Johnson as AA (p. D-58)defer approval of WRCC- Family Housing Research in the Western р. Region (pp. D 58-59)ask that W-141 technical committee re-write the 1977 annual report (p. D-62) appoint Dr. E. H. Zube (AZ) as AA of W-119 and request that he call a meeting of the technical committee to prepare a new outline (p. D-63) recommend personnel reassignments--Dr. L. W. Dewhirst to W-139; Dr. L. L. Sammet and Dr. M. N. Schroth to W-140; Dr. H. F. McHugh to W-143; Dr. M. N. Schroth to W-146; Dr. M. N. Schroth to W-150 (pp. D 63-64)Heard rest of RIC report--consideration of altering current regional research procedures (pp. D 64-65); personnel assignments (pp. D 66-67); problems associated with small farms/organic farming (p. D-64)

- 9. Heard WRPC report (pp. 27-30); report on SEA/federal research regional efforts (p. 30); SEA/federal research report (pp. 31-32); Forest Service report (pp. 32-34); EPA report (p. 34); report of Extension representative (p. 34); report of Resident Instruction representative (pp. 34-35); report of Home Economics representative (pp. 35-36); report of Veterinary Medicine representative (pp. 36-37); ASCUFRO report (p. 37); report on Station/Extension budget evaluation studies (pp. 37-38); report on federal research, program changes and zero based budgeting (pp. 38-39); report on maximizing researcher's potential and group efforts toward a goal (pp. 40-41)
- 10. Passed six resolutions

(pp. 41-44)

11. Agreed to suggest to ESCOP that Directors submit a "problem alert" form to a central office identifying new and important research problems

(p. 45)

·		

### INDEX TO MINUTES

Subject		Page
1.0	Call to Order	1
2.0	Introductions	1
3.0	Announcements	1
4.0	Adoption of Agenda	1
5.0	Approval of Previous Minutes	1
6.0	DAL Report	1
7.0	Report of Chairman/Report of Executive Committee	7
8.0	SEA/Cooperative Research Report	12
9.0	Committee of Nine Report	12
10.0	Resource and Commodity Analysis Program in Hawaii	13
11.0	EPA Laboratory in Corvallis/IR-4	14
12.0	Title XIV and USDA Reorganization	
	12.1 Management Perspective	15
	12.2 Staff Perspective	19
	12.3 ESCS	20
13.0	ESCOP Report	21
	13.1 ESCOP Legislative Subcommittee Report	24
14.0	Can Problem Identification and Research Implementation	2-
15.0	Be Improved?	25
15.0	RIC Report	27
16.0	WRPC Report	27
17.0	SEA/Federal Research Regional Efforts	30
18.0	Reports from Federal Agencies	<b>.</b>
	18.1 SEA/Federal Research	31
	18.2 Forest Service	32
	18.3 Environmental Protection Agency	34
19.0	Reports of WDA Liaison Representatives	
	19.1 Extension	
	19.2 Resident Instruction	34
	19.3 Home Economics	35
	19.4 Veterinary Medicine	36
	19.5 ASCUFRO	37

### INDEX TO MINUTES

Subject		Page
20.0	Report on Western Experiment Station/Extension Budget Evaluation Studies	37
21.0	Management of Research	
	21.1 Federal Research, Program Changes and ZBB	38
	Perspectives on (a) How to influence the individual researcher to maximize his/her potential, and (b) How to optimize group efforts toward a common goal	40
22.0	Resolutions	41
23.0	Other Business	
	23.1 Future Meetings	44
	23.2 Other Business	44
24.0	Adjournment	45
	INDEX TO APPENDICES	
Subject		Page
A	WDA Agenda	47
В	Proposed Redirection of the Northwest Biological Investigation Station, Environmental Protection Agency	49
C	ESCS Organization Chart	51
D	RIC Report	53
E	Taylor: On the Optimum Support per Scientist Year	69

### WESTERN ASSOCIATION

### CF AGRICULTURAL EXPERIMENT STATION DIRECTORS

### MINUTES OF SPRING 1978 MEETING

University of Hawaii Honolulu, Hawaii

March 29-31, 1978

### ATTENDANCE:

Arizona - L. W. Dewhirst Wyoming - L. C. Ayres  - W. M. Dugger, Jr N. W. Hilston - H. F. Heady - J. B. Kendrick, Jr. OWDAL - M. T. Buchanan - L. N. Lewis - J. E. Moak - D. E. Schlegel SEA - J. M. Nielson  Colorado - D. D. Johnson - H. F. McHugh ESCS - A. S. Johnson Guam - W. P. Leon Guerrero  W. P. Eurstick SEA/CR - R. J. Aldrich
- W. M. Dugger, Jr H. F. Heady - J. B. Kendrick, Jr. OWDAL - M. T. Buchanan - L. N. Lewis - D. E. Schlegel SEA - J. M. Nielson  Colorado - D. D. Johnson - H. F. McHugh  Guam - W. P. Leon Guerrero  SEA/CR - H. J. Tuma - H. J. Tuma - M. T. Buchanan - J. E. Moak - J. M. Nielson - A. S. Johnson - R. Z. Callaham
Colorado  - J. B. Kendrick, Jr. OWDAL  - M. T. Buchanan  - L. N. Lewis  - D. E. Schlegel  SEA  - J. M. Nielson  - D. D. Johnson  - H. F. McHugh  - W. P. Leon Guerrero  SEA/CR  - R. Z. Callaham
- Ł. N. Lewis - J. E. Moak - D. E. Schlegel SEA - J. M. Nielson  Colorado - D. D. Johnson - H. F. McHugh ESCS - A. S. Johnson  Guam - W. P. Leon Guerrero FS - R. Z. Callaham
Colorado  - D. E. Schlegel SEA - J. M. Nielson - D. D. Johnson - H. F. McHugh  - W. P. Leon Guerrero  SEA/CR  - R. Z. Callaham
Colorado  - D. D. Johnson - H. F. McHugh  Guam  - W. P. Leon Guerrero  SEA  - J. M. Nielson - A. S. Johnson - R. Z. Callaham  SEA/CR  R. J. M. Nielson - A. S. Johnson - R. J. Aldrich
Colorado - D. D. Johnson - H. F. McHugh - A. S. Johnson  Guam - W. P. Leon Guerrero FS - R. Z. Callaham  SEA/CR
Guam - W. P. Leon Guerrero FS - R. Z. Callaham
- W. P. Leon Guerrero
CEA/CD D I Aldrich
There is the property of the p
nawali - W. R. Furtick
- N. P. Kefford SEA/FR - H. P. Binger
- C. P. Wilson - S. N. Brooks
Idaho - A. A. Araji - W. G. Chace
- R I Miller - H C Cox
- C. E. Evans
Montana - J. A. Asleson - J. E. Gilmore
Nevada - D. W. Bohmont - A. I. Morgan
- R. A. Young
New Mexico - K. J. Lessman - R. L. Olson - J. B. Pate
D. D. D. D.
oregon - J. R. Davis
- W. H. POOTE
- B. E. Hawthorne - F. Strauch - P. H. van Schaik
Utah - C. E. Clark - J. M. Vetterling
- D. J. Matthews - W. J. Whorton
Washington - W. G. Huber
- W. G. Huber - D. J. Lee
- D. L. Oldenstadt
- J. S. Robins

			•

### 1.0 Call to Order

Chairman R. J. Miller called the meeting to order at 1:15 pm, Wednesday, March 29.

### 2.0 Introductions

Director Robins introduced Dr. W. G. Huber, Associate Dean of the College of Veterinary Medicine at Washington State University, and Assistant Director of the Washington SAES. Director Hilston introduced Dr. Harold J. Tuma, the new Dean of the College of Agriculture, Director of Cooperative Extension and Director of the Wyoming SAES, University of Wyoming. Dr. Koert J. Lessman, Associate Director of the New Mexico SAES, introduced himself. Director Johnson introduced Dr. Helen F. McHugh, Dean of the College of Home Economics and Associate Director of the Colorado SAES, Colorado State University.

Later in the morning, Dr. H C Cox introduced Dr. William G. Chace, Acting Associate Regional Administrator in the Western Region SEA/FR office, and Dr. James E. Gilmore, Assistant Area Director of the SEA/FR California-Hawaii-Nevada area.

### 3.0 Announcements

Chairman Miller announced the members of the Resolutions Committee: R. A. Young (Chairman), C. E. Clark and W. H. Foote.

Throughout the meeting Directors Furtick and Kefford announced local arrangements.

### 4.0 Adoption of Agenda

The agenda was adopted without addition, and is attached as Appendix A.

### 5.0 Approval of Previous Minutes

The Minutes of the July 28-29, 1977 meeting of the WDA were approved as distributed.

### 6.0 DAL Report - M. T. Buchanan

Oral report:

### 6.1 USDA Employment Opportunities

SEA - Deputy Director for Joint Planning & Evaluation Administrator, Human Nutrition Center Leader, Evaluation and Impact Staff Numerous analyst positions available under Ι.Ρ.Λ.

# ESCS- Administrator Deputy Administrator for Cooperatives Deputy Administrator for Economics Director, Program Evaluation & Development Staff

### 6.2 Studies required under Title XIV

The studies will probably be under the sponsorship of the Joint Council. The announcement of the appointees to the Joint Council should appear within a week or two. Cochairmen of preliminary work groups have been named for each of the studies, although these individuals will not necessarily be the final Cochairmen selected by the Joint Council. The current Cochairmen are:

Facilities - G. M. Browning and Don Black (SEA/FR)
Organic Farming - R. W. Kleis
Nutrition - B. E. Hawthorne and James Iacono (SEA/FR)
Small Farms - R. C. Powers and J. G. Vandenbergh
Secretary's Report - M. T. Buchanan, Al Grable (SEA/CR) and E. L.
Corley (SEA)

Weather & water - handled by Hjort et al

### Written report:

As you know, I have been in Washington, D.C. since about October 5, 1977. I initially went to assist in the implementation of Title XIV of PL 95-113. For the most part, I have done so indirectly by way of participating in the reorganization of research, extension, teaching and technical information services within USDA.

Secretary Bergland has delegated to the resultant new agency, the Science and Education Administration (SEA) most of the responsibilities assigned to USDA under the new legislation. In addition, SEA is to continue the programs previously assigned to CSRS, ARS, ES and NAL.

I have sent you from time to time copies of reports and memos prepared by Dr. Cutler, Dr. Nielson and me; these dealt with events that were current during several stages of the reorganization process. I have also submitted a report to the Division of Agriculture Executive Committee covering my service for them during the period October 15, 1977 to February 14, 1978. A copy of my report is appended.

My continuing activities in Washington, D.C. (until September 30, 1978) are being sponsored by the four Regional Associations of SAES Directors.

Quite a lot of what I attempted to do as the Division of Agriculture Executive Committee's USDA Liaison Officer and what I continue to do as the SAES-USDA Liaison Representative is precisely the same as I would have attempted to do as WDAL. A listing of trips and meetings is appended.

The Recording Secretary participated in meetings of the WDA, the WDA Executive Committee, RIC and WRPC, including preparing agenda, supplementary materials, and minutes or summary notes of the meetings. The Recording Secretary served as a staff member of WRPC and in that capacity prepared all the materials used by western administrators for the 1976-81 projection cycle for agricultural research, including preparation of materials for the meeting of western administrators held July 27, 1977 in Bozeman, Montana. Other WRPC staff assignments included the preparation of new task force guidelines.

The Recording Secretary assisted me in the preparation of a detailed listing of agricultural research in the western region by performing agencies entitled "Research Program Summary, Western Region, FY 1975" and another paper highlighting the "Patterns of Expenditures for Federal and State Funds, State Agricultural Experiment Stations, 1975." The Recording Secretary helped the ESCOP Legislative Subcommittee by compiling information on how western SAES Directors would spend projected increases in Hatch funds.

The Recording Secretary also assisted the Research Implementation Committee (RIC) in the review and evaluation of research projects, the development of policies and programs, and in the preparation of reports.

Expenditures of W-106 funds to support the Recording Secretary function during FY 1977 are indicated on the attached page.

### MTB TRAVEL SINCE WDA SUMMER 1977 MEETING

23-26 30-Sept.	Travel to Washington, D.C. to meet with other Regional Directors and meet with NPC staff on 1976-1981 planning cycle  2 Travel to Pullman, WA to attend ARS regional directors meeting and ARS-SAES PNW states meeting
SEPTEMBER	
5-9	Travel to Washington, D.C. to attend meetings of ESCOP, ESCOP
13-14	Legislative Subcommittee, and meet with other Regional Directors Travel to Chicago to meet with other Regional Directors on
27-28	evaluation of the Farm Bill Travel to Corvallis, OR to conduct interviews for management study
OCTOBER	
5-14	Travel to Washington, D.C. to attend meetings of ESCOP, ARI, NISARC, and prepare for Div. of Ag. short-term assignment Assignment in Washington, D.C. as USDA Liaison Officer for Div. of Agriculture, NASULGC
NOVEMBER	
2 3-8 11 12-15	Attended NPC meeting in Washington, DC Travel to Berkeley for personal business and work in OWDAL Travel to Beltsville to attend USDA reorganization workshop Attended NASULGC meetings at Washington Hilton Hotel (Div. of Ag., Experiment Station Section, ESCOP, WDA Executive Comm.) Attended ARPAC moeting in Washington
	Attended ARPAC meeting in Washington, DC  Travel to Berkeley for personal business and work in OWDAL

AUGUST 1977

7-8

DECEMBER	
14 15 19	Met with Executive Committee of Div. of Ag. at 1 DuPont Circle Meeting with members of RICOP Represented Div. of Ag. at 1st Annual Symposium on Famine Prevention, Russell Senate Office Bldg Met with other Regional Directors and Chairman of ESCOP (Coyt
	Wilson) at Burlington Hotel
JANUARY	1978
12-13 16-18	Attended ESCOP Liaison Subcommittee meeting Attended Nat'l Conf. on Research Planning for Forests & Associated Rangelands
18-21	Travel to Fort Collins, CO to participate in Colorado Crop Improvement Conference and conduct interviews for management study
30-31	Attended meetings of ESCOP Legislative Subcommittee and ESCOP Liaison Subcommittee
FEBRUARY	
8-9 15-16	Attended meetings of CAHA, Div. of Ag. Legislative Committee on USDA Budget, and Div. of Ag. Executive Committee Attended NISARC meetings
MARCH	

### OWDAL'S SINCE WDA SUMMER 1977 MEETING

Attended WRPC meeting in San Mateo, CA

133 - August 19, 1977	(1) (2)	Conference agreements on Farm Bill The Systems Approach
134 - Sept. 21, 1977	(2)	"National Agricultural Research, Extension and Teaching Policy Act of 1977" (Title XIV of the Farm Bill) Updated telephone card Table of Service
135 - Sept. 27, 1977		Draft copy of "interpretive analysis for ESCOP of Title XIVNational Agricultural Research, Extension and Teaching Policy Act of 1977"
136 - Oct. 17, 1977	(1) (2)	Mark T. Buchanan assignment in Washington, D.C. Meetings during the week of October 10 of ESCOP, ARI and NISARC
137 - Dec. 1, 1977	(1)	NPC meeting on November 2, 1977
138 - Jan. 9, 1978	1 1	PL 95-113 WDA Meetings
139 - Jan. 26, 1978		Executive Budget, FY 1979

### STATEMENT OF EXPENDITURES

### RECORDING SECRETARY ACCOUNT

### OCTOBER 1, 1976 - SEPTEMBER 30, 1977

	BUDGETED FOR FY 1977	ACTUAL EXPENDITURES FY 1977
Salaries	\$ 14,700	\$ 15,342.61
Employee benefits	2,000	2,513.62
Supplies and expense:		
Travel	1,400	452.55
Duplication	1,000	1,843.44
Mailing	500	537.70
Telephone	600	337.86
Miscellaneous	400	$-294.67 \frac{1}{}$
Office supplies	400	266.89
Printing and library materials	0	0
Equipment	0	0
	\$ 21,000	\$ 21,000.00

<sup>1/</sup> Includes reimbursement from DAL account to cover Buchanan travel and other expenses charged to Recording Secretary account

## SPECIAL STUDIES ACCOUNT OCTOBER 1, 1976 - SEPTEMBER 30, 1977

	BUDGETED FOR FY 1977	ACTUAL EXPENDITURES FY 1977
Miscellaneous expenditures	\$ 20,000	\$ 42.84
International Trade Symposium		4,000.00
Idaho SAES - Araji		15,339.00
Buchanan travel		618.16
	\$ 20,000	\$ 20,000.00

# SPECIAL STUDIES ACCOUNT - IDAHO EXPENDITURE OF FUNDS\*

April 1-September 30, 1977

705-K300			
Capital Outlay	\$ -0-		
Irregular Help	\$ 382.20		
Travel	\$ 5,132.13	(10 trips)	
Other Expense	\$ 429.59		
Salaries	\$ 7,733.75	(\$6,108.00	Prin. Invest.
Fringe Benefits	\$ 979.27	\$1,625.75	Res. Assoc.)
	\$ 14,656.94		

705-K400		
Capital Outlay	\$ 157.50	
Irregular Help	\$ 435.10	
Travel	\$ 481.62	
Other Expense	\$ 5,077.68	(\$5,000 computer time)
Salaries	\$ 7,805.15	(\$6,109.74 Prin. Invest. \$1,695.41 Res. Assoc.)
Fringe Benefits	\$ 1,002.16	\$1,095.41 Nes. 185001)
- 	\$ 14,959.21	

TOTAL $\frac{$29,616}{}$	.15
--------------------------	-----

### \*Sources of funds:

CSRS \$15,300 WRD 15,000 Total \$30,300

### Discussion:

Miller noted that the expenses for Buchanan's work in Washington, D.C. from February 15 - September 30, 1978 would be shared by all four SAES regions. Robins and Aldrich commented on Buchanan's impact as a member of the Staff Group assisting the USDA Transition Management Team. Buchanan reiterated that the most important function of such a liaison person is to serve as a focal point of interaction between the state and federal sides.

### 7.0 Report of Chairman/Report of Executive Committee - R. J. Miller

Minutes of the November 15-16, 1977 Executive Committee meeting in Washington, D.C. have been distributed previously. This report covers the Executive Committee meeting held in Honolulu, March 29, 1978.

### 7.1 Information Items

### 7.1.1 Reclassification of Recording Secretary

In March, the University of California recommended a reclassification to Administrative Analyst for Jill Moak. This action was retroactive to November 1977, to coincide with the beginning of Dr. Buchanan's absence from Berkeley.

### 7.1.2 RRF Allocation Procedures

Director Clark, as a member of the Committee of Nine subcommittee reviewing this matter, discussed the current method of allocation of RRF adopted by the Committee of Nine in November 1972. Under this method new funds, not including cost-of-living increases, are targeted for high priority research programs. The application of this formula in 1977 and 1978 resulted in the West receiving a smaller increase in funds than the other regions. The Committee of Nine is reconsidering the entire funding mechanism and may suggest that the rural population factor in the formula be eliminated.

### 7.1.3 WDA Travel Policies

The Executive Committee discussed again the issue of reimbursement for travel expenses incurred while representing the region at regional and national meetings. The travel of WDA representatives to ESCOP and ARPAC is currently paid by the Western Directors' Special Fund. There are a number of other cases, however, where travel is not reimbursed by the region, such as the WDA Chairman's travel to meet with the other regional chairmen. In addition, some states are now operating under "travel freeze" conditions. The Executive Committee decided not to recommend any change in travel procedures at this time.

7.1.4 Western Experiment Station/Extension Budget Evaluation Studies

Dr. Araji will be reporting on his findingsthis year later on during our meeting.

On a national level, SEA-CR has made a commitment to participate in these studies again during FY 1979 (an analysis for the FY 1980 budget presentation). Joseph Havlick (VA) will replace B. R. Eddleman as group leader. The rest of the group will consist of: Jim Araji (ID), J. Dean Jansma (PA), R. S. Manthy (MI), and Ruth Deacon (IA). WDE will continue to seek financial assistance from the Extension Service for this program.

The WDA Executive Committee believes it is important to continue western funding of Dr. Araji's portion of the work during FY 1979.

### DISCUSSION:

Aldrich expressed the view that (1) we have not adequately demonstrated to the Congress the results that have been achieved through the RRF program, and (2) a careful audit of these funds might argue that the funds are, in fact, allocated by formula. Other Directors noted that in previous years the Committee of Nine and others did make a point of highlighting the contributions of the RRF program.

### 7.2 Action Items

### 7.2.1 Appointments

### 7.2.1.1 RPG-3 Crops

The WDA Executive Committee recommends that the appointment of W. F. Keim (CO) as a member of RPG-3 be confirmed.

(Action of WDA: PASSED)

### 7.2.1.2 RPG-5

RPG-5 has been split into two separate RPG's as per the recommendations of NPC and ARFAC. The two new RPG's are RPG-5A Food and Human Nutrition and RPG-5B People, Communities and Institutions.

The WDA Executive Committee recommends that Dr. D. J. Lee (WA) be appointed SAES Co-chairman of RPG-5A Food and Human Nutrition.

(Action of WDA: PASSED)

The WDA Executive Committee further recommends that Dr. R. R. Rice (AZ) be appointed SAES Co-Chairman and Dr. R. C. Youmans (OR) be appointed a member of RPG-5B People, Communities and Institutions.

(Action of WDA: PASSED)

### 7.2.1.3 Rotation Schedule for Members of RPG's

The WDA Executive Committee recommends the adoption of the following rotation schedule for members and Co-chairmen of the western RPG's:

NOTE: Year indicated represents the completion of a term on November 15 of that year.

RPG-1: R. A. Young [1979], N. K. Whittlesey [1980], and N. A. Evans [1978]

RPG-2: R. M. Kallander [1979], H. F. Heady [1980], and E. L. Miller [1978]

RPG-3: D. W. Bohmont [1978], K. C. Feltner [1979], and W. F. Keim [1980]

RPG-4: D. J. Matthews [1980], A. B. Nelson [1979], and vacancy [1981]

RPG-5A: D. J. Lee [1981], M. M. Hard [1979], and vacancy [1980]

RPG-5B: R. R. Rice [1981], C. Ching [1979], and R. C. Youmans [1980]

RPG-6: H. F. McHugh [1980], R. S. Firch [1979], and B. D. Gardner [1978]

(Action of WDA: PASSED)

### 7.2.2 Tenure of WDA Officers

The Executive Committee recommends that the WDA Chairman and the Chairman of RIC be eligible to serve two consecutive one-year terms in those offices and that the WDA By-Laws be amended to reflect this change.

(Action of WDA: PASSED)

7.2.3 IR- Research Planning and Coordination Through the ESCOP-USDA Liaison Office

The Executive Committee reviewed the proposed IR- project to fund the positions of an ESCOP-USDA Liaison Officer and a Regional and National Planning Analyst, prepared by a subcommittee of ESCOP. The project outline has been approved in principle by the other three regions. The total estimated budget for the two positions plus office staff is \$170,100 for the first year.

The Executive Committee recommends that the WDA approve the proposed IR- project in principle subject to further refinement of the job descriptions. It was also recommended that the annual budget for the ESCOP-USDA Liaison Office should be approved by the four Regional Associations before submission to the Committee of Nine.

(Action of WDA: PASSED)

### DISCUSSION:

It was pointed out that NASULGC is planning to establish a position for an agricultural staff officer who would report directly to the Executive Director. Kendrick noted that it appeared that the role proposed for the National Planning Analyst duplicated the efforts of the budget analysis group currently headed by Joe Havlick. Are these two positions really necessary? Buchanan indicated that the Liaison Officer was necessary both because of Browning's imminent retirement and the current level of activity involving relationships with SEA and the Joint Council on Food and Agricultural Sciences. The principal emphases of the Liaison job will be on planning, evaluation and analysis rather than legislation or budget. Kendrick reiterated that he felt the benefits likely to accrue from having three or four people located in Washington, D.C. did not justify cutting back on our other programs in order to support them.

### 7.2.4 DAL - Function, Needs and Location

The Executive Committee received the report of the committee to review the Office of the DAL (Asleson, Kendrick, Jordan) based on a survey of the Western Directors. At the time of the survey, Directors were opposed to stationing the DAL in Washington, D.C. As a result of Title XIV and the reorganization of USDA, however, the Executive Committee feels that Buchanan's continued presence in Washington, D.C. could be beneficial to the West.

The Executive Committee recommends that the WDA continue to maintain a headquarters office at the University of California, Berkeley under the day-to-day administration of the Administrative Analyst. The Executive Committee further recommends that DAL Buchanan establish an office in Washington, D.C. following his tenure as the Interim ESCOP-USDA Liaison Officer. Specific functions will not be defined at this time in order to allow for maximum flexibility to adapt to the changing conditions there. This decision will be re-evaluated at the end of FY 1979.

(Action of WDA: PASSED)

### 7.2.5 Off-the-Top Funding

The Executive Committee received the following off-the-top funding requests for FY 1979:

	FY 1978	FY 1979	
Project	Appropriation	Request	%Increase
W-6			
Washington	\$138,488	\$149,200	
Oregon	800	800	•
	139,288	150,000	7.7%
W-84			
California	18,000	20,000	11.1%
I'R-1			
Wisconsin	75,100	82,750	10.2%
W-106			
Rcdng. Sec.	24,000	25,859	7.7%
Special Stud.	25,000	29,817	19.3%
	49,000	55,676	

The Executive Committee recommends the off-the-top allocations for W-6, W-84 and IR-1 be approved as requested.

(Action of WDA: DEFEATED)

### DISCUSSION:

Directors expressed concern about increasing allotments to the off-the-top projects, including all the IR projects, at a time when other research projects will probably suffer fund reductions because of the proposed \$11 million Hatch cut in the FY 1979 Executive budget. Director Foote pointed out that in the cases of W-6 and the IR projects, SEA/FR provides more money to the research programs than do the SAES. If we are going to have cooperative national programs, we need to pay our share of the costs. The Directors should provide better guidelines to the Administrative Advisors on how to prepare the budget requests.

It was moved and seconded that off-the-top funding for western regional projects and IR projects remain at the FY 1978 appropriation level. After the FY 1979 Agricultural Appropriations Bill is passed, the Directors authorize the Executive Committee to increase the off-the-top allotments by an amount not to exceed the percentage increase in Hatch funds nationally, up to the level of the projects' requests.

(Action of WDA: PASSED)

It is not known whether or not SEA will be able to provide DAL Buchanan with office space, telephone, or secretarial assistance. It was agreed that a secretary would no longer be needed in the Berkeley office and that DAL Buchanan should hire a secretary in Washington, D.C. If SEA does not provide office space, and if other suitable office space within the District of Columbia proves to be too expensive, Directors asked Buchanan to consider establishing an office within his house.

It was moved and seconded that the Executive Committee be authorized to approve a final budget for the DAL, Recording Secretary and Special Studies for FY 1979 after the issues of Hatch appropriations and DAL office space have been resolved. The total budget for all three functions shall not exceed \$125,000.

(Action of WDA: PASSED)

### 8.0 SEA/Cooperative Research Report - R. J. Aldrich

### 8.1 Competitive grants program

Joe Key's group is located in Rosslyn, VA, and the five program managers are all IPA appointments. For FY 1978 the competitive grants program is the responsibility of CR. Thereafter, the program will be under the SEA Assistant Director for Program Management, Keith Shea.

### 8.2 Animal Health

About half of the veterinary medicine research has now been classified and stored in CRIS. The veterinary medicine subcommittee of ESCOP has prepared a definition of animal health/disease research as follows: "Basic and applied studies of any clinical or subclinical, structural or functional abnormality, carrier state, or chemical residue which reduces or has the potential to interfere with the efficiency of production or marketing of animals or animal products or would pose a hazard to human health."

Guidelines for the use of animal health funds are being developed by G. C. Poppensiek under the sponsorship of the association of veterinary medicine deans.

### 8.3 Atkinson proposal on IPM

The Atkinson proposal involves 15 institutions, 250 scientists, and a request for \$22 million over five years. The proposal has been independently reviewed by USDA, NSF and EPA, and then the three agencies compared their reviews and agreed to do more detailed independent reviews. There was consensus that they could not recommend the project in its current form.

### DISCUSSION:

In response to a question, Aldrich noted that the competitive grants program, because the funding authority is PL 89-106, will full-fund projects, rather than phase-fund like NSF and NIH.

### 9.0 Committee of Nine Report - W. H. Foote

The Committee met in Fargo, ND on September 8, 1977 and San Francisco, CA December 8-9, 1977. The next meeting will be held in Washington, D.C. on June 14-15, 1978.

New members of the Committee starting January 1, 1978 are C. W. Donoho, Jr. (OH), C. E. Clark (UT), and Bertha Lewis (NY).

The Committee continues to seek ways to strengthen regional research in the high priority areas identified through the various priority setting groups.

The new Manual for Cooperative Regional Research requires that each project show the anticipated SY, PY and TY commitment for each participating state and agency. There has been some reservation about providing PY and TY information in advance of the activation of the project. The Committee feels that the information on anticipated SY, PY and TY commitments will be helpful in evaluation projects but major emphasis will be on the SY commitment. The Committee feels that the information on the PY and TY will be useful and this procedure should be given a chance.

CR has requested that for all project outlines submitted after January 1, 1978, and for progress reports beginning with calendar year 1977, measurement data be given in metric units. Some concern was expressed about converting too rapidly to the metric system and the Committee suggested scientists use a dual system of measurements to express research results for a reasonable period during the transition to the metric system.

Termination reports acknowledged:

None from the West.

New and Revised Projects:

W-125 Soil Interpretations and Socio-Economic Criteria for Land Use Planning. Revised October 1, 1977 - September 30, 1982.

Projects Deferred:

W- Evaluation of Alternative Land Uses on Forest, Range and Other Wildlands

The allocation procedure for new regional funds is a continuing concern of the Committee because of a questioning of the level of allocation among the four regions for fiscal 1978 when compared with previous fiscal years. The fiscal 1978 allocations were made on the basis of the 1972 Committee of Nine recommendations. The present Committee views any change in the allocation procedure as a very important matter and discussions will continue before specific recommendations are developed.

10.0 Resource and Commodity Analysis Program in Hawaii - W. R. Furtick

Because many people felt there was a lack of coordination between state agencies, and between research, extension and resident instruction, the legislature established an agricultural coordinating committee comprised of the governor, the dean of the College of Tropical Agriculture, and

the five cabinet members whose agencies in any way deal with agriculture. The committee meets twice a month and is concerned entirely with coordinating the delivery of services to the people of the state.

As a result, the College of Tropical Agriculture decided to go to a program planning basis, the Commodity and Resource Planning Program. Systems analysts reviewed our major commodities and resources and determined an initial classificatory breakdown. The faculty was then asked to identify the research and extension efforts needed for the resources and commodities.

The systems flow chart developed from this activity was sent to state and federal agencies for critique and review and a new document was prepared incorporating their suggestions. This document was reviewed by our clientele groups in a series of one-day workshops after which the document was again revised incorporating the views of the users.

We ended up with two documents: (1) the potential and basic problems of each industry, and (2) a review of all current resources and estimates of needed resources to overcome each problem, the probability of success, and the time dimension for success. Because of the systematic nature of this process, it has been easy to arrive at priorities within each commodity or resource area.

The legislature has been impressed with this approach and is now moving all the state budgeting to this type of basis.

Within the College of Tropical Agriculture we are establishing a mission-oriented program approach for research and extension utilizing program managers. The experiment station and extension service have been abolished as separate entities and been recombined as the Institute of Tropical Agriculture and Human Resources. However, it has been agreed that this is an experimental approach which will be discarded if it does not prove effective.

### 11.0 EPA Laboratory in Corvallis/IR-4 - W. M. Dugger/J. R. Davis

EPA has proposed that the work of its Northwest Biological Investigation Station located in Corvallis be redirected to work essentially full time on minor use problems in cooperation with the IR-4 program. During the summer of 1977 EPA invited a number of people to Washington, D.C. to discuss this concept.

In November 1977 the western IR-4 liaison representatives met and recommended that the EPA lab be reassigned to USDA (SEA-FR) in order to do research on minor uses of pesticides. They did not feel that the lab could remain part of EPA without serious conflicts of interest. This suggestion was unacceptable to EPA and the Pacific Northwest States, however.

EPA apparently has wanted to terminate the lab for some time since there are basic philosophical differences between the lab personnel and the administrators of EPA. The lab was formerly administered by USDA. The personnel have generated enough support from clientele groups and users, however, to prevent EPA closure of the lab, and this has prompted the current proposed redirection of effort.

The Pacific Northwest States have reservations about the proposed redirection but feel they cannot refuse an offer for help in an area which really needs help. They propose that the lab work on minor use registration and their data would then be channeled through the western IR-4 liaison committee. The work would include primary efficacy data and perhaps later on plot work and analysis for residue data, safety data and toxicity. EPA promises to maintain the current level of funding but has not obligated additional funds to the lab.

Directors expressed concern about the propriety of a regulatory agency developing data for use in requesting registrations for pesticides and the possibility that affiliation with EPA might cause the western SAES to lose credibility with their clientele groups, particularly chemical companies.

Dugger counter-proposed that the work of the lab be under the control and direction of the Western IR-4 Liaison representatives from the PNW states, and that the lab not perform any residue analysis, and that it specialize in ornamental crops. This recommendation was concurred in by the Directors.

Davis and Dugger presented a draft proposal which was amended to conform with the concerns of the Directors (Appendix B, p. 49). It was moved and seconded that the WDA endorse the proposal on redirection of the Northwest Biological Investigation Station, Environmental Protection Agency. Changes in the document which may be suggested by EPA would have to be ratified by the WDA.

(Action of WDA: PASSED)

### 12.0 Title XIV and USDA Reorganization

### 12.1 Management Perspective - J. M. Nielson

### 12.1.1 Implementation of Title XIV

We calculated that there were 49 items in the legislation which required action. We have completed action on 10, 29 are well in progress, and 10 have had nothing done on them.

Letters of invitation to the Joint Council on Food and Agricultural Sciences were mailed several weeks ago and a meeting of the Joint Council is tentatively scheduled for April 28-29.

Recommendations for members of the National Agricultural Research and Extension Users Advisory Board have been received. SEA is selecting names to forward to the Secretary's office.

Nominations for the Animal Health Board were sent to the Secretary and invitation letters to members should be mailed soon.

1

Thrust of Title XIV: USDA to be the lead agency in research, teaching and extension in the agricultural sciences, defined very broadly; USDA to continue its partnership with the land grant universities but also include other cooperators; USDA should do a better job of planning and coordination.

### 12.1.2 Reorganization of USDA

Part of USDA's response to Title XIV was a reorganization effort within the Department. The number of agencies was reduced from 40 to 26. A new agency, the Science and Education Administration (SEA), was created.

SEA has accomplished the following to date: Delegations of authority to deputy and assistant directors; assignment of functions to units; definition of kinds and numbers of staff in each organizational unit; identification of people for the key administrative posts.

In the organization chart (page 17) the positions listed in the "sunburst" comprise the central management team. The budget function will definitely be tied to the Joint Planning and Evaluation unit.

The costs of reorganization include early retirement by staff, loss of morale, lost man-hours of work. A number of potential benefits can flow from reorganization, however, including increased dialogue among sub-units and with non-federal cooperators. Whether or not such benefits will materialize depends, in the final analysis, on the motivation of individual employees. They are the key to any successful reorganization effort.

The objectives of our human nutrition work are: giving more resources to nutrition, giving nutrition greater visibility, doing a better job of coordinating in-house and outside research with extension efforts. One of the users of human nutrition information are the action and regulatory agencies reporting to Foreman. They are not our main audience, however. Our main audience is the American public.

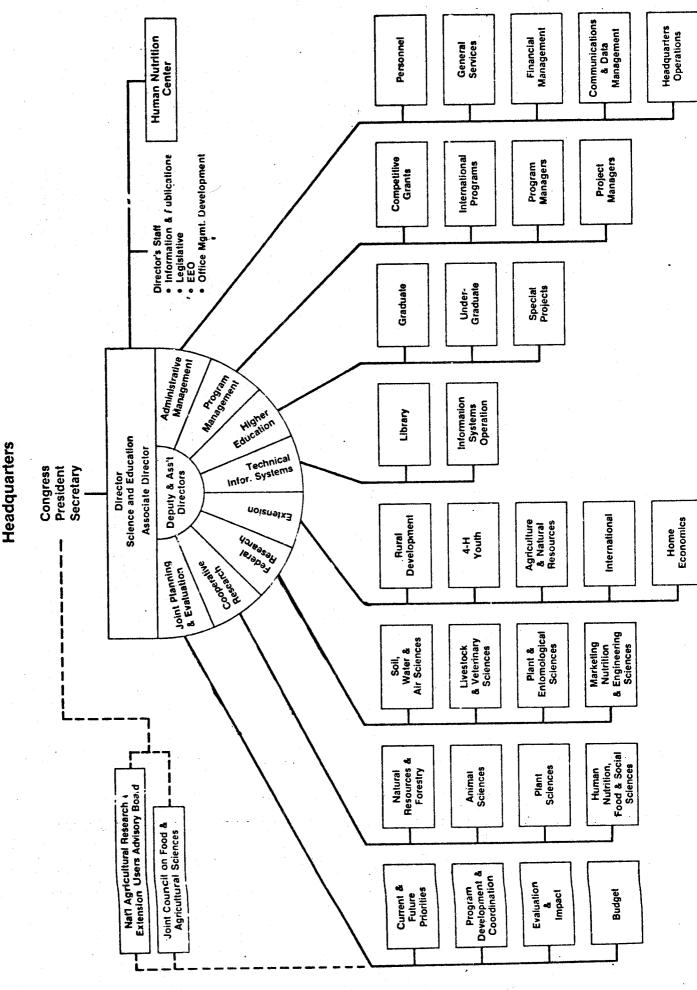
The total SEA budget proposed for FY 1979 is \$750 million with a PFT ceiling of 8,555.

### 12.1.3 Cooperation

### 12.1.3.1 Opportunities for interaction

Neilson distributed a flow chart entitled "The Food and Agricultural Sciences and Education System."

# Science and Education Administration



Opportunities for interaction will continue to exist on a one-to-one basis, through regional and national planning groups, through the Joint Council and the Users Advisory Board, and most importantly through joint staffs under IPA agreements in the Joint Planning and Evaluation unit. The legislated charge to the Joint Council reads "... analyze and evaluate the economic, environmental and social impacts of agricultural research, extension and teaching programs conducted in the United States and determine high priority agricultural research areas and submit annual reports identifying such high priority research areas to the Secretary." Such a charge requires staff assistance of a high level of competence, which we hope to provide through the Joint Planning and Evaluation unit. We are proposing a significant number of IPA appointments within this unit.

### Joint Planning and Evaluation

sub-unit	No. IPA	Total Staff
Current & Future Priorities	4	14
Program Development & Coord.	15	34
Evaluation & Impact	7	14
	26	62

Some IPA positions will be paid for entirely by the Department. Others will be funded by their sponsoring agencies or institutions (such as FS, ESCS, ESCOP, ECOP, RICOP, NSF, etc.). We would provide office space and secretarial help. The IPA's would be treated the same as our regular staff employees and would be expected to be involved in the budget development process as well as be subject to the budget "curtain".

### 12.1.3.2 Joint Budget Development

We don't yet know how we will coordinate our planning and budget activities but we plan to work cooperatively with you in whatever plan we devise. There will, of course, be opportunities to influence our budget process by both the states, user groups, Congress, OMB and the President.

The entire federal government is committed to a strong competitive grant program with regard to basic research. Cutler and the administrators within SEA also recognize that formula funds are necessary to keep a pool of talent in each state. We also have a strong commitment to a continued in-house research program.

The Director of SEA will have the opportunity to appear before the Secretary and the Department Program and Budget Review Board during the budget development process.

### DISCUSSION:

Nielson noted that the staff in the Joint Planning and Evaluation unit will play an important role in effecting coordination between the various human nutrition activities.

Kendrick emphasized the need for USDA, SEA and the Joint Council to give due consideration to special regional priorities when developing national priorities, noting that one of the strengths of our agricultural system is its plurality.

### Cooperative Research - R. J. Aldrich

### Reorganization:

Reorganization provides some opportunities for cooperative budget development, determining total research budgets, relating research and extension budgets, relating competitive grant funds to the total research funds. However, if we try to jointly plan budgets you should recognize that some state autonomy may have to be sacrificed.

Expanding the number of performers of research may help you by incorporating scientists at your own institutions who are not a part of the Experiment Station. All performers of research will be asked to provide CRIS data on their research.

Some Directors are concerned about the seeming "distance" between the CR Deputy Director and the Assistant Secretary level. It is the intention that the sub-units of SEA remain the main contact points for the Directors.

### DISCUSSION:

Cox noted that it would be worthwhile to have representatives of Cooperative Research and Extension stationed in the Federal Research regional offices.

### 12.2 Staff Perspective - M. T. Buchanan

Buchanan referred Directors to the report on his activities as the Division of Agriculture Liaison Officer which was included with the DAL Report. He emphasized that the legislation challenges us to work together for total programs for all performers and all sources of funding.

### 12.3 ESCS - A. S. Johnson

In the material Ken Farrell distributed to this group in advance of the meeting were the ESCS organization chart, directory, and statement of functions. The ESCS organization chart is included herein as Appendix C, p. 51.

### Reorganization

Reasons for reorganization were: (1) reduce the number of persons reporting to the Director of Economics, Policy Analysis and Budget so that he could devote more time to his policy analysis and budgeting responsibilities; and (2) improve management support services by providing these services directly to the agencies rather than the free-standing Economic Management Support Center.

One major benefit may be that the overall statistical and analytical out-put of the Department will improve by having ERS and SRS within the same agency. The overall mission of the agency will be no different than the sum of the missions of the former program agencies.

### FY 1979 Budget

The fiscal 1979 budget request is \$80,008,000, \$33,662,000 of which is for economic research or the equivalent of the old ERS.

### 1980 and Beyond

There are many policy issues which must be decided in the next few years. These include: (1) relationships between domestic agriculture and food policy, international trade policies, world food production, and aid; (2) increased emphases on technology assessment; (3) impact of agricultural and non-agricultural policies such as energy conservation and environmental protection; (4) need for improved knowledge about our natural resources; (5) goals for rural America.

### ESCS-University "Partnership"

There are many reasons why we are concerned about our relations with universities: (1) We want to achieve the biggest bang for the buck for all public supported research. (2) The universities "manufacture" our major production in-put -- the agricultural economist, agricultural statistician or other social scientist. (3) It is important that mechanisms are developed that permit us to supplement our in-house program with talent that exists at universities. (4) The universities are a place where we can conduct some of our more basic research and also where our researchers can get "retooled".

Twenty-eight ESCS people are located at universities in the Western states. We also have numerous cooperative agreements with the universities, both extramural and intramural. We established a program last year designed to support graduate thesis work. We have been conducting annual meetings with the leaders of organizations representing institutions conducting agricultural economics research. We have involved the universities in reviews of our programs.

Looking Ahead

In the absence of any overall increase in staff, it is possible there will be a slight decrease in the number of people located at universities. Our assignments to field locations will likely be more temporary in nature than in the past. Because it will probably be easier to get dollars than employment slots, I suspect the funds available for cooperative work will continue to increase.

It is important that we continue to strive to jointly identify priorities. The Regional and National Planning System has been useful in this regard, but the best method is still through researcher-to-researcher exchange.

### 13.0 ESCOP Report - L. C. Ayres

### ESCOP Actions

ESCOP held meetings in Washington, D.C. October 10-11, and November 13, 1977 in conjunction with the Land-Grant meetings. Western representatives included Mullins, Ayres, Jordan and Mark Buchanan.

### October 10-11, 1977

A full agenda was scheduled for the one and one-half days with the majority of the time involved in discussion of the Food and Agricultural Act of 1977. Significant actions included:

- 1. M. T. Buchanan named to represent the Division of Agriculture in a staff group to work on reorganization and implementation of Title XIV of the Food and Agriculture Act of 1977.
- 2. R. L. Aldrich presented a plan for reorganization of the USDA and indicated that C. Harris had been assigned full time responsibility for interacting with other staff concerned with reorganization and its implementation.
- 3. W. P. Flatt distributed materials prepared by the Research Analysis staff and presented before OMB. ESCOP approved in principle that the base for the Fiscal Year 1980 budget request be the amount authorized in Title XIV of the Food and Agriculture Act of 1977.
- 4. Attention was brought to OMB Circular A-110 and the impact its imposition, and related regulations, could have on the formula funded programs. Particular attention was called to those features that could make the formula funds subject to overhead.
- 5. An arrangement for J. Havlick of the Virginia Station to replace B. R. Eddleman on the Research Analysis Staff was agreed to by the group. The Chairman of the Legislative Subcommittee was authorized to administer the Research Analysis Staff as required to prepare analyses to support the budget request.
- 6. ESCOP elected and recommended nominees and representatives to the Joint Council, (D. Rouse), Animal Health and Disease Advisory Committee (Hoefer & Card), and the Executive Policy Group (C. Wilson, with J. P. Jordan as alternate).

7. ESCOP suggested serious consideration be given to an organization structure that will group into one unit under FASEA all educational programs, into another unit all in-house research of USDA, and into a third unit all activities involving administration of Federal formula funds alloted to States for research in agriculture, forestry, rural development, animal health and diseases and home economics. And further, improve coordination of the programs of the Bureau of Land Management and those of the Forestry Service, the Soil Conservation Service and the State Agricultural Experiment Stations.

### November 13, 1977

The half day agenda was mostly filled with discussion regarding the responsibilities and functions of FASEA (or FASA).

- 1. Discussion followed on how FASEA would be the one Administration for USDA that would be responsible for all legislative and other mandates to the Secretary/USDA both prior to and including Title XIV relating to all research, extension and teaching programs and activities in the food and agricultural sciences as broadly defined in Title XIV. Buchanan presented the reorganizational alternatives under consideration by the USDA. ESCOP passed a resolution to endorse Activity Model Variation "B", with no reorganization as a back-up.
- 2. New Food and Agriculture Act of 1977 (PL 95-113)
  - a. The Act eliminates the requirement for 20% of the Hatch research funds being used in marketing research. This will apply right now to the FY 1978 appropriations.
  - b. The Act provides for the 1890 universities to move from grant funding authority to formula funding beginning FY 79.
- 3. ESCOP reviewed the EPA Pesticide Data Auditing Program. SAES should review draft regulations and scientists should be aware of implications for preservation of new data records.
- 4. The NPC recommends that RPG 5.00 be separated into two RPG's, i.e. (a) Food and Human Nutrition that includes RP's 5.01 and 5.02, and (b) People, communities and institutions that includes RP's 5.03, 5.04 and 5.05. Also, that the CRIS Committee be reconstituted to implement this change but with attention to retaining the integrity of CRIS.
- 5. The Legislative Subcommittee report (preliminary budget tables FY 80) was approved.
- 6. Report of Marketing Subcommittee regarding the workshop on the coordination of marketing research held May 9-11, 1977 in Washington, D.C. A volume "Future Frontiers in Agricultural Marketing Research" is being prepared.
- 7. Problems still exist in IR-4 with continued delays in approval or clearing registrations.

- 8. Additional Washington representation was discussed.
  - a. Reorganization and Implementation Staff
  - b. National Research Liaison Representative
  - c. Regional and National Planning Analyst
  - d. Executive Vice Chairman of ESCOP

Mark Buchanan is filling the (b.) position for the time being. No action was taken on others because of the reorganization. Supposed to be discussed at Spring regional meetings and for Section meeting next fall (1978).

- 9. Executive Order No. 11987, Exotic Organisms, in light of the Western Regional Association's resolution, was discussed. The ESCOP Chairman will discuss it with USDA officials.
- 10. ESCOP approved resolution regarding Public Land Utilization, and to present it to the Division.
- 11. ESCOP Officers 1978

Chairman - Coyt Wilson, VPI and State University Vice Chairman - J. P. Jordan, Colorado State University Secretary - T. W. Dowe, University of Vermont

# Interim Subcommittee Actions

The Interim Subcommittee of ESCOP met in Washington, D.C., September 6-7, 1977 with Mullins representing the Western Region.

- 1. A proposal for establishing an Executive Vice Chairman of ESCOP was presented to CAHA for their meeting on September 7, 1977. Later at the meeting, it was reported that while there was considerable support in the CAHA for the position, the consensus within the Division Executive Committee was that ESCOP, ECOP, and RICOP each needed Washington representation.
- 2. A position statement was prepared and approved relative to manpower needs to implement the planning and projection aspects of Title XIV of the 1977 Farm Bill.
- 3. The Interim Subcommittee concurred with both the "Review of Hatch and McIntire-Stennis Project Proposals" and "FY '78 Hatch Program Increase" letters presented.

The Interim Committee of ESCOP met in Washington, D.C., January 31, 1978 with Ayres representing the Western Region.

- 1. The status of SEA was discussed, with flow chart. The search for a Director is in the process. A recommendation to Bergland is planned for February 21, 1978.
- 2. The status of USDA Liaison Position, February 15-September 30 was discussed with support from NC, S and W evident and NE to discuss at their next meeting.

- 3. Funding strategies were discussed concerning the FY 1979 Budget recommendations regarding decrease in payment to states, use of formula funds, and vulnerability of RRF. An ad hoc committee of Rouse, Miller and Browning appointed to look into RRF funding and report to ESCOP at the April meeting.
- 4. Status reports were provided on the following subjects: Integrated Pest Management, Earmarking of Hatch Funds by Directors, CRIS Location, Weather-Water Allocation Study.
- 13.1 ESCOP Legislative Subcommittee Report J. P. Jordan

A supplementary packet of material, one for each state, was distributed.

- 13.1.1 Thrust. The principal focus for the Legislative Subcommittee of ESCOP is towards full implementation of the Food and Agriculture Act of 1977 as it impacts on Title XIV.
- 13.1.2 FY '78 Supplemental. ESCOP has proposed funding increases in 4 priority packages referenced to the appropriate section of Title XIV for \$99.9 million. Recognizing that the Congress will not fund supplementals that are calculated on a full-year basis but begin mid-year, the priority packages were put together ranging from \$46.3 million down to a low of \$14.7 million. The Department has been unsupportive of the animal health and disease component of the Supplemental Request.
- 13.1.3 FY '79 Budget Request. The Subcommittee's allegations with respect to the Administration's budget request to the Congress has been that it is unreflective and unresponsive of the issues and authorizations designated by Congress in the passing of the Food and Agriculture Act of 1977. Actually, it represents a reduction in Formula Funding to the State Agricultural Experiment Stations' System.

Each state is requested to look at the budget in terms of the potential cuts for your state and to communicate the meaning of these cuts in terms of program and personnel to the Congressional delegation from your state. Please keep those of us on the Legislative Subcommittee aware of what information you send to your Congressmen.

We should all remember that in five years the Hatch Act and related formula fund programs will be reviewed under the "Sunset Clause". It is clear therefore that if the Hatch Act programs are to continue, cutbacks cannot be sustained without the resultant reduction in research activity, at least with respect to the Hatch program. The same argument applies to Rural Development, McIntire-Stennis, and to the traditional Special Grants Program area.

The key issue so far as the federal government 1s concerned relates to the question of what is the best way to handle federal funding for agricultural research. OMB believes that the Land Grant community will defend its part of the budget.

- 13.1.4 FY 1980 Budget Request. Initial work on this budget is moving forward towards full funding under Title XIV. In FY 1980 therefore ESCOP is looking towards a budget request of \$355.3 million which is up from the FY 1979 budget request of \$193.8 million.
- 13.1.5 ESCOP-USDA Liaison Office. Although the ESCOP-USDA Liaison Office is a program of ESCOP itself rather than the Legislative Subcommittee, the significance of this position to the legislative effort is clear. The budget is tied irrevocably to Title XIV and this office is important in providing the Experiment Station input into the implementation plans of the Department of Agriculture regarding Title XIV.
- 14.0 Can Problem Identification and Research Implementation Be Improved? R. J. Miller, D. L. Oldenstadt

We want to address what is the best way to harmonize state, regional and national goals through a planning and implementation process that is understood by all of us. The chart (below) reflects the current and previous mechanisms we have used to achieve planning coordination.

Federal administrators	FR-CR-ESCS-FS NASULGC	NPC	Communications, initiations
Regional Directors	WDA	WRPC	
State & Area Directors	RRC (RIC)	RPG's	
Dept. chairmen	RAC's (WHERAC, etc.)	RAC's	
Scientists	RRP's, WRCC's	TF's	Planning

#### DISCUSSION:

We have done a good job to date but this discussion is for the purpose of generating ideas on how to fine tune the mechanism.

## CRIS:

- We need a better way of rearranging CRIS goals and cross-walking the CRIS system to get the newly identified problems at the national level.
- We need a common information system for the states as well as all SEA units, including research, extension and teaching.
- How can we translate the information system knowledge into program structures?

- To the extent that CRIS is a valid description of what is going on, the projects are properly classified, and the classification system is adequate, you can get a great deal of information from CRIS.
- CRIS was intended to be an information exchange system for scientists and only coincidentally managers began using it.
- CRIS is an adequate system for management control but has never been adequate as an information exchange system for scientists because it doesn't include enough scientific information.
- The information which we get from CRIS is only as good as the information which is fed into it.
- IR-5 and/or the CRIS Policy Committee chaired by Browning and Bob Harris should look closely at all of these issues.
- The commodity classifications are often less useful than the RPA classifications.

#### RRF:

- There are too many western regional research projects--we ought to terminate some of them or turn them into coordinating committees.
- Projects should be more narrowly defined.
- If we recognize that RRF is a nucleus for attracting other funds, how do you decide how many projects is too many?
- We need to do a better job of communicating the results of our research to the legislators and the general public. But what kind of evidence will they accept?
- We must make sure not to infringe on the individual researcher's ability to propose new regional research projects--this is one of the strengths of our system.

# Problem Identification and Priority Setting:

- We need a mechanism for identifying newly emerging problems and giving them national recognition. Perhaps there could be a form that Directors would send to some central federal office as such problems come to their attention.
- Even when regional problems are identified, they are aggregated on the national level and lose some of their definition. And we have a hard time assembling the data to demonstrate what resources are already being devoted to such priority problems. In addition, the problems are aggregated numerically, which turns many people off. We might be more successful if we simply gave examples.
- We have to recognize that there are national, regional, state and local priorities and they are not always compatible. When priorities are aggregated nationally, we end up with only national priorities reflected in our projection cycles.
- Perhaps during the next projection cycle we could include more than just national priorities.

# 15.0 RIC Report - D. L. Oldenstadt

The RIC Report is included herein as Appendix D, pp. 53-68.

# 16.0 WRPC Report - C. E. Clark

- 16.1 Responses to WDA Requests
  - 16.1.1 Prepare a report to the WDA detailing the effects of our WRPC priority-identification procedures, i.e., how has research been affected by the priority identification procedures?

WRPC has determined that such an analysis would be extremely difficult and would probably be meaningless for several reasons. During the early projection years, a great deal of reclassification of projects and redefinition of SY's occurred causing apparent shifts in the base data. Secondly, responses to congressionally mandated research thrusts caused significant changes in the direction of research which could not have been predicted at the time the projections were made.

The NPC Report 1976-81 Cycle for Projecting and Analyzing Research Program Adjustments (just published) includes a section which analyzes the correspondence between previous national projections and realized research adjustments. WRPC recommends this section to the Directors' attention.

16.1.2 WRPC was asked to prepare a plan for (a) determining centers of excellence in each state, and (b) effecting trade-offs and coordination between and among states and ARS.

WRPC has established a continuing agenda item for reports on subregional planning efforts. At its March meeting, WRPC heard a report on the Four Corners meeting held in Albuquerque on November 21, 1977. This meeting was attended by representatives of New Mexico, Arizona, Colorado, Utah and SEA/FR. The purpose of the meeting was to identify mutual problems and discuss areas where all states and agencies could benefit from cooperative efforts. Another report on a similar meeting in the Pacific Northwest involving Idaho, Washington, Oregon, and SEA/FR was also received. The reports of both of these meetings indicated that they were very useful and that they were major steps toward improved cooperative efforts. WRPC will continue to encourage such efforts.

The request to "prepare a plan for determining centers of excellence in each state" was more problemmatic. One major difficulty is defining the terms "centers of excellence" or "areas of research emphasis". USDA agencies have existing policy for establishing centers of excellence and a list of such federally funded centers can be provided. The

criteria for identifying university centers of excellence are not as well defined--should they include numbers of scientists, quality of scientific output, single locations vs. scattered locations, etc.? In addition, there could be institutional and political problems associated with defining areas of research excellence since areas not included might be considered inferior or de-emphasized.

If the WDA would like to pursue this inquiry, WRPC requests WDA assistance in defining the criteria for such centers, procedures for requesting such information from the SAES, and reclarification of the purpose of such a review.

16.1.3 WRPC was asked to make recommendations on implementation of the Stairs proposal entitled "Proposal to Develop Strengthened Role of RPG's in Regional and Related Research Programming".

WRPC first referred this matter to RIC and then recommended that RIC continue to exist as a subcommittee of WRPC with its function being primarily to administer the program of western regional research, e.g. regional research projects and WRCC's.

WRPC requested RIC give further consideration to delegating more responsibility to the Administrative Advisors and the extent to which the RPG's should be involved in the regional research process.

16.1.4 Monitor world food and fiber production needs and provide research position papers annually from which western regional priorities for the SAES might be determined by the WDA.

WRPC concluded that the "Corley-Turnbull" report satisfies this request for 1978. WRPC will further recommend to the Joint Council that this effort be continued at a national level in the future.

16.1.5 Optimum funding for SY's

WRPC received an earlier request from the WDA to determine the optimal level of funding support per SY. WRPC requested ERS (now ESCS) investigate methods of obtaining this information either from the CRIS system or some other survey or monitoring system. Gary Taylor prepared a thoughtful report on this topic which WRPC refers to the WDA for consideration. (See Appendix E, pp. 69-72.)

- 16.2 Other Highlights of the March 1978 WRPC Meeting
  - 16.2.1 Task Force Guidelines

WRPC approved a new set of guidelines for Task Forces. These new guidelines are considerably different from the guidelines they replace, and establish three different kinds of Task Forces:

- (a) Problem Definition Task Forces. This type is responsible for determining and establishing priorities of societal or "real-world" problems and for developing specific research targe for problems of high priority. Such task forces are expected to be staffed by people close to the "real-world". RPG's may, in some instances, wish to constitute themselves as a Task Force for this purpose or to sponsor public workshops to help define problems and determine priorities.
- (b) Program Definition Task Forces start in where Problem Definition Task Forces leave off. Their job is to define the specific research jobs needed to address one or more of the high priority problems developed by Problem Definition Task Forces. Staffing will be primarily by scientists and they will be expected to use systematic and acceptable procedures for developing research activity flows (such as the Convergence Analysis Technique).
- (c) Combination Task Forces are assigned responsibilities for both Problem and Program Definition. Use of this type of Task Force will be limited to narrow-scope subject areas and to emergency situations.

# 16.2.2 WRPC Policy and Procedure Handbook

WRPC instructed staff to prepare a "WRPC Policy and Procedures Handbook." This handbook for members of WRPC and its RPG's would include: a history of the development of the Regional and National Planning System; policies; RPG responsibilities; Task Force Guidelines; the role of RIC and other WRPC subcommittees; membership lists; methods for appointing members to WRPC, RPG's and Task Forces; terms of office; and a list of published Task Force reports. A draft of the handbook is to be prepared for the next meeting of WRPC.

#### 16.2.3 Division of RPG-5

ARPAC approved NPC's recommendation (based on a recommendation from WRPC) that RPG-5 be split into two separate RPG's. For the time being, the RPG's will be numbered RPG-5A and RPG-5B. Assignment of separate numbers must await action by the CRIS Policy Subcommittee of ARPAC. RPG-5A will be entitled Food and Human Nutrition and will include RP's 5.01 and 5.02. RPG-5B will retain the title People, Communities and Institutions and will consist of RP's 5.03 and 5.04. The WDA will need to appoint three new representatives to the membership of the two RPG's.

# 16.2.4 Five-year Projection Cycles

NPC and ARPAC approved (contrary to WRPC's recommendation) an every-other-year projection cycle, therefore projections will not be made for 1978. WRPC discussed the types of planning activities to undertake this year and decided to distribute last year's projections to the RPG's, asking them to reassess the projections and make suggestions for changes. RPG's were also requested to examine the CRIS classifications within their areas and make recommendations for improvements.

#### DISCUSSION:

Directors expressed both pro and con views on the advisability of trying to identify regional centers of research emphasis. Consensus was reached that sub-regional meetings in order to identify common problems and apportion resources to address those problems were helpful.

# 17.0 SEA/Federal Research Regional Efforts - H C Cox

Cox reviewed, through slides, the responsibilities of some of the national laboratories located in the Western Region. These included:

- U.S. Salinity Laboratory, Riverside developing guidelines for soil management under conditions of limited precipitation to minimize adverse effects of salinity in irrigated areas.
- U.S. Water Conservation Laboratory, Phoenix using water more efficiently, reducing agricultural water losses.
- Bee Research Laboratory, Tucson basic and applied studies of behavior and biology of honey bees
- Biological Control of Weeds Laboratory, Albany breeding insects for control of weeds
- National Seed Storage Laboratory, Fort Collins stop continued loss of native plant germplasm
- Arthropod-Borne Animal Disease Research Laboratory, Denver
- Poisonous Plant Research Laboratory, Logan develop knowledge of biology, ecology and biochemistry of poisonous range plants and develop means of control
- Snake River Conservation Research Center, Kimberley develop technology to conserve our water resources
- U.S. Sheep Experiment Station, Dubois increase production and quality of lamb meat and wool
- Livestock and Range Research Station, Miles City improve meat production, vegetation and management practices on rangelands
- Rangeland Insect Laboratory, Bozeman biology, control and management of range insects, particularly grasshoppers

# 18.0 Reports from Federal Agencies

## 18.1 SEA/Federal Research - H C Cox

Reorganization, appropriations, budget and personnel were the most significant activities affecting the Western Region of ARS during the past year.

You are all aware that Agricultural Research Service was abolished and became Federal Research, one of the components of SEA. Early in the reorganization thought was given to abolishing the four Regions and enlarging the Areas but reducing their number. Acting Director Nielson has since indicated that this plan is no longer being considered, although there may be some readjustments in the Area boundaries.

Increases were limited in the Fiscal Year 1978 Appropriation:

## Increases

Location	Program	Gross \$ (in thousands)
Miles City and Cheyenne	Range management	200
Pullman	Disease evaluation of plant introductions	80
Bozeman	Mormon cricket	50
Corvallis, Logan, and Prosser	Pollination, forage	100
Phoenix	Radar to study insect migration	100
Albany	Host plant resistance	200
Albany	Chemical triggers of nitrogen fixation	200
Corvallis	Filberts	10
Indio	Date palm germplasm repository	41
Corvallis and Prosser	Mint breeding	96
Corvallis	Fruit and nut germplasm repository	726
Shafter	Cottonseed	65
Salinas	Sugarbeets	100
Davis	English walnuts	50
Pasadena	Guayule	50
Davis	Soybeans	54

There were no ceiling slots allocated with the increases. In fact, FR must reduce its personnel ceiling a total of 60 by the end of FY78. While it is difficult to staff the programs which require additional personnel, progress is being made. We have been informed that we must reduce by an additional 250 in FY79.

The FR Budget for FY79 has already been given in detail elsewhere. The following summary shows activities in the Western Region which would be affected:

## Reductions

		Gross \$ (in thousands)
FR:	Processing, storage and distribution efficiency research	9,431
	WR: Food processing, marketing and wool fiber (Prosser, Yakima, Albany)	1,054
FR:	Housing research	389
	WR: None	0
FR:	Tropical/subtropical research	343
	WR: Extramural	159
	TOTAL: FR	10,218
	WR	1,213
	Redirections	
FR:	Crop and animal production and conservation	6,396
	WR: Forage, range, oilseeds, cotton, straw conversion, potato and tomato, insects of man, irrigation, soil management, sa damage, watershed hydrology (Burns, Cheyenne, Davis, Tucson, Bozeman, Flagstaff, Shafter, Corvallis, Prosser, Fre Riverside, Fort Collins, Laramie)	

#### Increases

FR:	Health and safety	443
	Nutrition	2,893
	Conservation (extramural)	3,884
	Nutrition (extramural)	5,000
	Small and part time farms (extramural)	, 00
	Integrated pest management (extramural)	1,500

# 18.2 Forest Service - R. Z. Callaham

Callaham distributed a handout prior to the meeting which discussed the following items.

Hearings were held in the House recently on three bills:

- Cooperative Forest Resource Assistance, H.R. 11777
- Renewable Resources Research, H.R. 11778
- Forest Resources Extension Program, H.R. 11779

HR 11778 would amend the McSweeney-McNary Act of 1928.

President's Budget for 1979

The President's budget for FY 1979 proposes a reduction of about \$3.6 million from the FY 1978 appropriation for forestry research. This reduction reflects a one-third cut of the increases appropriated by the Congress for FY 1978. Urban Forestry Research, started last year, has no funding proposed for FY 1978. Decreases are proposed for threatened and endangered species research, fire prevention research, and other important research areas in the West.

National Forestry Research Plan

The Forest and Rangeland Renewable Resources Planning Act of 1974 set into motion a greatly intensified planning effort, including research. The Secretary requested the Forest Service to prepare a "National Forestry Research Plan" including all related research efforts, not just those of the Forest Service.

The Chief of the Forest Service requested and received assistance from the Regional and National Agricultural Research Planning and Implementation System. Thus the development of the National Plan has been a joint endeavor of the Forest Service, ASCUFRO, SAES's, industry and others from its inception.

Our western RPG-2 hosted one of four working conferences on "Research Program Planning for Forests and Associated Rangelands." A National Working Conference was then held in Washington, D.C. in January, 1978. Delegates to the regional and national conferences were drawn from groups representing the users of the results of forestry research.

In addition to the regional and national workshops, CSRS, FS and ASCUFRO requested the National Resources Foundation to address the science policy question, including the organization and conduct of forestry research. The Foundation sponsored a 3-day symposium at Arlie House, Warrenton, VA, May 30-June 3, 1977, to enlist the views of scientists, educators, and science administrators. The results of the conference have recently been published as "A Review of Forest and Rangeland Research Policies in the United States."

The symposium and regional and national workshops are only steps towards development of the National Plan. With the results of these efforts in hand, a national team and the four regional RPG-2's are drafting Regional and National Planning Documents. Drafts of these plans for research are scheduled for release by May 15, 1978. The resulting National Forestry Research Program will be inserted into the format of the Resources Planning Act for easier review and consideration by the Congress.

New Initiatives in Planning
The FS is continuing its efforts in broad subject area planning.
These planning efforts cut across FS Experiment Station boundaries.
These planning efforts are joint efforts with universities, colleges

and industry. They have also been coordinated through the National Planning System. Examples of recent broad program planning efforts are: arid lands research, Great Basin rangeland research, riparian zone research, land-use planning research, energy research.

# 18.3 Environmental Protection Agency - R. Boesch

Boesch is in the EPA San Francisco office and works with pesticide programs.

#### Status of amendments to FIFRA

Two bills have been passed by the Senate and the House, S. 1678 and H.R. 8681, which amend FIFRA to allow conditional registration of extensively tested chemicals for an interim period pending further testing, provided additional tests show no adverse environmental effects. Conference committee will begin meeting in April.

Reorganization of EPA Office of Pesticide Programs

Hazard evaluation division ) All EPA pesticide scientific
Benefits & field studies division ) expertise in these two offices
Registration division
Operations division
Program support division
Special pesticide review division

Petitions for minor uses will still go to the Registration Division.

#### DISCUSSION:

Several Directors expressed concern about the delay in processing minor use petitions. Miller related EPA's request that W-124 comment on the newly published guidelines on municipal wastes on agricultural land. The Technical Committee requested EPA provide travel funds for the committee to meet for this purpose, but EPA was unable to do so.

### 19.0 Reports of WDA Liaison Representatives

#### 19.1 Extension - J. B. Kendrick

The spring Extension Directors meeting is the week following the WDA meeting so no report was presented.

#### 19.2 Resident Instruction - C. E. Clark

Report of meeting of resident instruction deans and directors held March 22-23.

The concerns of these people include student enrollment, students graduated, student placement in jobs and starting salaries. There is a changing composition of students--more women students and more with non-farm background. A Washington State survey revealed 59% male and 41% female in agriculture, which is about the same as for

the total university. About 30% had a farm background and a greater percentage of females had non-farm background than males. This has a great impact on classroom teaching programs.

Homer Folks, Assistant Director for Higher Education, SEA, discussed the process of building the first budget for a higher education teaching program in USDA and is seeking input from university resident instruction deans and others. Most of the developmental process for the FY 1980 budget will be completed by USDA June 1978. It has not been determined whether the approach to the teaching budget will follow similar thrusts identified by research or whether a different approach will be taken. Much progress has been made in recognizing the need for improved teaching programs and in coordinating the teaching and research areas in the universities.

### 19.3 Home Economics - B. E. Hawthorne, H. F. McHugh

#### HERAPP Report

Printing of the Home Economics Research Assessment, Planning and Projections (HERAPP) Report is anticipated for April. Final review by the Steering Committee, representing the cosponsors, ARPAC and AAHE, FS-USDA and the regional representatives of the Home Economics Research Subcommittee of ESCOP, occurred in February. The comprehensive report will include (a) Present and Projected Research Programs for Home Economics; (b) Most Important Research Problem Areas; (c) Home Economics Research in the Experiment Station Environment; and (d) Recommendations for Future Research Activities and Support. The brief, popularized brochure aimed at policy makers and the public, should be available by May. This project was largely funded by CSRS with additional support by the Association of Administrators of Home Economics in State Universities and Land-Grant Colleges, Inc.

Coordination of Efforts in Implementation of Title XIV, PL 95-113
To coordinate efforts of home economists in offering services to the Secretary of Agriculture in determining policies, devising operating directives and participating in the decision-making related to the implementation of Title XIV of PL 95-113, an informal "coalition" of presidents or chairmen of the following have been pooling their efforts: American Home Economics Association, Association of Administrators of Home Economics, National Council of Administrators of Home Economics, Commission on Home Economics-NASULGC, Home Economics Subcommittee of ECOP and Home Economics Research Subcommittee of ESCOP. Each organization has also been operating independently when advisable.

Program Analysis; Cost/Benefit Analysis of Home Economics Research Preliminary analyses of cost/benefit in certain areas of home economics research have been initiated by the Home Economics Research Subcommittee of ESCOP through voluntary efforts of a committee, chaired by Ruth Deacon, of Iowa State University. Ruth Deacon also joined the program analysis group led by J. Havlick at their December meeting. Financial support will be needed to make significant progress.

# Research Planning and Coordination through the ESCOP-USDA Liaison Office

The problem of the need for a home economics research representative in Washington has been presented to Dr. Coyt Wilson, Chairman of ESCOP. He suggested that inclusion of a home economics representative in the proposed ESCOP-USDA Liaison Office in Washington, D.C., be presented to the regional director groups as they consider the IR project proposed to support enhanced liaison efforts between ESCOP and USDA and to provide an analytical input into the regional and national planning effort.

A letter prepared by Dr. Hawthorne requesting WDA consideration of this issue was circulated. It states in part "... the Home Economics Subcommittee of ESCOP believes the full missions of PL 95-113 related to human nutrition and home economics can only be achieved if a home economist/human nutritionist is added to the proposed Liaison Office staff."

## Report of WHERA Meeting, March 27-28

- (1) A proposed regional project on nutrition prepared by WRCC-31 was reviewed. It was agreed the proposal will be ready for review by RIC in July 1978.
- (2) Discussed the possibility of an inter-state doctoral program, particularly in the areas of family economics, consumer economics.
- (3) Requested that a home economist/human nutritionist be added to the proposed ESCOP-USDA Liaison Office staff.

#### DISCUSSION:

Nielson noted that SEA feels there should be some place under the Joint Council for sub-groups, such as human nutrition. The subject is still open, however, and further discussions with Directors need to be held. Directors questioned how a home economist position would be funded--through off-the-top RRF? No action was taken on recommending such a position.

### 19.4 Veterinary Medicine - W. G. Huber

An important concern of western colleges of veterinary medicine is the establishment of an adequate effort to fund programs to control the economic losses produced by common diseases of food-producing animals. Of equal importance is the need to assemble multidisciplinary research teams, rather than using the monodisciplinary, isolated project approach to address programs of disease control.

Most colleges of veterinary medicine receive a majority of extramural funding from federal sources to conduct research on animals for the purpose of increasing the knowledge of human diseases. The amount of support to study animal diseases for eventual use in animals is limited. It is the intent of Title XIV to support animal disease research. An ESCOP ad hoc committee on Animal Disease Research met on Feb. 27 and 28 for the purpose of (1) defining the term "animal health" and (2) developing guidelines for use by the Secretary to determine the "animal health research capacity" of eligible institutions. A definition of animal health research and the guidelines to determine the animal health research capacity have been recommended by the committee. Discussion of research capacity measurements involved utilization of information included in the CRIS system. In addition to research support, recommendations for predoctoral and postdoctoral support, as provided by the bill, were also made.

The Northwest Regional Program of Veterinary Medicine involving Washington State University, the University of Idaho, and Oregon State University may serve as a useful vehicle for collaboration of research efforts to address problems of food-producing animals. Although the Northwest Regional Program was initially established to train veterinarians, benefits could also accrue from regional multidisciplinary research to control disease losses of economic significance.

The funding of disease control programs for animal health requires new strategies towards new sources since the major support of veterinary research is the National Institutes of Health with a mission which does not include food animal health per se. Support from the animal drug industry is usually short-term with a narrow scope of activity, and in all but a few states the funding needs for food animal disease studies have not been recognized or supported by the animal commodity groups.

Educational efforts and greater visibility must be accomplished by food animal disease researchers and administrators to obtain support by letting new publics, such as animal commodity groups and food processors, know of the investment yield that can be accomplished with their support.

### 19.5 ASCUFRO - N. P. Kefford

ASCUFRO has had two major concerns in the last few months. The first is the FY 1979 Executive Budget. The competitive grants program does not include any forestry areas, and there is a proposed decrease in McIntire-Stennis funds. The second concern has been the proposed reorganization of natural resources/environment. This effort appears to have been stalled for the present.

# 20.0 Report on Western Experiment Station/Extension Budget Evaluation Studies - A. A. Araji

A report entitled "Returns to Public Investment in Agricultural Research and Extension in the Western Region" by Araji, Sim and Gardner, has been distributed to all Directors of research and extension.

There will be a symposium in Moscow, Idaho on May 21-23 for Directors and their technical representatives, to explain the methodology employed in the analyses.

At the Bozeman meeting we were still in the process of interviewing extension specialists and researchers in order to obtain our raw data. Commodities analyzed for the FY 1979 budget included cotton, sheep, rice, fruit and vegetables including potatoes (lettuce, tomatoes, grapes). For the FY 1978 budget we had analyzed beef, dairy, soybeans and poultry. While the national report did not include any information on how extension contributes to research effectiveness, the western report does include such a section.

The results of our two years of work indicate that there is a high return on public investment in agricultural research. We have also concluded that the more basic the research is, the less effective the extension effort will be, and vice versa.

Assumptions used in our methodology:

- The research will be effective;
- The research will be used to 1990 or 1995;
- Measures of payoff were estimated with and without extension expenditures;
- Computed both the cost/benefit ratio and the internal rate of return;
- Maintenance of the present knowledge base was taken into account;
- The data base used total funds per RPA under each commodity.

Budget analysis plans for FY 1980 Budget:

- J. Havlick (VA) rural development
- J. Dean Jansma (PA) human nutrition
- R. S. Manthy (MI) forestry
- R. Deacon (IA) home economics
- A. A. Araji (ID) Integrated Pest Management, plus updating work on the commodities handled in FY 1977 and 1978.

### 21.0 Management of Research

#### 21.1 Federal Research, Program Changes and ZBB - H C Cox

One of the purposes of the USDA reorganization was to improve planning and coordination between federal and state research. Stated another way, SEA was designed to correct misapprehensions about the lack of coordination in state and federal research programs.

I believe SEA can accomplish that goal only if its administrators do not forget that they and we exist because of on-going research. I am concerned about what appears to be a staff superstructure that would take personnel slots away from actual research programs, and which will probably demand voluminous amounts of paperwork that will further deprive our scientists of research time.

Zero Based Budgeting (ZBB)will be with us for a while, so we need to learn not only to live with it, but to make effective use of it. The use of ZBB in preparing the FY 1979 budget emphasized to me the need for the best federal-state communications possible because ZBB requires a hard look at programs and a shift out of research judged to be less urgent or of lower priority.

I suspect that economic conditions and fiscal policy objectives will restrict greatly increased appropriations in the Executive Budget in the near future. Therefore, program redirections and perhaps reductions, as well as increases, will continue to result from the budget development process. By reductions I mean actions such as the proposed closure of the wool program at the Western Regional Research Center, food processing research at Prosser, and the reductions in funds for tropical and subtropical agriculture in the 1979 budget. By redirections I mean the shifts in emphasis and the transfer of programs to other research programs, such as have been proposed for cotton production at Shafter, range research at Burns and Cheyenne, oilseeds at Davis, and so forth.

The new Departmental policymakers may not have the same perceptions of priorities that we have come to expect in the past. As a result, budget development should include consideration of redirection and reduction as well as increase.

In order to be effective, ZBB requires comprehensive assessment of all research programs, which depends on large amounts of detailed information.

The criteria used in selecting individual projects for reduction and redirection in the FY 1979 budget:

- Does the project reflect important work?
- Is the cost excessive?
- Is the project nearing completion?
- Is the project marginal to Federal Research mission?
- Does the project have sub-regional scope?
- Is the work disadvantaged by its location?
- Is the work duplicative?
- Is it likely that the work could be done by the states, private sector, or other federal agencies?

In developing the FY 1979 budget, application of these criteria started primarily at the regional level and continued on through the agency to the Secretarial level. In future years Area/Center directors will have greater involvement in the process. The process would have been further enhanced by greater knowledge of State Agricultural Experiment Station programs, priorities, needs, and plans.

I am not so naive as to believe that we will always agree on programs, needs, or priorities. But I am confident that an open and honest sharing of ideas and opinions, as well as frank discussions of plans and objectives, will enable us to build on the strengths of each other. We can make better decisions and, ultimately, better serve agriculture.

21.2 Perspectives on (a) How to influence the individual researcher to maximize his/her potential, and (b) How to optimize group efforts toward a common goal

## J. B. Kendrick

There are three groups that engage in research, but I am going to concentrate on the academic model. There is also the federal model or research laboratory—a publicly supported research institute. Then there is a corporate model performing applied research to yield a profit.

Characteristics of the academic model:

The university is composed of disciplinary groupings--departments. The rewards for researchers are peer recognition, peer evaluations, how they rate with their professional colleagues, gaining rank or advancing through the system, "psychic income". Because life's problems usually cut across disciplinary lines, however, it is important to utilize multidisciplinary and sometimes mission-oriented approaches.

A key to achieving such an approach is involving the scientists in identifying the problem and the line of attack to solve the problem. A second important factor is to set short-term goals which can be achievable within a reasonable period of time, such as five years. If the problem is very broad, define a five-year goal for just one aspect of the problem. A third factor which has proven successful in California is to set up program managers for each five-year goal and centralize the budget allocation.

#### W. G. Chace

I spoke with 10 scientists throughout the U.S. requesting their advice on how management can influence their research. Their responses broke down into groups of "gimme's" and "don't's".

Don't - burden me with paperwork

- restrict me with stupid regulations
- demand endless reports
- burden me with committee work
- restrict travel
- require strict accounting of my budget
- hold me to an 8 am 5 pm work schedule
- ignore me

Gimme - enough money to get the job done

- high caliber help
- unlimited equipment
- full-time secretary
- sabbatical every other year
- credit for the leadership job, especially with the teams
- credit for the total job as a researcher, as part of a research community

The bottom line was: Give me an outline of what you want me to do and then leave me alone.

A leader of a research team also suggested that it was important to establish the "rules of the game" early in the project. The mix of people on the team is important--you have to consider harmony as well as productivity.

### R. J. Miller

Another important way to influence research is through the regional research projects. In this connection, the role of the Administrative Advisor is crucial. The Administrative Advisor needs to perform a strong leadership function and critically evaluate the progress of the committee. In addition, the Administrative Advisor should see to it that the right people are appointed chairmen, and not allow the chairmanship to rotate yearly to all the members of the committee.

## 22.0 Resolutions - R. A. Young

The Resolutions Committee consisted of Young (Chairman), Foote and Clark. The WDA passed the following Resolutions:

#### 22.1 Resolution 1

WHEREAS, the Western Association of Agricultural Experiment Station Directors, and the USDA SEA-FR administrators in the Western Region were informed of the recent, untimely death of Dr. David P. Moore, Director, U.S. Plant, Soil and Nutrition Laboratory, Ithaca, New York and formerly Assistant Director of the Oregon Agricultural Experiment Station, and

WHEREAS, Dr. Moore served the Western Directors and Federal Research administrators faithfully and with sincerity as an Administrative Advisor for IR-2 and W-139 and was a personal friend to many of the members of this group,

NOW THEREFORE BE IT RESOLVED, that the Western Association of Agricultural Experiment Station Directors and the USDA SEA-FR administrators express their deepest sympathy to Mrs. Ruth Moore and family.

#### 22.2 Resolution 2

WHEREAS, Dr. James Nielson has traveled many miles over land and sea and has taken time out of a busy schedule to share his experiences and leadership in the USDA reorganization activity with agricultural research administrators in the Western Region, and

WHEREAS, the Western Association of Agricultural Experiment Station Directors and USDA administrators in the west recognize the important role now being filled by Dr. Nielson and the personal dedication he has displayed toward molding the USDA into a new structure to better serve the citizens of the United States, and

WHEREAS, Dr. Nielson is the right man in the right place at the right time,

NOW THEREFORE BE IT RESOLVED, that the Western Association of Agricultural Experiment Station Directors and USDA Federal Research administrators in the Western Region express sincere appreciation for the talents and efforts now being expressed by Dr. Nielson and for sharing his time with us in the West, and

BE IT FURTHER RESOLVED, that these Western Region research administrators pledge continued support to Dr. Nielson toward furthering the course of Agriculture in the United States.

#### 22.3 Resolution 3

WHEREAS, the Western Association of Agricultural Experiment Station Directors and representatives of USDA research in the Western Region have completed a successful meeting, and

WHEREAS, arrangements for the meetings, hotel accommodations and a very enjoyable evening at the "Top of the Waikiki" all contributed to the success and enjoyment of this meeting,

NOW THEREFORE BE IT RESOLVED, that the Western Association of Agricultural Experiment Station Directors, representatives of USDA and guests express appreciation and thanks to Dr. W. R. Furtick and Dr. N. P. Kefford and their staff for the many efforts and friendly hospitality on our behalf, for contributing to a successful meeting and for sharing the customs and glamour of their beautiful Aloha State.

#### 22.4 Resolution 4

WHEREAS, the Congress of the United States, as a part of the Food and Agriculture Act of 1977, did include as Title XIV a comprehensive and far-reaching initiative for the Food and Agricultural Sciences, and

WHEREAS, that initiative was generated through the aggressive and effective leadership of the Committee on Agriculture of the House of Representatives and the Senate, and

WHEREAS, that initiative clearly calls for improved coordination, strengthening, and broadening the base of the Food and Agricultural Sciences of this nation, and

WHEREAS, the Western Association of Agricultural Experiment Station Directors has repeatedly and consistently supported the principles enunciated in the initiative, and

WHEREAS, the Fiscal Year 1979 proposals of the agriculture committees of the two Congressional bodies to their respective budget committees did strongly further recognize the need for substantial strengthening and broadening of the Food and Agricultural Sciences in all their dimensions,

NOW THEREFORE BE IT RESOLVED, that the Western Association of Agricultural Experiment Station Directors does hereby commend and express sincere appreciation to the House and Senate Agriculture Committee members individually and collectively for their farsighted and effective leadership supportive of the Food and Agricultural Sciences and thus to the agriculture and forest industries and to all the nation's citizens, and

BE IT FURTHER RESOLVED THAT, the Association members, individually and collectively, pledge continued cooperation with relevant federal agencies and others in designing and implementing programs to maximize effectiveness in use of available resources to the benefit of the nation's food and fiber industries and rural communities and thus to the nation's citizenry.

[Copies to: All members of Senate and House Agriculture Committees, all members of Senate and House Agricultural Appropriations Subcommittees, Chairmen of Regional Directors Associations, Chairman of ESCOP, Secretary of Agriculture]

#### 22.5 Resolution 5

WHEREAS, Dr. Gerald Ray Stairs has served as Dean of the College of Agriculture, University of Arizona, Director of the Arizona Agricultural Experiment Station, and Director of the Arizona Cooperative Extension Service for four and one-half years with utmost dedication to the advancement of agriculture in his state, and

WHEREAS, Dr. Stairs has served the Western Association of Agricultural Experiment Station Directors as Chairman, as Co-chairman of RPG-5, and as Administrative Advisor of several regional projects, and

WHEREAS, Dr. Stairs has devoted his entire professional career to the advancement of teaching, research, extension and administration in forestry and agriculture, and

WHEREAS, Dr. Stairs has elected to return to his professional field of forestry to pursue his interests in teaching and research,

NOW THEREFORE BE IT RESOLVED, that the Western Association of Agricultural Experiment Station Directors recognizes with sincere appreciation the important contributions Dr. Stairs has made to the Association and to western agriculture and wishes him success and satisfaction in his new activities.

## 22.6 Resolution 6

WHEREAS, Dr. Neal W. Hilston has served as Dean, College of Agriculture, University of Wyoming, and as Director of the Wyoming Agricultural Experiment Station for twenty years with distinction and utmost devotion to the advancement of agricultural research in his state, and

WHEREAS, Dr. Hilston has served the Western Association of Agricultural Experiment Station Directors as Vice Chairman, member of the Regional Research Committee, and as Administrative Advisor for several regional research projects, and

WHEREAS, Dr. Hilston has devoted his entire professional career to the advancement of teaching, research, and administration in agriculture, and

WHEREAS, Dr. Hilston has made special efforts to maintain the integrity of federal and state relationships in relation to federal funding, and

WHEREAS, Dr. Hilston will retire from his current position on June 30, 1978,

NOW THEREFORE BE IT RESOLVED, that the Western Association of Agricultural Experiment Station Directors expresses its sincere appreciation to Dr. Neal W. Hilston for his important service to the Association and his dedicated efforts to further agricultural research in the western states, and wishes him and Mrs. Hilston a long and rewarding retirement.

## 23.0 Other Business

## 23.1 Future Meetings

The WDA summer meeting will be held August 9-11, 1978 in Estes Park, Colorado.

Suggestions were made that the WDA invite representatives of industry, Fish and Wildlife Service, and Bureau of Land Management to some of their meetings. BLM conducts \$3.5 million of natural resource-related research in the Western Region.

The WDA spring 1979 meeting will be hosted by the California Station and held in Davis. Dates are not known at this time.

Young invited the WDA to hold either the summer 1979 or winter 1980 meeting in Nevada

### 23.2 Other Business

Miller asked Directors to consider some of the following issues and provide their ideas to him.

- What is a desirable ratio of competitive funds to formula funds?
- Should Hatch funds be expended only on basic research?
- How can we recognize regional centers of excellence?
- How do you feel about line iteming processes in the federal budget?

Directors discussed again the notion of developing a "problem alert" form which Directors would submit to a central office as newly emerging and important research problems are brought to their attention. It was moved and seconded that the WDA ESCOP representatives bring this suggestion to the attention of ESCOP.

(Action of WDA: PASSED)

# 24.0 Adjournment

The meeting was adjourned at 11:30 am, Friday, March 31, 1978.

# APPENDIX A

# MEETING OF THE WESTERN ASSOCIATION OF

# AGRICULTURAL EXPERIMENT STATION DIRECTORS

# University of Hawaii/East-West Center Honolulu, Hawaii

March 29-31, 1978

# AGENDA

# Wednesday, March 29 WDA Members only

1:15	1.0	Call to Order
	2.0	Introductions
	3.0	Announcements
	4.0	Adoption of Agenda
	5.0	Approval of Previous Minutes
1:45	6.0	DAL Report - Buchanan/Moak
2:15	7.0	Report of Chairman/Report of Executive Committee - Miller
3:00	Coffe	e Break
3:30	8.0	SEA/Cooperative Research Report - Aldrich
4:00	9.0	Committee of Nine Report - Foote
4:15	10.0	Resource and Commodity Analysis Program - Furtick
		WDA Members and SEA/Federal Research Administrators
4:30	11.0	EPA Laboratory in Corvallis/IR-4 - Dugger/Davis
	LIDA Mass	Thursday, March 30
	WDA Mem	bers, WDA Invited Guests, SEA/Federal Research Administrators
0.00	12.0	Title VIV and HCDA Decomposite time
8:00	12.0	Title XIV and USDA Reorganization
		12.1 Management Perspective - Nielson
		12.2 Staff Perspective - Buchanan
		12.3 ESCS (formerly ERS) and the SAES - Farrell
10:00	Coffe	e Break
10:30	13.0	ESCOP Report - Ayres
		13.1 ESCOP Legislative Subcommittee Report - Jordan
12:00	No Ho	st Lunch
1:15	14.0	Can problem identification and research implementation be improved? - Miller/Oldenstadt
2:00	15.0	RIC Report - Oldenstadt

# Thursday, March 30 (continued)

3:00	Coffee	e Break
3:30	16.0	WRPC Report - Clark/Callaham
4:15	17.0	SEA/Federal Research Regional Efforts - Cox
	UDA Mami	Friday, March 31 bers, WDA Invited Guests, Federal Research Administrators
	WDA Menu	pers, with involved duests, rederat hesearch hamottoer atore
8:00	18.0	Reports from Federal Agencies
		18.1 SEA/Federal Research - Cox
		18.2 FS - Callaham
		18.3 EPA - Voesch
8:25	19.0	Reports of WDA Liaison Representatives
		19.1 Extension - Hoffman
		19.2 Resident Instruction - Goto
		19.3 Home Economics - Hawthorne
		19.4 Veterinary Medicine - Huber
		19.5 ASCUFRO - Kefford
8:50	20.0	Report on Western Experiment Station/Extension Budget Evaluation Studies - Araji
	21.0	Management of Research
9:15		21.1 Federal Research Program Changes and ZBB - Cox
9:35		21.2 Perspectives on
		(a) How to influence the individual researcher to maximize his/her potential
		(b) How to optimize group efforts toward a common goal
		J. B. Kendrick/W. G. Chace/R. J. Miller
10:15	Coffe	ee Break
		WDA Members only
10:30	22.0	Resolutions - Young
	23.0	Other Business
		23.1 Future Meetings
12:00	Adjo	urnment

# APPENDIX B PROPOSED REDIRECTION

of the

# NORTHWEST BIOLOGICAL INVESTIGATION STATION FINVIRONMENTAL PROTECTION AGENCY

The Agricultural Experiment Stations in Idaho, Oregon, and Washington, in concert with the U.S. Environmental Protection Agency, propose to the Western Agricultural Experiment Station Directors Association; to Federal Research, SEA, USDA and to IR-4 a program of redirection for the Northwest Biological Investigation Station.

# Purpose

We propose to redirect the Station to work essentially full time on programs related to minor use registrations of pesticides in the Pacific Northwest (PNW). In order to develop appropriate data for the registration of minor use pesticides, the Station will work with the liaison committee members in the PNW as a subcommittee of the Western Regional IR-4 Liaison Committee. General program management policies and selection of program priorities shall be the responsibility of the PNW subcommittee of the Western Regional IR-4 liaison committee representatives.

# Nature of Investigations

All data and other Station outputs for inclusion in a petition for registration will be submitted through regular channels (the PNW subcommittee to the regional IR-4 coordinator) to IR-4 headquarters in New Brunswick, New Jersey, and would include:

- 1. Efficacy data on crops identified by the Regional Advisory Committee with emphasis on ornamental crops.
- 2. Safety data and data on phytotoxicity.

Investigations on specified food, feed, and fibre crops, as well as on certain ornamentals, will comprise the field, greenhouse and laboratory work. Development of improved methods for the determination of efficacy/safety data would also be a part of the responsibility of the Station.

# Fiscal and Other Arrangements

EPA will provide full and complete support to the redirected program. This includes management of programming, operations, facilities, and personnel and associated funding.

The Station has six professional staff (including one vacancy) and five support staff (including two vacancies). EPA will staff the vacant positions;

suggestions for scientific qualifications and position responsibility are to be made to EPA by the PNW subcommittee of the Western Regional IR-4 Liaison Committee. Courtesy appointments at Oregon State University will be recommended for the professional staff.

The current annual operating budget is about \$232,000. Additional annual support must be provided for the travel requirements of the redirected effort (\$14,000), and non-recurring funds for purchase of necessary capital equipment are to be made available. This arrangement may be terminated by either EPA or the Agricultural Experiment Station Directors of the PNW states by proper notice given six months in advance.

# Facilities & Local Arrangements

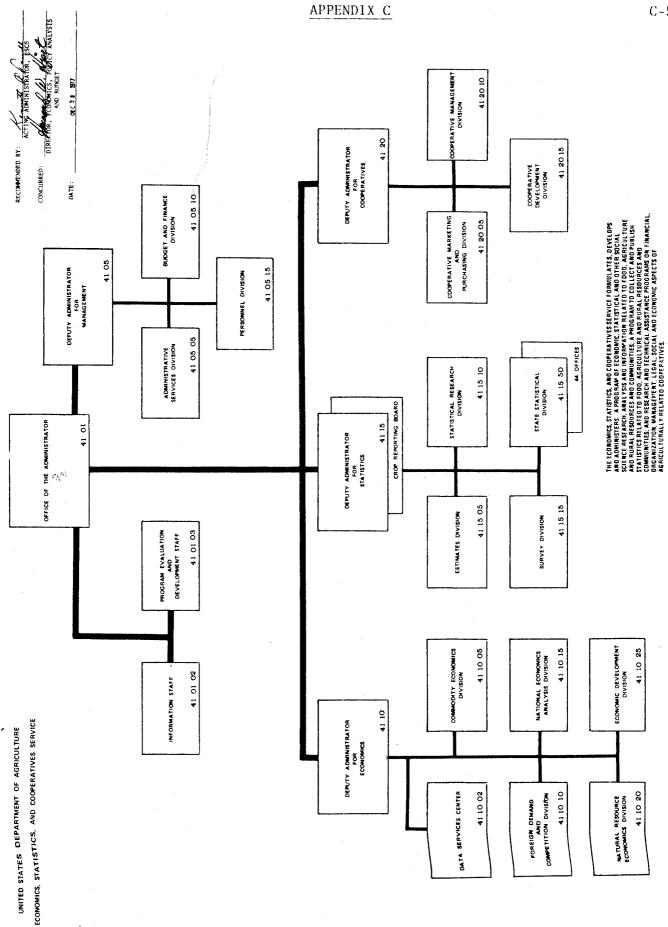
Use and maintenance of facilities and other accommodations in Corvallis will be arranged through a memorandum of understanding between EPA and Oregon State University.

# Reports

Annual reports of investigations completed and underway are to be made to EPA, & the PNW subcommittee of the regional IR-4 committee as the normal procedure for state project reporting.

JPD:lgs

13Apr78



#### RIC REPORT

RIC met March 28-29, 1978 in Honolulu, Hawaii. Present at this meeting were D.L. Oldenstadt, J. R. Davis, W. M. Dugger, L. W. Dewhirst, H C Cox, R.Z. Callaham, A. Johnson, R. J. Aldrich and J. Moak.

- 1.0 Regional research projects and coordinating committees scheduled to terminate September 30, 1978
  - W-45 Residues of Pesticides and Related Chemicals in the Agricultural Environment--Their Nature, Distribution, Persistence, and Toxicological Implications
  - W-102 Biological Protection of Livestock Against Internal Parasites
  - W-126 Physiological Criteria for Forage, Range and Pasture Plant Breeding
  - W-127 Stand Establishment as Related to Mechanized Production of Vegetables
  - W-128 Trickle Irrigation to Improve Crop Production and Water Management
  - W-129 Salinity Management in the Colorado River Basin
  - W-130 Improving Stability of Deciduous Fruit Production by Reducing Freeze Damage
  - WRCC-8 Range Livestock Nutrition
  - WRCC-11 Turfgrass
  - WRCC-17 Control of Fruiting
  - WRCC-19 Drainage Design Research
  - WRCC-31 Nutrition and Food Acceptance as Related to Selected Environmental Factors
  - 2.0 Project Revisions and Extensions
    - 2.1 W-45 Residues of Pesticides and Related Chemicals in the Agricultural Environment--Their Nature, Distribution, Persistence, and Toxicological Implications

A revised project outline for W-45 entitled "Environmental Distribution, Transformation and Toxicological Implications of Pesticide Residues" was received from Administrative Advisor D. J. Lee.

RIC recommends the revised project outline in the above entitled area be approved and forwarded to the Committee of Nine, to be effective from October 1, 1978 to September 30, 1983, with Dr. D. J. Lee to continue as Administrative Advisor. RIC

recommends that the project seek participation from scientists at the SEA/FR Western Regional Research Center in Albany, FS scientists at Corvallis working on the fate of pesticides in the environment, and FS scientists at Davis conducting field experiments on new pesticides in forests. RIC further recommends that the committee coordinate its efforts with those of W-82 in order to avoid duplication of research.

(Action of WDA: PASSED)

2.2 W-82 Dissipation and Degradation of Herbicides and Related Compounds in Soil and Water Systems

A request for permission to revise W-82 entitled "Processes Affecting Pesticides and Other Synthetic Organics in Soil and Water Systems" was received from Administrative Advisor W. R. Furtick.

RIC recommends W-82 proceed to prepare a revised project outline in the above entitled area, to be effective from October 1, 1979 to September 30, 1984. RIC recommends that the project seek participation from FS scientists in Corvallis working on the fate of pesticides in the environment and FS scientists in Davis conducting field experiments on new pesticides in forests. RIC further recommends that the committee coordinate its efforts with those of W-45 in order to avoid duplication of research.

(Action of WDA: PASSED)

2.3 W-84 Environmental Improvement Through Biological Control and Pest Management

A request for permission to revise W-84 entitled "Implementation of Biological Control, A Key to Pest Management" was received from Administrative Advisor D. W. Bohmont.

RIC recommends W-84 proceed to prepare a revised project outline to be effective from October 1, 1979 to September 30, 1984. RIC recommends that the revised project outline have more narrowly focussed objectives than the current proposal, and expresses concern that there is insufficient attention given to the biological control of weeds. RIC requests the committee consider whether the biological control of weeds should receive a separate identity as a WRCC or another regional project. RIC recommends the committee seek participation from other groups working on biological control, such as the western SEA/FR grasshopper lab. Since ESCS has received funds to perform economic evaluations of biological control, RIC urges the committee to keep ESCS informed of its activities.

(Action of WDA: PASSED)

2.4 W-102 Biological Protection of Livestock Against Internal Parasites

A revised project outline for W-102 entitled "Protection of Live-stock Against Internal Parasites by Management Systems" was received from Administrative Advisor C. S. Card.

RIC recommends the revised project outline in the above entitled area be approved and forwarded to the Committee of Nine, to be effective from October 1, 1978 to September 30, 1983 with Dr. C. S. Card to continue as Administrative Advisor.

(Action of WDA: PASSED)

2.5 W-126 Physiological Criteria for Forage, Range and Pasture Plant Breeding

A revised project outline for W-126 entitled "Physiological Criteria for Forage Plant Breeding" was received from Administrative Advisor S. N. Brooks.

RIC recommends the revised project outline in the above entitled area be approved and forwarded to the Committee of Nine, to be effective from October 1, 1978 to September 30, 1983, with Dr. S. N. Brooks and Dr. D. L. Oldenstadt to continue as lead-Advisor and co-Advisor, respectively. RIC further recommends that before submission of the project outline to the Committee of Nine, the section on anticipated resources be revised to indicate the extent of SEA/FR participation and include anticipated PY's and TY's for all participating stations.

(Action of WDA: PASSED)

2.6 W-127 Stand Establishment as Related to Mechanized Production of Vegetables

A revised project outline for W-127 entitled "Stand Establishment of Small Seeded Vegetable Crops" was received from Administrative Advisor J. M. Lyons.

RIC recommends the revised project outline in the above entitled area be approved and forwarded to the Committee of Nine, to be effective from October 1, 1978 to September 30, 1983, with Dr. J. M. Lyons to continue as Administrative Advisor. RIC further recommends that the committee give continuing consideration to the regional application of its research results.

(Action of WDA: PASSED)

2.7 W-128 Trickle Irrigation to Improve Crop Production and Water Management

A revised project outline for W-128 entitled "Trickle Irrigation to Improve Crop Production and Management" was received from Administrative Advisor J. R. Davis.

RIC recommends the revised project outline in the above entitled area be approved and forwarded to the Committee of Nine, to be effective from October 1, 1978 to September 30, 1983, with Dr. J. R. Davis to continue as Administrative Advisor. Before submission of the project to the Committee of Nine, RIC requests the committee include the PY's and TY's under the section on "anticipated resources".

(Action of WDA: PASSED)

2.8 W-130 Improving Stability of Deciduous Fruit Production by Reducing Freeze Damage

A revised project outline for W-130 entitled "Freeze Damage and Protection of Deciduous Fruit and Nut Crops--Reducing Energy Requirements and Stabilizing Annual Production" was received from Administrative Advisor J. M. Lyons.

RIC recommends the revised project outline in the above entitled area be approved and forwarded to the Committee of Nine, to be effective from October 1, 1978 to September 30, 1983, with Dr. J. M. Lyons to continue as Administrative Advisor. Before submission of the project outline to the Committee of Nine, RIC requests the committee include the Py's and the Ty's under the section on "anticipated resources."

(Action of WDA: PASSED)

2.9 W-131 Development of Integrated Strategies for the Management of Mosquito Populations

A revised project outline for W-131 was received from Administrative Advisor C. E. Hess.

RIC recommends that the project outline be returned to the committee for rewriting. Specific comments included: concern that the objectives were not narrowly focussed; some objectives did not seem attainable by this committee (e.g., "experiments will be designed to alter water holding capacity of soils"); 4.0 SY's listed for Berkeley appears to be in error; PY's and TY's not indicated.

(Action of WDA: PASSED)

## 3.0 Project Proposals

3.1 W- Clogging of Drainlines by Mechanical, Chemical and Biological Actions

A request for a regional project in the above entitled area was received from Dr. Jan van Schilfgaarde on behalf of WRCC-19 Drainage Design Research.

RIC recommends the project outline entitled Clogging of Drainlines by Mechanical, Chemical and Biological Actions be approved and forwarded to the Committee of Nine, to be effective from October 1, 1978 to September 30, 1983, with Dr. J. van Schilfgaarde to serve as lead Advisor and Dr. W. M. Dugger to serve as co-Administrative Advisor. RIC believes the project objectives are completely achievable within the five-year period.

(Action of WDA: PASSED)

3.2 W- Optimization of the Use of Range and Complementary Forages for Red Meat Production

A request for a regional project in the above entitled area was received from Dr. L. W. Dewhirst on behalf of WRCC-8 Range Livestock Nutrition.

RIC recommends the project outline entitled Optimization of the Use of Range and Complementary Forages for Red Meat Production be approved and forwarded to the Committee of Nine, to be effective from October 1, 1978 to September 30, 1983, with Dr. L. W. Dewhirst to serve as Administrative Advisor. Before submission of the project to the Committee of Nine, RIC requests the committee include SEA/FR participation and the PY's and TY's under the "anticipated resources" section of the outline. RIC further suggests that the committee seek participation of FS range researchers.

(Action of WDA: PASSED)

3.3 IR- Investigation into the Cause of High pH in Must and Wines

A request for an interregional project in the above entitled area was received from Dr. J. M. Lyons on behalf of Professor C. S. Ough of Davis.

RIC does not believe this proposal merits consideration as an interregional project, but notes that any approved regional project may include participants from outside that region. RIC recommends that this proposal not be approved because it is not fully developed and

does not include commitments to participate from at least two western states.

(Action of WDA: PASSED)

#### 4.0 WRCC Extensions and Revisions

#### 4.1 WRCC-11 Turfgrass

A request for a three-year extension of WRCC-11 was received from Administrative Advisor W. P. Hackett.

RIC recommends that WRCC-11 be extended for three years, to be effective from October 1, 1978 to September 30, 1981, with Dr. W. P. Hackett to continue as Administrative Advisor.

(Action of WDA: PASSED)

#### 4.2 WRCC-17 Control of Fruiting

A request for a three-year extension of WRCC-17 was received from Administrative Advisor O. E. Smith.

RIC recommends that WRCC-17 be extended for three years, to be effective from October 1, 1978 to September 30, 1981, with Dr. O. E. Smith to continue as Administrative Advisor.

(Action of WDA: PASSED)

#### 5.0 WRCC Petitions

5.1 WRCC- Land and Water Management for Control of Salinity in Western States

A request for a WRCC in the above entitled area was received from Dr. D. D. Johnson on behalf of W-129 Salinity Management in the Colorado River Basin.

RIC recommends approval of WRCC-33 Land and Water Management for Control of Salinity in Western States, to be effective from October 1, 1978 to September 30, 1981, with Dr. D. D. Johnson to serve as Administrative Advisor. RIC encourages the committee to seek participants from outside the Colorado River Basin.

(Action of WDA: PASSED)

5.2 WRCC- Family Housing Research in the Western Region

A request for a WRCC in the above entitled area was received from Dr. R. R. Rice.

RIC deferred approval of this WRCC. RIC requests Dr. Rice contact Western Directors to identify the participation of researchers and provide this information to RIC by July 1, 1978.

(Action of WDA: PASSED)

- 6.0 Project and Coordinating Committee Reviews
  - 6.1 RIC apportioned projects scheduled for in-depth (2nd or 4th year) reviews among its members. If Administrative Advisors wish more detailed reports on the reviews, please contact the reviewers indicated.

The following projects and coordinating committees were scheduled for in-depth review by RIC and appear to be progressing satisfactorily with good publication records, adequate resources, and the technical committees are following project objectives:

W-67 Application of Information on Water-Soil-Plant Relations to Use and Conservation of Water (reviewer J. R. Davis)

RIC believes this project should be allowed to terminate as scheduled, September 30, 1979, to be replaced by a WRCC or a new project with more specific objectives.

W-68 Soil Water and Its Management in the Field (reviewer D. L. Oldenstadt)

RIC recommends this project terminate as scheduled, September 30, 1979. If a request for a new project is prepared, RIC suggests that it focus on some of the more pressing research needs and contain very specific objectives.

W-82 Dissipation and Degradation of Herbicides and Related Compounds in Soil and Water Systems (reviewer R. Z. Callaham)

RIC notes that the researchers with the most limited participation also contributed the least toward the accomplishment of the project's objectives.

W-84 Environmental Improvement Through Biological Control and Pest Management (reviewer H C Cox)

RIC expresses some concern whether work on the biological control of weeds should be included in this project.

W-118 Impacts of Human Migration Flows and Population Dispersal on Nonmetropolitan People and Places in the Western Region (reviewer A. Johnson)

W-131 Development of Integrated Strategies for the Management of Mosquito Populations (reviewer H C Cox)

W-132 Genotype-Environment Interactions Related to End Product Uses in Small Grains (reviewer R. J. Aldrich)

W-134 Research, Development and Use of Nematode Pest Management Systems (reviewer H C Cox)

RIC concurs with the Administrative Advisor's evaluation that the original project objectives were overly ambitious, and recommends that if the project seeks a revision, it should focus on objective 2 of the current project.

W-135 Limiting Stress of Food Producing Animals to Increase Efficiency (reviewer L. W. Dewhirst)

RIC suggests that if this project seeks a revision in 1979, the objectives should be more narrowly focussed.

W-136 Poultry Production and Environmental Quality (reviewer R. J. Aldrich)

RIC shares the Administrative Advisor's concern that Arizona honor its commitment to perform the back-up laboratory evaluation of dietary composition and housing conditions.

W-137 Increased Efficiency in Marketing of Lamb and Mutton (reviewer A. Johnson)

RIC concurs with the Administrative Advisor's recommendation that this project terminate as scheduled, September 30, 1979, with any future activities to be carried out as a WRCC.

W-139 Maximizing the Effectiveness of Bees as Pollinators of Agricultural Crops (reviewer J. R. Davis)

RIC suggests that if this project seeks a revision in 1979, the objectives should be more specific and focus on high priority areas. In addition, the committee should attempt to get participation by toxicologists and mycologists.

In addition, the Administrative Advisor forwarded to RIC the information that W-139 has set up a Non-Apis Bee Subcommittee. RIC feels the activities of the subcommittee can be carried out under the current project objectives without revising the project. This subcommittee may involve participation of scientists not currently members of W-139. There are procedures outlined in the CSRS Manual of Procedures for adding "late comers" to existing regional research projects, and individual Station directors will have to decide whether or not to direct additional resources into this effort.

W-140 Energy in Western Agriculture--Requirements, Adjustments and Alternatives (reviewer D. L. Oldenstadt)

W-146 Worker Safety Re-entry Intervals for Pesticide-Treated Crops (reviewer R. Z. Callaham)

RIC notes that the annual report includes participation by Florida which is not included in the original project outline. RIC requests a file copy of the addendum authorizing Florida's participation. RIC urges the committee to increase its efforts to involve M.D.'s in the research and furnish more information on the clinical analyses being conducted.

W-149 An Economic Evaluation of Managing Market Risks in Agriculture (reviewer A. Johnson)

RIC suggests that some Stations should be encouraged to increase their commitment of resources to this project.

WRCC-1 Beef Cattle Breeding

If this committee seeks an extension in 1979, RIC requests that a new petition and justification statement be prepared.

WRCC-13 Seed Production and Technology Research (reviewer L. W. Dewhirst)

WRCC-17 Control of Fruiting (reviewer W. M. Dugger)

WRCC-24 Diseases and Pests of Grape Crops (reviewer W. M. Dugger)

WRCC-25 Diseases and Pests of Landscape Plants (reviewer H C Cox)

RIC also reviewed the following:

W-6 Introduction, Multiplication, Maintenance, Evaluation and Cataloguing of Plant Germ Plasm (reviewer W. M. Dugger)

RIC decided it could not conduct a review of this project. RIC recommends that the WDA Executive Committee conduct a review of this project each year when it considers the W-6 off-the-top budget request.

(Action of WDA: FAILED)

W-133 Determinants of Choice in Outdoor Recreation (reviewer J. R. Davis)

RIC appreciates the attention the technical committee gave to RIC comments in 1977, but RIC still feels there is evidence that this project is largely a collection of individual state projects. RIC requests the committee devote additional attention to the accomplishment of objective 2 and coordinate its efforts with those of W-119 (rev.) Evaluation of Alternative Land Uses on Forest, Range and Other Wildlands if and when it is approved by the Committee of Nine.

W-138 Herbicidal Modification of Plant Environment and Its Prediction (reviewer R. Z. Callaham)

Because RIC did not receive an annual report on this project, it was unable to judge the accomplishments of the project. RIC recommends the project terminate as scheduled, September 30, 1979.

W-141 Distribution Among Rural People of Benefits and Costs of Selected Government Programs (reviewer D. L. Oldenstadt)

RIC recommends that the technical committee be requested to re-write their 1977 annual report to conform with the format and to demonstrate how the work reported therein has addressed the objectives and hypotheses of the original project outline.

(Action of WDA: PASSED)

W-147 Use of Soil Factors and Soil-Crop Interactions to Suppress Diseases Caused by Soil-Borne Plant Pathogens (reviewer W. M. Dugger)

RIC is concerned about the apparent lack of progress in meeting the project's objectives and urges the committee to accelerate its efforts.

W-148 Climatic and Phenological Models for Resource Planning and Management (reviewer R. J. Aldrich)

Because RIC did not receive the annual report on this project, it was unable to conduct an adequate review. RIC requests a copy of the annual report as soon as possible. RIC encourages the Administrative Advisor to continue to strive for coordination of efforts.

6.2 W-109 Codling Moth Population Management in the Orchard Ecosystem response to RIC spring 1977 in-depth review

RIC appreciates the thoughtful response of the W-109 technical committee to the RIC 1977 review and looks forward to seeing major progress by the committee. RIC encourages the committee to focus on narrower objectives.

6.3 RIC did not review the Administrative Advisor evaluations on all other projects this time because the evaluations did not seem to

provide a very critical review. RIC is considering possible changes in the current review procedure (see agenda item 9.0 below).

- 7.0 Follow-up of "pending" projects or approved areas of work
  - 7.1 W-116 (rev.) Dietary Practices, Nutritional Status and the Use/Non Use of Certain Food Supplements

At the July 1977 meeting of the WDA, the Directors approved the RIC suggestion to forward this proposed project to RPG-5 for review of scientific merit and priority of the area of research. The RPG-5 review indicated that while nutrition research is a high priority, there were serious reservations about the aims, regionality and proposed methodology of the project. The assessment was forwarded to WRCC-31, which is preparing the project outline. WRCC-31 met in January and intends to submit a new project outline to RIC by July 1, 1978.

7.2 W-119 (rev.) Evaluation of Alternative Land Uses on Forest, Range and Other Wildlands

The proposed project outline was approved, with requested corrections, by the WDA at the July 1976 meeting. The Administrative Advisor forwarded the project to the Committee of Nine and it has three times been disallowed by the Committee because the project outline is deficient.

RIC recommends that Dr.E. H.Zube (AZ) be appointed the Administrative Advisor of this project and, with the assistance of Dr. L. W. Dewhirst, call a meeting of the ad hoc technical committee to prepare a new project outline in the above-entitled area.

(Action of WDA: PASSED)

8.0 Personnel Reassignments

RIC recommends that the following interim appointments be confirmed by the WDA:

- W-139 Maximizing the Effectiveness of Bees as Pollinators of Agricultural Crops -- Dr. L. W. Dewhirst to replace Dr. G. R. Stairs as the co-Administrative Advisor; the lead Advisor remains Mr. L. E. Myers
- W-140 Energy in Western Agriculture--Requirements, Adjustments and Alternatives -- Dr. L. L. Sammet appointed lead Advisor and Dr. M. N. Schroth (CA) appointed co-Advisor, to replace Dr. G. R. Stairs

- W-143 Nutrient Bioavailability--A Key to Human Nutrition -- Dr. H. F. McHugh appointed to replace Dr. J. P. Jordan
- W-146 Worker Safety Re-entry Intervals for Pesticide-Treated Crops -- Dr. M. N. Schroth appointed to replace Dr. J. B. Kendrick
- W-150 Genetic Improvement of Beans for Yield, Pest Resistance, and Nutritional Value -- Dr. M. N. Schroth to replace Dr. J. B. Kendrick as the Co-Administrative Advisor; the lead Advisor remains Dr. W. G. Chace

(Action of WDA: PASSED)

9.0 Consideration of altering current western regional research procedures RIC discussed a proposal presented by Dr. C. E. Clark (see attached diagram) to alter current western regional research procedures. This was part of a continuing discussion held at the RIC and WRPC meetings in San Mateo earlier in March, in response to the WDA request to consider the "Stairs proposal".

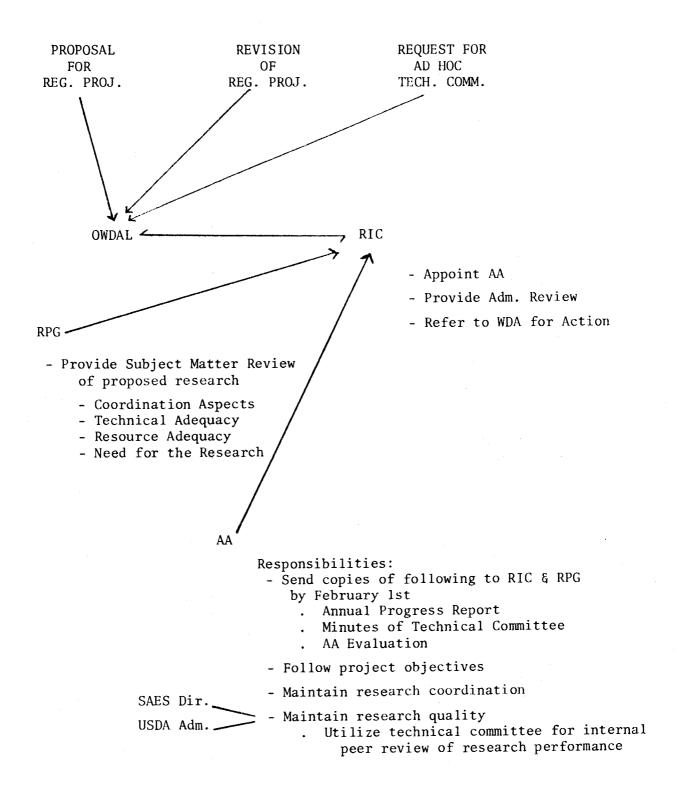
RIC reached consensus on two major points:

- (1) There is a strong desire to improve the quality of the new and revised project outlines so that many of the problems facing Administrative Advisors and RIC assessments of progress would not arise. This would require setting up some new method of obtaining subject matter or technical review of project outlines.
- (2) There is a feeling that it should then be the responsibility of the Administrative Advisor to maintain project quality and arrange for critical reviews of the project annually and at its mid-point. This may involve the use of some outside review system.

RIC will continue to deliberate on changes necessary to improve the western regional research process, but is interested in hearing Directors' and Administrative Advisors' views on these issues.

- 10.0 Personnel Assignments (See attached pages)
- 11.0 Other Items
  - 11.1 Problems associated with small farms/organic farming

RIC briefly discussed this area of concern with respect to: mechanization; human health problems associated with raising animals (e.g., parasites); transmission of bacteria or disease through roadside marketing of organically grown farm products. Since there is a USDA committee looking at these issues, headed by Ned Bayley, RIC will request that Bayley provide a list of the researchable problem areas identified by the committee. In addition, J. R. Davis will consult with R. C. Youmans (Director of the Western Rural Development Center) about the possibility of a WRDC role in this area.



## PERSONNEL ASSIGNMENTS

Asleson, J. A.	W-148, WRCC-21
Ayres, L. C.	W-133
**Bennett, J. A. (UT)	WRCC-1
Bohmont, D. W.	W-84
*Brooks, S. N.	W-126
Burris, M. J.	W-112
Card, C. S.	W-102
*Chace, W. G.	W-150
Clark, C. E.	W-122
Davis, J. R.	W-68, W-128
Dewhirst, L. W.	W-Red Meat, W-139 <sup>+</sup> , WRCC-8, WRCC-32
Dugger, W. M.	IR-4, W- Clogging of Drainlines+
*Evans, C. E.	W-67
Foote, W. H.	W-6, W-132, IR-1
Furtick, W. R.	W-82, WRCC-28
**Gardner, B. D. (CA)	W-149
**Gilmour, C. M. (ID)	W-147
Gledhill, V. H.	W-141
**Hackett, W. P. (CA)	WRCC-11
**Hawthorne, B. E. (OR)	WRCC-31
Heady, H. F.	W-110
Hess, C. E.	W-131, W-138
Johnson, D. D.	W-67 <sup>+</sup> , W-129, WRCC-33
Jordan, J. P.	IR-5
**Keim, W. F. (CO)	WRCC-13
**Keiser, M. B. (MT)	WRCC-23
Kendrick, J. B.	W-149 <sup>+</sup>
Lee, D. J.	W-45, IR-2
Lyons, J. M.	W-127, W-130
Matthews, D. J.	W-135 <sup>+</sup> , WRCC-26

ARS personnel

 <sup>\*\*</sup> Other SAES research administrators
 + Designates the SAES Co-Administrative Advisor in a project with Co-Advisors

### PERSONNEL ASSIGNMENTS (cont'd)

McHugh, H. F.

\*\*McIntyre, G. A. (CO)

\*\*McLean, D. L. (CA)

Miller, R. J.

Moreng, R. E.

\*\*Moss, D. N. (OR)

Mullins, A. M.

\*Myers, L. E.

Oldenstadt, D. L.

\*Plowman, R. D.

Rice, R. R.

Robins, J. S.

Sammet, L. L.

\*\*Schafer, , J. F. (WA)

Schlegel, D. E.

Schroth, M.N.

\*\*Smith, O. E. (WA)

\*van Schilfgaarde, J.

Young, R.A.

Zube, E. H.

W-143

WRCC-25

WRCC-24

W-106, W-124, W-147

W-136, W-142

WRCC-27

W-137, W-145

W - 139

W-118, W-126

W - 135

W-144, WRCC- Family Housing

W-109

W - 140

WRCC-20, WRCC-29

W - 134

 $W-140^+$ , W-146,  $W-150^+$ 

WRCC-17

WRCC-19, W- Clogging of Drainlines ...

W-125, WRCC-30

W-119 (rev.)

<sup>\*</sup> ARS personnel

<sup>\*\*</sup> Other SAES research administrators

<sup>+</sup> Designates the SAES Co-Administrative Advisor in a project with Co-Advisors

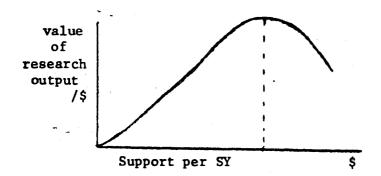
GCTaylor 3/3/78

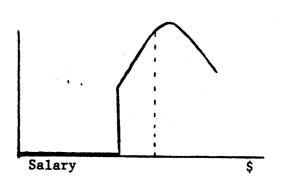
# On the Optimum Support per Scientist Year

- I. Problem--There is a widely held view that projections of scientist years in research planning are misleading because scientist years are currently not funded at optimum levels.
- II. Studies by WRPC staff and ARS in Washington do not provide any persuasive evidence that <u>real</u> funding per scientist year has changed over the last decade. Therefore if underfunding is a problem, it is a problem of longer standing.

# III. Conceptualization:

The "optimum" level of funding implies an input-output relationship--namely the maximum value of research output per dollar of scientist year support.





Where is the current level of funding on this curve? The belief is that we are somewhere to the left of the peak.

### IV. Analytical Issues

There are serious analytical problems:

- A. How do we measure the value of research output?

  Is output valued when the research is finished—when the user applies it after it is delivered by Extension Service or other means—or when the new graduate applies it on the job?
- B. What is the correct unit of observation?
  Is the proper unit the scientist—or plus extension—or plus teaching?
  Is the scientist year a valid unit or is there a critical mass of scientists necessary e.g. livestock research?

# V. Possible Alternative Approaches

While the above issues appear to be overwhelming at this point, there are some other approaches that would provide indirect information on the question. Some of these are:

- A. Analyze the current funding levels in a few of the leading experiment stations (if we could decide which these are). What is the funding per SY at the top five stations for dairy research for example—and so on.
- B. Analyze the funding levels in a few of the largest experiment stations e.g. California. Does the funding level per SY differ from other states? Why?
- C. Analyze "centers of excellence". The ARS soil and water lab at Riverside and the Forest Service genetics research institute at Berkeley come to mind—you have your own candidates. These groups enjoy a worldwide reputation. Is their funding per SY

higher than other similar research centers? If so, is this the reason for their reputation?

D. Survey opinion of researchers and research administrators as to optimum levels of funding. This is a direct approach. I have serious reservations as to whether a survey could be designed in such a way as to eliminate the factor of self interest or, as important, the <a href="mailto:appearance">appearance</a> of self interest in the results. There is the problem of the desire for prestige facilities or prestige equipment vis-a-vis other stations, for example.

#### VI. Conclusion

Each of us with some role in research and research administration somewhat naturally feels that he could do a better job with more support. Research administrators are frustrated in being unable to move rapidly to expand research in high priority areas. Nevertheless significant shifts have occurred in the West as the record shows. Furthermore with these shifts have come innumerable opportunities to adjust the ratios of SY's and dollar support. It isn't obvious that real levels of support have changed. Thus my tentative conclusion is that the current level of support per SY may not be too far from "optimum" now. Bear in mind the present levels of support are not as high as we might like—without constraints, but it may be these levels are close to "optimum," in the aggregate i.e. maximizing value of research output per dollar of SY support.