

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

**Las Cruces, New Mexico**

**March 23-24, 1988**



## SUMMARY OF ACTIONS

March 23-24, 1988

1. Approved the Agenda as presented . . . . . 2
2. Approved the Minutes of the November 11, 1987 WDA Meeting . . . . . 2
3. Heard report of the Chairman/Executive Committee and took the following action regarding allocation of off-the-top funding for: . . . . . 3
 

W-6 Plant Introduction	Approved
W-084 Biological Control of Pests	Approved
IR-1 Solanum Species	Approved
IR-2 Virus-free Tree Clones	Approved
IR-4 Chemical & biological Clearance	Approved
IR-5 CRIS	Approved
IR-6 National & Regional Research Planning	Approved
IR-7 Atmospheric Deposition	Approved
4. Heard RIC Report and approved recommendations to:
  - a. revise projects;
 

W-045	Persistence of Pesticide Residues: Transport, Fate and Effects . . . . .	30
W-102	Integrated Methods of Parasite Control for Improved Livestock Production . . . . .	31
W-130	Freeze Damage and Protection of Fruit and Nut Crops . . . . .	31
W-168	Seed Production and Quality Investigations . . . . .	31
IR-4	A National Agricultural Program: Clearances of Chemicals and Biologics for Minor or Special Uses . . . . .	31
  - b. extend or renew WRCCs;
 

WRCC-01	Beef Cattle Breeding Research in Western Region . . . . .	32
WRCC-24	Diseases and Pests of Grape Crops . . . . .	33
WRCC-28	Developing, Implementing, and Coordinating Research on Crop Loss Appraisals . . . . .	33
WRCC-40	Western Rangeland Research . . . . .	33
  - c. establish new WRCCs;
 

WRCC-65	Adaptive Control of Surface Irrigation System . . . . .	33
WRCC-66	Biology and Control of the Russian Wheat Aphid . . . . .	34
  - d. establish ad hoc technical committees;
 

W-	Immigration Reform and U.S. Agriculture . . . . .	34
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  - e. establish or extend ad hoc coordinating committees;
 

WRCC-	Effects of Mother Absence in the Development of Children . . . . .	34
WRCC-	International Marketing . . . . .	35

f.	assign Administrative Advisors for;	
W-130	Freeze Damage and Protection of Fruit and Nut Crops .	35
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IR-1	Introduction, Preservation, Classification, Distribution and Evaluation of Solanum species . . . . .	35
WRCC-21	Revegetation and Stabilization of Deteriorated and Altered Lands . . . . .	35
WRCC-23	Textile and Clothing Research Coordination . . . . .	35
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6.	Approved the Treasurer's Report on the WDA Special Account . . . . .	4
7.	Approved the Treasurer's Report on the Western DAL Account . . . . .	4
8.	Approved development of administrators workshop, as soon as feasible	14
9.	Unanimously approved nine resolutions . . . . .	22
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WESTERN ASSOCIATION OF  
AGRICULTURAL EXPERIMENT STATION DIRECTORS

MINUTES

March 23-24, 1988  
New Mexico State University  
Las Cruces, New Mexico

ATTENDANCE:

Alaska	G. A. Mitchell	Oregon	T. R. Dutson
Arizona	L. W. Dewhirst		L. J. Koong
	G. W. Ware	Utah	D. J. Matthews
California	J. N. Seiber	Washington	J. J. Zuiches
	D. E. Schlegel		D. L. Oldenstadt
Colorado	R. D. Heil	Wyoming	C. C. Kaltenbach
Idaho	G. A. Lee	WDAL	L. L. Boyd
	R. C. Heimsch	OWDAL	H. A. Sykes
Montana	R. B. Muntifering	ARS	G. R. Evans
Northern Marianas	W. F. Matson	CSRS	W. D. Carlson
Nevada	B. M. Jones	ERS	N. Schaller
New Mexico	J. Owens	FS	R. R. Bay
	D. Smith		L. Lassen
	D. M. Briggs		

1.0      Call to Order

Chairman Heil called the meeting to order at 8:15 a.m. on Wednesday, March 23, 1988.

2.0      Welcome -- J. Owens

Dr. John Owens, Dean of the College of Agriculture and Home Economics welcomed the meeting participants to New Mexico State University.

3.0      Introductions and Announcements

The attenders introduced themselves.

#### 4.0 Adoption of Agenda

The motion was made and seconded to adopt the agenda as presented. MOTION CARRIED. A copy of the agenda is included as Appendix A, pp. 28-29.

#### 5.0 Approval of Minutes of November 11, 1987 Meeting

The motion was made and seconded to approve the minutes of the November 11, 1987 WDA meeting. MOTION CARRIED.

#### 6.0 Chairman's Report/Interim Actions -- R. D. Heil

Heil reported that Dr. Laurence Lassen of the Forest Service Intermountain Research Station in Ogden, Utah will be replacing Dr. R. R. Bay as representative to the WDA and RIC from the FS.

Dr. G. R. Evans of the Agricultural Service Northern Plains Area in Fort Collins, Colorado will be replacing Dr. W. G. Chace as representative to the WDA and RIC from the ARS.

#### 7.0 Executive Committee Report -- R. D. Heil

The Executive Committee reviewed the off-the-top funding requests for FY89 for the Interregional projects (IR-001, IR-002, IR-004, IR-005, IR-006, IR-007) and recommended that the projects be funded at no more than the Hatch level of increase or at the request level, whichever is the lower. The off-the-top funding for: W-006 "Plant Germplasm Introduction, Increase, Evaluation, Documentation, Maintenance and Distribution" is recommended at \$262,000, which is a 7.15 percent increase over FY88. The increase is for salary raise and a one-time expense of a new vehicle; and W-084 "Establish, Improve, and Evaluate Biological Control in Pest Management Systems of Plants" is recommended at the request level of \$30,000 which is no increase over FY88.

The off-the-top funding for W-106 "Regional Research Coordination" will be determined at the summer meeting of the WDA. Boyd reported that salary information was not available in time for the current meeting, so it was decided to postpone making a recommendation until the next meeting. The Office of the Western Director-at-Large has been operating on some residual funds for the past three years. Next year the budget will probably increase by \$20,000, and the Directors should consider whether to increase the off-the-top funding for W-106, or to bear the cost of the increase in the annual assessment.

It was moved and seconded that the WDA recommend to the Committee of Nine that the Interregional projects (IR-001, IR-002, IR-004, IR-005, IR-006, IR-007) be funded for FY89 at no more than the Hatch level of increase or at the request level, whichever is the lower. MOTION CARRIED.

It was moved and seconded to approve off-the-top funding for W-006 in the amount of \$262,000 for FY89. MOTION CARRIED.

It was moved and seconded to approve off-the-top funding for W-084 in the amount of \$30,000 for FY89. MOTION CARRIED.

#### 8.0 RIC Report -- L. J. Koong

Koong presented the RIC Report which is included as Appendix B, pp. 30-37.

A question has been raised about whether regional funds can be used for foreign travel. The CSRS office has indicated that regional funds and other federal funds can be used for travel into a foreign country. Those states that border the foreign country only need authorization from the Administrative Advisor with approval from the respective Director. Those states not bordering on a foreign country must submit a special request to CSRS (submitted as a group or as individual states) and then be authorized by the Administrative Advisor with approval from each of the members' Directors. The states can use other than federal funds for non-domestic travel, if they choose.

Dewhirst reported that several years ago the Western Directors decided to discourage meetings outside of the United States.

The Executive Committee recommended to the WDA at the November 1987 meeting that Administrative Advisors who are department chairs are to work with the Director's offices in their respective states with regard to the formal paperwork, reporting and travel authorization to ensure that correct procedures are followed. In other words, the Directors would function as Co-Administrative Advisors.

It was moved and seconded that Directors, or their named designates, function as Co-Administrative Advisors on those WRCCs whose Administrative Advisors are department chairs. MOTION CARRIED.

The Directors serving as Co-Administrative Advisors are not required to attend the meetings of the WRCCs.

Sykes commented that the listing of participants in regional projects which is used to update the Information for Western Directors can be submitted in electronic form, either by Dialcom or on a floppy diskette. It should be in a format that can be imported into a dBase file. This can be done by both

Administrative Advisors and the states when they submit their update information. Annual reports can also be submitted in electronic form, which would allow the OWDAL to manipulate the publications information into a dBase format.

#### 9.0 Treasurer's Report -- R. B. Muntifering

The Treasurer's Report was distributed by Muntifering and is included as Appendix C, pp. 38-39.

It was moved and seconded to accept the Treasurer's Report on the Western Directors Association Special Account. MOTION CARRIED.

It was moved and seconded to accept the Treasurer's Report on the Western Director-at-Large Account. MOTION CARRIED.

#### 10.0 Reports from Federal Agency Liaison Representatives

##### 10.1 CSRS Report -- W. D. Carlson

Carlson distributed the CSRS Report which is included as Appendix D, pp. 40-42.

The position of Associate Administrator of Grants and Programs has been advertised and the selection should be made by the end of May 1988.

The WDA will draft resolutions to the Secretary of Agriculture and to Congress in an effort to emphasize the need for water quality and management research. (See Resolutions - Agenda item 18.0, p. 22).

Carlson reported that J. P. Jordan, Administrator of CSRS requests that all Directors contact their U.S. Representatives and Senators on appropriations committees to zero in on budget areas of interest. He asks that Deans and Directors contact him when appointments have been made and either he or Carlson will accompany them and serve as a backup to carry the message to the President. Jordan would like Deans and Directors to concentrate on this activity during the spring and summer. It does mean identifying specific things for your states that your people are interested in and then broadening it as we see what CSRS can do for the country and your state. It is to get Congress to be more sensitive to what is needed because, obviously, we are not getting it from the regular channels.

The other item Jordan wants emphasized is that we are going to start using a different approach to OMB. We are going to try to have them

look at it from what has been distributed in the past and not go back to the base, which has a \$100 million differential. We are going to push the point of making recommendations of how OMB could redistribute the funds. The key thing is that CSRS wants everyone to move on this, the DALs are going to be working on this, the Chairs of each of the regional associations and all of the Directors will be working on it.

Jordan requests that each of the Directors contact him to identify areas of the commitment on which they can work.

10.2 ARS Report -- G. R. Evans

Evans distributed the ARS Report which is included as Appendix E, p. 43.

10.3 FS Report -- R. R. Bay

Bay distributed the FS Report which is included as Appendix F, p. 44.

Bay reported that more support for regional research for natural resources types of projects may be needed as populations move into the agricultural lands and forest lands. The urban interface causes many concerns, such as chemical problems.

11.0 Film on New Mexico Agricultural Experiment Station Program -- D. M. Briggs

Briggs presented a film that highlighted some of New Mexico State Agricultural Experiment Station research projects around the state.

12.0 Expert System Demonstration -- T. Sammis

Dr. Sammis of the Department of Agricultural Engineering at New Mexico State University demonstrated expert systems on both MacIntosh and IBM-PC computers. He also distributed information on expert systems which is included as Appendix G, p. 45.

13.0 Reports from Representatives to Regional & National Committees

13.1 Joint Council -- L. W. Dewhirst

Dewhirst distributed information on Joint Council activities which is included as Appendix H, pp. 46-50.

He reported that each of the Joint Council meetings have presentations by groups such as Forestry and four or five papers are selected

nationwide for presentation. They give reports on many subjects, for example, education-extension-research. The presentations last about one-half day. The Joint Council puts out many reports into which you have a lot of input. As a matter of fact, the Users Advisory Board, the National Agricultural Research Committee and Western Regional Council all have input into the Joint Council. The Joint Council can best be described as the only integrative planning and summarizing body on the agricultural system.

At the April meeting the Joint Council will prioritize those items that have come up through the various councils and bodies. There will be another Joint Council report released in June that will contain the 1990 priorities.

### 13.2 Users Advisory Board -- C. C. Kaltenbach

Kaltenbach distributed information on the Users Advisory Board which is included as Appendix I, p. 51.

At the Spring UAB meeting, the President's budget is routinely reviewed and responded to. The heads of the various agencies make presentations of their budgets. Due to the amount of time required to review the budgets, the UAB may increase the time for budget reviews to more than one day.

### 13.3 National Agricultural Research Committee -- L. L. Boyd

Boyd distributed information on NARC which is included as Appendix J, pp. 52-56. Appendix H, pp. 46-50 shows the rankings of the research initiatives from the NARC meeting.

Research accomplishment reports have been solicited from each of the states in the Western Region and 58 have been received to date. Ten will be submitted from each region. Nationally, twelve will be included in the report.

### 13.4 Western Regional Council -- C. C. Kaltenbach

Kaltenbach distributed information on the Western Regional Council, attended by C. E. Clark, which is included as Appendix K, pp. 57-68. The priorities are listed, as well as a narrative on each of the priorities.

### 13.5 Committee of Nine -- G. W. Ware

The Committee of Nine report was distributed by Ware and is included as Appendix L, p. 69.

The Committee of Nine report was distributed by Ware and is included as Appendix L, p. 69.

13.6 Ad Hoc Task Force on Interregional Projects -- D. E. Schlegel

Schlegel distributed a report on the Ad Hoc Task Force on Interregional Projects which is included as Appendix M, pp. 70-75.

The WDA is requested to review the January 22, 1988 Report of the Committee on Interregional Projects and be prepared to make recommendations if solicited.

13.7 ESCOP/ECOP Interactions -- C. C. Kaltenbach

Kaltenbach distributed a report on ESCOP/ECOP interactions, which is included as Appendix N, pp. 76-81.

A draft document titled "Mechanisms for Enhancing Cooperation between Experiment Stations and Extension Services" is also included in Appendix N, pp. 77-81. The final document will be distributed as soon as both ESCOP and ECOP make changes and approve it.

13.8 ESCOP Special Initiatives Subcommittee -- J. J. Zuiches/  
S. D. Van Gundy/R. D. Heil

Zuiches reported that the Special Initiatives Subcommittee has not met since September 1987. The next scheduled meeting is March 29-30, 1988.

13.9 ESCOP Research Planning & Budgets Subcommittee -- D. L. Oldenstadt/L. L. Boyd

Boyd distributed the draft Implementation Plan for the ESCOP Subcommittee for Research Planning and Budgets, included as Appendix O, pp. 82-85.

The ESCOP Research Planning and Budgets Subcommittee was tentatively approved at the November, 1987 meeting following the NASULGC meetings. The ESCOP Interim Subcommittee gave final approval in February, 1988. This Subcommittee is comprised of what was five former subcommittees of ESCOP, i.e. ESCOP Subcommittee for Research Planning and Evaluation, ESCOP Special Initiatives Subcommittee, and three Budget Subcommittees, e.g. as shown in the diagram, p. 85, at this time FY89, FY90 and FY91. Relative to the diagram, please add an arrow from the National Research Planning

As many of you are aware the SAES have had a planning process dating back to at least the mid 1960s and probably longer. However, we started a much more intensive planning process in the early 1980s with the first highly visible result being Research 1984, which was developed under the leadership of Neville Clarke. This was initiated to make a bigger impact on OMB, the Congress and others about our priorities and requests for funding. From the beginning of this effort, we planned to have the planning process drive the budget requests. While the five Subcommittees mentioned above were functioning well, many believed we could improve upon it. Clive Donoho, as 1988 Chair of ESCOP, brought forth the proposed amalgamation of these subcommittees into the one larger Subcommittee. Neville Clarke suggested the top group in the diagram, p. 85, as sort of a "Board of Directors" to closely link the groups.

The National Research Planning Group is essentially the same in function as the previous Research Planning and Evaluation Subcommittee. It will lead the development of a comprehensive research plan every four years similar to Research Initiatives: A Research Agenda for the State Agricultural Experiment Stations, which was published in 1986. This, as most of you know, involves an intensive effort to solicit commodity organizations, professional societies and others for input of those organizations/groups agricultural research priorities. It also will lead the development of a less extensive update every two years similar to Research Initiatives: A Midterm Update of the Research Agenda for the State Agricultural Experiment Stations, which was published early this year, 1988. In addition there will be annual updates for input to NARC, the Joint Council and elsewhere as needed. This Subcommittee also planned a symposium in June, 1985 with the proceeding being Research Perspectives and later the publication Research Dynamics: The Base Program of Research in the State Agricultural Experiment Stations.

The Special Initiative Group is expected to continue to have a "think tank" orientation to make certain that developing issues are surfaced and evaluated rapidly. This will help insure that the SAES are leading and not following.

Oldenstadt questioned whether additional travel for representatives from the WDA would be required and whether the WDA Special Fund would be billed for it.

Boyd stated that there would be the same number of meetings in the new organization with the exception of the Budget Strategies and Action Group. The Executive Committee did not have a chance to deal with that issue yesterday, and will have to in the future.



Oldenstadt stated that, for the new planning process to be successful, more than just the committee members need to be involved. All directors must become more involved in the budget making in an advocacy role. The Budget Strategies and Action Group will be encouraged to come up with a more simplified version of what is being requested and then, more importantly, try to develop some information using the CRIS database as to what the budget initiatives being put forth by the Division will mean to the region and/or to the states so that the Director can have that information in front of him when he goes in to talk to his Congressman. He can feel that he has more to gain by promoting the budget initiatives.

In response to a question by Briggs on how the CRIS system could be used, Oldenstadt responded that it has not been formulated yet. However, the budget initiatives are identified with the eight goals of the CRIS system and with the amount of money being sought, this can be related to what each state might gain if these were funded at the request level.

Boyd commented that with the budget process that was started for last year, particularly with the data from research initiatives and the process of projecting forward for three years, you can track where we're putting those funds by some combination of RP and RPG.

The new ESCOP Research Planning & Budgets Subcommittee doesn't interact with NASULGC in the sense of integration with ECOP and RICOP. That linkage still comes through the Division of Agriculture with some effort to do some advance linking with Extension on common thrusts. There is no formal tie at the moment.

13.10 ESCOP FY89 Budget Strategies & Action Group -- D. L. Oldenstadt/  
L. L. Boyd

Boyd distributed copies of the Division of Agriculture Fiscal Year 1989 Budget Committee report (Appendix P, pp. 86-99). Also included in Appendix P is a copy of a summit agreement between the President and the joint leadership of Congress dated November 20, 1987, which states the agreed upon budget numbers for the compromise for both FY88 and FY89, so that a FY88 budget agreement could be reached for the continuing resolution. The agreement states that neither the Congress nor the President will initiate supplementals except in the case of dire emergency. The agreement further gives the target reductions expected in agriculture.

case of dire emergency. The agreement further gives the target reductions expected in agriculture.

The Budget Strategies & Action Group needs to identify items which are key to the Western Region and give input how to portray that to Congress.

As you know, in the past, we have had three separate budget subcommittees functioning at one time. One of these was "selling" the budget about to be enacted and the other two were in advanced and beginning stages of development and/or modification. The "selling" group in the past has been the subcommittee that developed it. We see a different concept in the Budget Strategies and Action group in the use of Directors, who have Congressional representatives on Committees that most affect our budget appropriations. For a long time we have needed to involve people from Mississippi. Recently it was Oregon, when Mr. Hatfield chaired the Senate Appropriations Committee. Now it is Vermont with Mr. Leahy. There are others, of course. This Group will be chaired by the Director, who lead the development process. They also will be calling on many of you for specific budget promotion efforts.

Boyd reported that another significant change is in the specific roles of the DALs. In the past they all have been involved in each of the various activities. Now they are being asked to assume specific roles on a continuing basis to provide more continuity to the various groups. Keith Huston has the most experience working on the Hill, so he was a logical choice for the Action and Strategies group. Boyd is pleased with the role in the budget development groups that he was asked to accept. If anyone in the West objects to his taking this on, he needs to know immediately.

13.11 ESCOP FY90 Budget Development Group -- J. J. Zuiches/L. L. Boyd

Zuiches reported that the FY90 budget projections had not yet been completed. The budget projections will be distributed in the near future. The Committee intends to continue to follow the pattern of three-year budget requests building on the FY89 numbers. The budget numbers on the FY89 documents will be treated as a base and the FY90 budget will add back in items which were recommended as part of FY89 budget but were not funded. There is approximately \$126 million that will be added back into the FY90 budget.

The FY90 budget request is scheduled to go behind the curtain in July 1988.

(3) diet, health and nutrition; (4) sustainable agricultural systems; (5) natural resources other than water; and (6) rural revitalization. All six of the thrusts would appear in each of the two budgets and ESCOP and ECOP will each develop strong statements or joint statements that would be harmonious and have common elements in support of the budgets. They will also seek other common elements for reinforcing statements or substatements.

Appendix Q, pp. 100-103 contains a copy of the original ESCOP Research Initiatives which was released in 1986. The summary of resource needs by initiatives (Table 4) shows continuing needs of \$231,641,000. Over \$100 million in the top 25 percent of the initiatives

went into building the FY89 budget, which left \$131 million to be split between FY90 and FY91. An item which was left out was one-time funding of \$4 million for startup facilities costs and the plan originally was to put it in as a two-year plan and cost share with the states on an equal basis.

Jones reported that ECOP had lagged behind on Extension initiatives. Once they developed their eight initiatives, there is a very strong push from Washington to set programs along those lines. Extension was oriented towards agriculture, natural resources, home economics, 4H and CRD for many years. Now, all reporting is to be done on the eight initiatives.

#### 13.12 ESCOP Communications Subcommittee -- D. M. Briggs

Briggs indicated that the current objective of the ESCOP Communications Subcommittee is to facilitate improved communications of administrators with communicators. The reason is so that the Experiment Stations can get their story out to the public in a better package that is understood and can help national and state legislative needs.

The Subcommittee has developed guidelines to relate to the objective. The initial requirement is to define the mission of the Experiment Stations. Second, the target audience needs to be defined. Third, a communications plan needs to be developed.

The Subcommittee has developed a document to facilitate the interaction of the administration with the communicators. It was decided that some pilot tests were needed. Two tests were initiated; one in Georgia, and the other in Illinois.

The structure of the ESCOP Communications Subcommittee includes an administrative advisor from each of the regions and a communicator

from each of the regions. In the pilot tests, the communicator from Tennessee was sent to Georgia and the communicator from Missouri was sent to Illinois.

There were some conclusions that came out of the successful pilot test in Georgia. There were elements of the work plan that need to be modified and those are currently being done. There were four general conclusions: (1) The scheduling of the workshop should be limited to one-half day. There are problems in getting the administration and the communicators in the same room at the same time and having a productive session. (2) There is a problem of priority of state reports. (3) The role of the facilitator must be defined. (4) The distribution of the final communication plan must be determined.

The ESCOP Communications Subcommittee will request that each station designate a facilitator (a communicator facilitator).

CSRS has committed funds to pay for publishing the guidelines that are evolving out of the pilot test. CSRS has also committed funds for an audio teleconference which will be between members of the ESCOP Communications Subcommittee, particularly the technical people, and the facilitators in each of the Experiment Stations.

13.13 ESCOP Interim Subcommittee -- C. C. Kaltenbach

Kaltenbach distributed a report on the ESCOP Interim Subcommittee which is included as Appendix R, p. 104.

13.14 ESCOP Pest Control Strategies Subcommittee -- G. W. Ware

Ware distributed the report on the ESCOP Pest Control Strategies Subcommittee which is included as Appendix S, p. 105.

The Subcommittee is attempting to bring key people together for a meeting to develop the next pest control strategy. In a meeting with the National IPM Coordinating Committee they were encouraged to pursue the development session which is scheduled for April 28, 1988 in St. Louis, MO.

14.0 DAL Report -- L. L. Boyd

Boyd distributed the DAL Report which is included in Appendix T, pp. 106-122.

The directors discussed possible advantages of having David Gibbons of OMB visit a site or sites in the Western Region. The visit will be a topic of discussion at the next ESCOP meeting.

Gibbons has stated that there could be no tradeoffs between defense and the discretionary programs. He indicated that budgets would go down. When he addressed ECOP, he encouraged them to join with EPA to try to extend those programs. The one thing that we really need to look at is that he approves mandated programs with little questioning. Perhaps we can figure out a way to mandate more of our programs, particularly the next Farm Bill. We intend to pursue the possibilities of this.

Participation in NISARC has dwindled, and the Western Region attendance has followed the decline. There is a need for the Experiment Stations, through NISARC or a similar organization, to marshal industry and trade organization support for the budgets.

Boyd reported that he was having difficulty in establishing a time for the proposed workshop for department chairs. The purpose of the proposed workshop is to help new administrators understand the SAES system and how they work within the system as a department chair. The number of participants would need to be restricted in order to maintain a quality presentation. Responses to a DAL inquiry resulted in a mixed preference of date and location for the workshop. Due to the time frame of trying to plan, make arrangements and conduct the workshop, the earliest time to schedule the workshop would be September 1988.

Briggs questioned whether the Northeastern Regional Workshop could be videotaped and edited for use in the West. Boyd will check on that possibility.

Heil stated that the Executive Committee had discussed the possibility of developing videotapes of the proposed workshop for department chairs for use by institutions whenever it was appropriate. The rationale for doing so is that there is a constant flow of new people. The Executive Committee questioned whether the Directors wanted to provide funding for their personnel to attend this sort of workshop every year. Videos were suggested, not as an alternative, but to augment an annual workshop.

Boyd indicated that the WDA needed to make a decision on whether or not to schedule a workshop. The Northeastern Regional Workshop, held in

Washington, DC, has access to a great number of people to utilize in giving the workshop. In order to have the same people come to a location in the West, the WDA would probably have to pay their expenses. Another alternative is for Boyd to go to the Northeastern Regional Workshop as an observer and then pattern a WDA workshop after it.

Lee suggested including training and information on how departments conduct CSRS reviews and how department chairs deal with CSRS reviews.

Many new department chairs do not know how to deal with commodity groups, deal with people and get their research projects developed, and initiate multidisciplinary projects. Heil stated that it should be the responsibility of each of the universities to provide training on administrative management to new department chairs.

The motion was made and seconded to proceed with development of the administrators workshop, combined with the possibility of videotaping the workshop for future use, as soon as feasible. MOTION CARRIED.

#### 15.0 Aquaculture Centers Report -- G. A. Lee

Lee distributed the Aquaculture Centers Report which is included as Appendix U, p. 123.

Oldenstadt commented that the Aquaculture Centers Consortium can be used as a model for the Low Input Agriculture Program.

#### 16.0 Other Business

##### 16.1 Low Input Agriculture Policies & Plans -- Neill Schaller/ D. E. Schlegel

Schlegel distributed information on the Federal Low Input Agriculture Program which is included as Appendix V, pp. 124-133.

Schaller reported that the Low Input Agriculture program started in the late 1970s and early 1980s with a growing concern about soil erosion. The term low input wasn't used then. The term then was organic farming, which triggered a lot of emotionalism. The proponents of organic farming tended to be more missionary than practical. They didn't talk much about profit in farming.

There was emotionalism on the other side. The yields were not as good from organic farming. That was a period when exports were soaring and there was not a lot of surplus. There was a stalemate.

In the 1981 Farm Bill there were discussions that began to touch on low input farming. The idea of demonstration centers was proposed. What was missing was the financial problems that farmers began encountering in the early 1980s. That was a powerful trigger for what followed.

Between 1981 and 1985 there was economic trouble for farmers. Land values dropped and farmers were looking for ways to cut costs. They looked at what they were spending on fertilizer and pesticides which came together with concerns of environmentalists and growing new concerns about groundwater contamination.

As a result of all of the concerns, a coalition of environmental groups and others came together to write the conservation title of the 1985 Farm Bill, and also Subtitle C of the Research and Education title, which is the basic authorization for the low input agriculture program.

The USDA formed a task force in 1987 on alternative farming systems which later became an official subcommittee on alternative farming systems of the Research and Education Committee.

The Senate version of the appropriations bill authorized \$9 million for research and education on low input agriculture to go to the USDA for the low input agriculture program. The House version authorized \$2.6 million which was scattered throughout several agencies. Both versions inferred that the USDA needed to manage the appropriations better than in the past and must work with universities, non-government organizations, and farmers. The Conference Committee finally settled on \$4.1 million, with \$100,000 going to Minnesota and \$100,000 to ARS to support the ARS scientists at the Rodale Farm.

Each region will receive \$836,000. The funding for the program will be awarded to a designated institution within each region. Each designated institution will disburse the funds allocated for each region. A minimum amount will be held in Washington, DC to pay administrative expenses. ERS was funded \$50,000 to study the effects of public policies on low input agriculture (what policies will encourage it, retard it, etc.). ERS has contracted American Farmland Trust, who is providing an additional \$100,000, for the study to complement what is being done in each of the regions.

The decision for the structure of the program involves committees from each of the regions. The current thrust is to put together projects that will produce information that is immediately useful to farmers.

A letter from the Fertilizer Institute to Assistant Secretary of Agriculture Bentley which registers opposition to the program contends that the USDA has lost touch with American farmers, that there are no facts to back up their premises, and that the USDA is picking on synthetic pesticides and fertilizers. The letter further states that other things, such as municipal sludge, cause problems, too. A response by Congressman George E. Brown, Jr. is included in Appendix V, pp. 131-133.

The guidelines will be mailed by April 1, 1988 and each of the Directors is requested to distribute them to other universities and groups. A complete set of rules should be distributed with a brief synopsis of the program.

Schlegel stated that there was a preliminary meeting with representation from Cooperative Extension, Experiment Station, and industry. A discussion of what the programmatic approaches should be took place. It was decided that a strong database needed to be developed and that a work plan must be developed by June 1988. An announcement will be distributed within the week with a request to share it with as broad a constituency as can be identified. This is required by the legislation. The committee then will: determine how it will manage the projects; review the projects; establish an administrative oversight committee. It was decided that a regional council would be appointed to oversee the program.

Members of the committee will be allowed to participate in projects. No one on the Administrative Committee can be a project leader. When the Committee reviews projects, anyone participating in a specific project must leave the room while that project is being evaluated.

After the proposals have been received (with a probable deadline of May 31) the committee will assign each project to two members of the committee for an in depth review. All committee members are to review all the projects. The projects are to be multistate, multidisciplinary and multiinstitutional. There will not be many awarded as each one will be large.

It was suggested that a small amount of the funding be held back to be made available for groups to plan for the next round of proposals.

Schaller commented that the necessary structure will evolve for the next round of proposals from the method being used to solicit and establish projects. The Administrative Councils and technical committees will be established.



The committee for the Western Region intends to fund no more than three or four total proposals for a period of two years. Institutions can plan for a five-year program of work. The proposals must be interdisciplinary and can be interstate. The first year will be mostly data gathering. Basic research will start after the data is gathered and then some smaller proposals may be funded.

Heil indicated that he envisioned the Western Region being subdivided into subregions of three to four states that have some commonalities in terms of types of agricultural enterprises. Multidisciplinary teams representing the physical, social, economic, sciences will be built. We need to try to identify people who are now involved in low input or organic agriculture. We should get a cross section of the kinds of agricultural enterprises we have, from the very low input to the high input and high technology input and have the teams work with those people and ask them what kinds of information they have available. Find what questions are being asked that nobody is answering in terms of production and in terms of decisions that need to be made. Each of the teams in the Western Region would then work with an information management systems group who could begin building a database of information and searching for information to answer the questions these people are asking. By doing this, the research needs could be identified as well as the kind of demonstrations which would be most effective. There would be regional coordination in determining that.

Zuiches commented that the concept of the low input agriculture program has been outlined. Pragmatically, there will be approximately \$280,000 spread over two years (\$140,000 per year). All that can be done in the first year or two is to get organized and start to target one or two areas within the broad, regional, interstate, agroecology systems and get something started in each of those areas.

The Western Association of Agricultural Experiment Station Directors recognizes their role and responsibility with respect to the Low Input Agriculture program and have unanimously agreed with the process that is in place under the Ad Hoc WRCC - Sustainable Agriculture. In order to enhance the progress of the program, the motion was made and seconded that the WDA waive the rules requiring receipt of a formal petition and create WRCC-67 "Sustainable Agriculture" for a period of three years (to 9/30/91). MOTION CARRIED.

16.2 Russian Wheat Aphid Impact on States -- G. A. Lee/R. D. Heil

Lee distributed an update on the Russian Wheat Aphid Impact which is included as Appendix W, pp. 134-138. One of the major interests was establishment of WRCC-66 "Biology and Control of the Russian Wheat Aphid." An announcement will be sent to all the SAES requesting names of participants to WRCC. The first meeting will be scheduled in Denver, CO in the near future.

Thirteen of the fourteen states invited to participate have responded with a commitment of funds to send Dr. Estop to Russia and Turkey. Estop has not yet received approval to go into Russia, but his proposal is being sent through the bureaucracy. He is concerned with getting into Russia in a timely manner this spring. The total bill proposed for the trip is \$24,700. APHIS has proposed putting \$15,000 into the fund for the trip. Therefore, the price per individual experiment station is approximately \$750. APHIS is also planning to work very closely with the Commonwealth Institute of Biological Control in England on the British program. The European Parasite Laboratory (EPL) will also work closely with the British agency. APHIS will contribute \$15,000 to EPL for their study. Any findings by EPL will come back into the United States into a Newark, Delaware quarantine facility. Insects that Estop finds will go into the quarantine facility at Texas A&M University. The Montana State facility will be a secondary facility.

Lee reported that most states seem to have some activity going on; state departments of agriculture and federal agencies are getting involved. It is important that we have a forum for everyone to meet, interact and start coordinating the activities.

There is interest in finding resistant varieties, biological control, and other items which can fit into an integrative management program.

16.3 State Reports - Economic Situation/Major Issues

**Alaska** - Mitchell reported that, economically, the University of Alaska has taken some cuts due to the lower price of oil. The current year budget was based on \$16/barrel oil and the current price is \$13/barrel. Over the last two years, the Experiment Station has taken a 28 percent cut in state funding. Most of the products produced in Alaska are consumed in Alaska. When the Alaska economy gets hit, the farmers get hit, also. The Alaska Agricultural Revolving Loan Board, which provides the only financing available to farmers, has no funds to loan. The new Director of the Alaska Division of Agriculture has indicated that loans in default will be foreclosed. The University of Alaska has

gone through a restructuring process as a result of the 28 percent reduction. The initial goal was to eliminate \$1 million in administrative salaries. The Experiment Station and Cooperative Extension are now under the same chancellor. The Experiment Station has divided into three divisions: plant and animal sciences; forestry; and natural resources.

**Arizona** - Ware reported that Arizona celebrated the centennial of the Hatch Act by dedicating the new Maricopa Agricultural Center. A large (\$2.25 million) meats laboratory has just been completed at the campus agricultural center. A \$13.6 million, seven story laboratory building is being designed for construction on campus. A \$4.57 million grant has been received for agricultural research. The legislature has given the university funds for a two percent salary raise which is given on merit. The overall university budget will be cut by eight to twelve percent.

**California** - Schlegel reported that reorganization of the California system currently underway will take some time to put in place. The Experiment Station office has relocated to Oakland, CA. The new address and telephone numbers are listed in the 1988 Information for Western Directors. The Experiment Station received a four percent increase for the year.

**Colorado** - Heil reported that higher education in Colorado will get a fifteen percent increase this year. Since the Experiment Station and Extension are not a part of the general education budget, those increases have not followed. The university granted a seven percent salary increase last year and the Experiment Station will probably get a ten percent increase this year with nothing for salaries. The governor of Colorado started a rural economic strategy plan a year ago by splitting the state into four regions. A report has been published and an implementation plan is being developed. As a result, there may be funds for a new food research development center, for alternative agriculture, for marketing research.

**Idaho** - Lee reported that, legislatively, the Experiment Station will receive approximately a 2.0 percent across the board increase. The College reorganization is complete and the Experiment Station has full responsibility for the research and extension centers, the foundation seed program, analytical services and agricultural statistical programs. The academic departments have also been reorganized. There is a new Department of Veterinary Science. The Department of Plant, Soil and Entomological Sciences has been reorganized into four divisions. There has been a collaborative effort between Washington, Idaho and

Oregon at the Deans and Directors levels for resident instruction, research and extension to coordinate more programs.

**Montana** - Muntifering reported that, legislatively, Montana is in its second year of a biennium and is in the second year of no salary increases. The reconfiguration of the College of Agriculture is complete and all of the staff positions have been filled. The Montana Center for Molecular and Genetic Biology has been established. It involves a commitment of two FTE from the Experiment Station with an additional two FTE being recruited in the future. They will be centralized in Leon Johnson Hall.

**New Mexico** - Smith reported that the legislature had given the university three percent for salaries. The university then awarded a seven percent salary increase. They are working to improve evaluation of department units. Due to the isolation of the branch stations, an effort is being made to integrate the research program on a statewide basis.

**Nevada** - Jones reported that the Nevada legislature is also in their second year of the biennium. There will be a projected budget increase of approximately 5.5 percent next year. The economy of the state is going well. The mining industry is booming due to the price of gold. Las Vegas, NV leads the nation in residential building. Economic development has been booming in Las Vegas, with their population at 600,000 with a projected growth to over one million by the year 2000. Nevada will have reapportionment in 1990 and between 65-75 percent of the politicians will live in Las Vegas. Nevada is number one in population percent living in an urban area. As a result, the Experiment Station and Extension are gearing up to do more things on the urban side.

**Northern Marianas** - Matson reported that they have been a land-grant institution for less than a year. It will be important for them to be included in the WDA because they are small. Some things that the Northern Marianas have to offer are the climate and opportunities for entomologists to study. They want to be involved in regional projects and can stretch their resources by becoming involved in regional efforts and regional research. They hope to join the WDA by the 1990s. Their small agricultural population would have an advantage in that, for anything that the region develops with in which the Northern Marianas is an active participant, whether it is in entomology or a new hybrid, there is almost instant dissemination. The funding available for their program is almost totally federal and amounts to approximately \$600,000. They have an exemption from matching to a minimum level of \$290,000 on the research side and

\$200,000 on the extension side. The formula base for research and extension is slightly over one million dollars. At best, with the commonwealth legislature insuring a total match, the land-grant functions as a total will be approximately \$1.8 to \$1.9 million, and research would be \$700,000 to \$800,000.

**Oregon** - Dutson reported that budgetwise, the Oregon Agricultural Experiment Station is in the same position as everyone else. The Governor has declared that programs are to be expanded and concentrate on action and do it with less money. On the legislative side, there is support, and they are pushing in the opposite direction. The College and the Experiment Station are at full staff. There is very good support across the state with industry and extremely good cooperation with the Oregon Department of Agriculture. The Directors of the Experiment Station, the Department of Agriculture, the Department of Economic Development, Department of Environmental Quality, Department of Energy are visiting approximately thirty food processors across the state and visiting with the CEOs of each of the companies to find what their needs, restraints, and future opportunities are. The results to date have been positive feedback.

**Washington** - Zuiches reported that, legislatively, it was the second year of the biennium. There is an eight percent raise scheduled for next year. For the next biennial budget the university has decided that plant and animal biotechnology would be a major initiative. The biggest problem that the state is facing presently is a statewide drought. The tri-state (Washington, Idaho and Oregon) discussions have been valuable with cooperation with ARS and commodity commissions improving. There have been special grants awarded as a result of industry support.

**Wyoming** - Kaltenbach reported that the university had lost between five to six million dollars by the time the legislature adjourned the past week. How it will translate to the College of Agriculture and the Experiment Station has yet to be seen. There was an increase for salaries (about three percent). There was money appropriated to relocate the university stock farm and money to upgrade one of the branch stations.

## 17.0 Future Meetings

### 17.1 Joint Summer Meeting -- R. D. Heil

The 1988 Joint Summer Meeting will be held in Fort Collins, CO the week of July 25, 1988. Cooperative Extension will meet on July 25-26. RIC, Executive Committee, RI, CAHA and CARET will meet July

26. The Joint Meeting will be Wednesday, July 27. The WDA will meet Thursday and Friday (July 28-29). CARET, International Programs, and the Rural Development Center will meet individually on July 28, with CARET joining the WDA on July 29. The Home Economics Administrators will meet July 29.

The focus of the Joint Meeting will be to identify cooperative efforts that might be developed in research, extension and education within the Western Region to more efficiently utilize available resources. Examples of the efforts have been requested from Deans and Directors.

17.2 NASULGC Meeting in Dallas, TX -- C. C. Kaltenbach

Kaltenbach indicated that the NASULGC meeting is scheduled for November 13-15, 1988 in Dallas, TX.

17.3 Proposals for 1989 Spring Meeting

The 1989 Spring Meeting of the WDA will be hosted by California. The WDA meeting will tentatively be March 22-23, 1989 in Monterey or Carmel, CA, with RIC meeting on March 21.

18.0 Resolutions

The motion was made, seconded and UNANIMOUSLY CARRIED to approve the following resolutions:

RESOLUTION #1

**WHEREAS** activities carried out on agricultural lands and the nation's public lands impact the quality and quantity of both surface and groundwaters, and

**WHEREAS** agriculture and public land agencies are major contributors to the quality and quantity of the nation's water, and

**WHEREAS** the nation's agricultural and natural resource systems, both state and federal, are assigned responsibility for publicly-supported research to maintain agricultural and public land productivity while protecting the public welfare, and

**WHEREAS** the Western Association of Agricultural Experiment Station Directors and affiliated research agencies believe strongly that this research strength must be mobilized to address the research needs related to the nation's concern for water quality and quantity,

**NOW THEREFORE BE IT RESOLVED**, That the Western Association of Agricultural Experiment Station Directors urges the Congress of the United States to include specific funding to augment state and federal research efforts already ongoing to improve and protect the nation's water supply, and

**BE IT FURTHER RESOLVED**, That the nation's state and federal, publicly-supported agricultural and natural resource research agencies be instructed to work with regulatory agencies such as EPA, and action agencies, such as USGS, and others to help define the most pressing research areas and formulate plans for implementation of the most economically effective remedial measures.

#### RESOLUTION #2

**WHEREAS** activities carried out on agricultural lands and the nation's public lands impact the quality and quantity of both surface and groundwater, and

**WHEREAS** agriculture and public land agencies are major contributors to the quality and quantity of the nation's water, and

**WHEREAS** the nation's agricultural and natural resource systems, both state and federal, are assigned responsibility for publicly-supported research to maintain agricultural and public land productivity while protecting the public welfare, and

**WHEREAS** the Western Association of Agricultural Experiment Station Directors and affiliated research agencies believe strongly that this research strength must be mobilized to address the research needs related to the nation's concern for water quality and quantity,

**NOW THEREFORE BE IT RESOLVED**, That the Western Association of Agricultural Experiment Station Directors urges the Secretary of Agriculture to include specific funding to augment state and federal research efforts by CSRS, Forest Service, ERS, and ARS already ongoing to improve and protect the nation's water supply.

#### RESOLUTION #3

**WHEREAS** Dr. Sharon Wallace has been a member and active participant in the Western Association of Agricultural Experiment Station Directors, and

**WHEREAS** Dr. Wallace has moved on to a new assignment at Humboldt State College in California,

**NOW THEREFORE BE IT RESOLVED**, That the Western Association of Agricultural Experiment Station Directors assembled at the Spring meeting in Las Cruces, New Mexico, express their appreciation to Dr. Sharon Wallace for her many significant contributions to and support of the Western Association of Agricultural Experiment Station Directors and wish her every future success, and

**BE IT FURTHER RESOLVED**, That the original of this resolution be sent to Dr. Wallace and that a copy be made a part of the minutes of the March 23, 1988 meeting.

**RESOLUTION #4**

**WHEREAS** Dr. Roger Bay has been a member and active participant in the functions of the Western Association of Agricultural Experiment Station Directors as a member of the U. S. Forest Service, particularly in his service to the Research Implementation Committee, and

**WHEREAS** Dr. Bay is retiring from his position with the Forest Service in Berkeley, California on March 31, 1988,

**NOW THEREFORE BE IT RESOLVED**, That the Western Association of Agricultural Experiment Station Directors assembled at the Spring meeting in Las Cruces, New Mexico, express their gratitude to Dr. Bay for his many significant contributions to and support of the Western Association of Agricultural Experiment Station Directors and extend him best wishes in his retirement, and

**BE IT FURTHER RESOLVED**, That the original of this resolution be sent to Dr. Bay and a copy be made a part of the official minutes of the March 23, 1988 meeting.

**RESOLUTION #5**

**WHEREAS** Dr. William G. Chace, Jr. has been a member and active participant in the functions of the Western Association of Agricultural Experiment Station Directors as a representative of the USDA Agricultural Research Service, particularly in his service to the Research Implementation Committee, and

**WHEREAS** Dr. Chace has been transferred to Stoneville, Mississippi as Area Director of the ARS Delta States Area,

**NOW THEREFORE BE IT RESOLVED**, That the Western Association of Agricultural Experiment Station Directors assembled at the Spring meeting in



Las Cruces, New Mexico, express their gratitude to Dr. Chace for his many significant contributions to and support of the Western Association of Agricultural Experiment Station Directors and extend him best wishes in his new assignment, and

**BE IT FURTHER RESOLVED**, That the original of this resolution be sent to Dr. Chace and a copy be made a part of the official minutes of the March 23, 1988 meeting.

**RESOLUTION #6**

**WHEREAS** Dr. Wilfred P. Leon Guerrero was elevated to the exalted position of President of the University of Guam on March 1, 1988, and

**WHEREAS** Dr. Guerrero has been a member and participant in the functions of the Western Association of Agricultural Experiment Station Directors as Director of the Guam Agricultural Experiment Station,

**NOW THEREFORE BE IT RESOLVED**, That the Western Association of Agricultural Experiment station Directors assembled at the Spring meeting in Las Cruces, New Mexico, express their congratulations to Dr. Guerrero and extend him best wishes in his new assignment, and

**BE IT FURTHER RESOLVED**, That the original of this resolution be sent to Dr. Guerrero and a copy be made a part of the official minutes of the March 23, 1988 meeting.

**RESOLUTION #7**

**WHEREAS** Dr. Kenneth Foster has been a member and active participant in the functions of the Western Association of Agricultural Experiment Station Directors as Associate Director of the Arizona Agricultural Experiment Station, and

**WHEREAS** Dr. Foster has returned to full-time Directorship of the Office of Arid Land Studies at the University of Arizona,

**NOW THEREFORE BE IT RESOLVED**, That the Western Association of Agricultural Experiment station Directors assembled at the Spring meeting in Las Cruces, New Mexico, express their appreciation to Dr. Foster for his contributions to and support of the Western Association of Agricultural Experiment Station Directors and wish him every future success, and

**BE IT FURTHER RESOLVED**, That the original of this resolution be sent to Dr. Foster and a copy be made a part of the official minutes of the March 23, 1988 meeting.

**RESOLUTION #8**

**WHEREAS** Dr. Estel H. Cobb, Deputy Administrator for Plant and Animal Sciences, CSRS, will retire on April 1, 1988, and

**WHEREAS** Dr. Cobb has provided long and exemplary service to the WAAESD as Regional Research Fund Administrator for the Committee of Nine, as scientist and as administrator of various program areas of interest to Western Association of Agricultural Experiment Station Directors,

**NOW THEREFORE BE IT RESOLVED**, That the Western Association of Agricultural Experiment Station Directors thank Dr. Cobb for his helpful guidance and assistance through the years, and wish him and his wife, Hilda, a happy and prosperous retirement, and

**BE IT FURTHER RESOLVED**, That a copy of this resolution be sent to Dr. Cobb and a copy be entered into the official minutes of the March 23, 1988 meeting held in Las Cruces, New Mexico.

**RESOLUTION #9**

**WHEREAS** Dr. John Owens and his associates at New Mexico State University have made arrangements for the 1988 Spring meeting of the Western Association of Agricultural Experiment Station Directors at Las Cruces, New Mexico, and

**WHEREAS** Director David Smith and Associate Director Dinus Briggs have provided excellent help with facilities and arrangements,

**NOW THEREFORE BE IT RESOLVED**, That the Western Association of Agricultural Experiment Station Directors express their gratitude to Drs. John Owens, Dinus Briggs and David Smith for their hospitality and efforts, and

**BE IT FURTHER RESOLVED**, That the original of this resolution be sent to Dean Owens and that a copy be made a part of the minutes of the March 23, 1988 meeting.

Lee, as Secretary of the Organization, indicated that copies of appropriate resolutions will be sent to congressional delegations and that the WDA should

send copies to their state agricultural committees, commissions and other state delegations. He will send copies of the resolutions to the WDA with a list of the recipients of copies so that each state can take care of their own mailings.

19.0 Adjournment

The motion was made and seconded to adjourn the meeting. MOTION CARRIED.

## WESTERN ASSOCIATION OF AGRICULTURAL EXPERIMENT STATION DIRECTORS

March 23-24, 1988  
New Mexico State University  
Las Cruces, NM

## AGENDA

Wednesday, March 23, 1988

- 8:15am 1.0 Call to Order -- R. D. Heil
- 8:20 2.0 Welcome -- J. Owens
- 8:35 3.0 Introductions and Announcements -- R. D. Heil
- 8:40 4.0 Adoption of Agenda -- R. D. Heil
- 8:45 5.0 Approval of Minutes of November 11, 1987 Meeting -- R. D. Heil
- 8:50 6.0 Chairman's Report/Interim Actions -- R. D. Heil
- 9:00 7.0 Executive Committee Report -- R. D. Heil
- 9:15 8.0 RIC Report -- L. J. Koong
- 9:45 9.0 Treasurer's Report -- R. B. Muntifering
- 10:10 BREAK
- 10.0 Reports from Federal Agency Liaison Representatives
  - 10:30 10.1 CSRS Report -- J. P. Jordan
  - 10:45 10.2 ARS Report -- G. R. Evans
  - 11:00 10.3 FS Report -- R. R. Bay
  - 11:15 11.0 Film on New Mexico Agricultural Experiment Station Program --  
D. M. Briggs
  - 11:30 12.0 Expert System Demonstration -- T. Sammis
- 12:00 LUNCH
- 13.0 Reports from Representatives to Regional & National Committees
  - 1:30pm 13.1 Joint Council -- L. W. Dewhirst/J. P. Jordan
  - 1:40 13.2 Users Advisory Board -- C. C. Kaltenbach/L. L. Boyd
  - 1:50 13.3 National Agricultural Research Committee --  
D. L. Oldenstadt/L. L. Boyd
  - 2:10 13.4 Western Regional Council -- C. C. Kaltenbach
  - 2:20 13.5 Committee of Nine -- G. W. Ware
  - 2:30 13.6 Ad Hoc Task Force on Interregional Projects -- D. E. Schlegel
  - 2:45 13.7 ESCOP/ECOP Interactions -- C. C. Kaltenbach
  - 2:55 13.8 ESCOP Special Initiatives Subcommittee -- J. J. Zuiches/  
S. D. Van Gundy/R. D. Heil
  - 3:05 13.9 ESCOP Research Planning & Budgets Subcommittee --  
D. L. Oldenstadt/L. L. Boyd
  - 3:15 13.10 ESCOP FY89 Budget Strategies & Action Group -- L. L. Boyd
  - 3:30 13.11 ESCOP FY90 Budget Development Group -- J. J. Zuiches/L. L. Boyd
  - 3:45 13.12 ESCOP Communications Subcommittee -- D. M. Briggs
  - 4:00 13.13 ESCOP Interim Subcommittee -- C. C. Kaltenbach
  - 4:15 13.14 ESCOP Pest Control Strategies Subcommittee -- G. W. Ware
- 4:30 ADJOURNMENT FOR DAY

Thursday, March 24, 1988

8:15am 14.0 DAL Report -- L. L. Boyd  
8:30 15.0 Aquaculture Centers Report -- G. A. Lee  
16.0 Other Business  
8:40 16.1 Low Input Agriculture Policies & Plans -- Neill Schaller/  
D. E. Schlegel  
9:30 16.2 Russian Wheat Aphid Impact on States -- G. A. Lee/R. D. Heil  
10:00 BREAK  
10:30 16.3 State Reports - Economic Situation/Major Issues  
17.0 Future Meetings  
11:00 17.1 Joint Summer Meeting -- R. D. Heil  
11:10 17.2 NASULGC Meeting in Dallas, TX -- C. C. Kaltenbach  
11:20 17.3 Proposals for 1989 Spring Meeting  
11:30 18.0 Adjournment

LUNCH

1:30 to 2:30pm Optional Tour - Plant Gene Expression Laboratory -- J. Kemp

### RESEARCH IMPLEMENTATION COMMITTEE REPORT

RIC met Tuesday, March 22, 1988 at the Agriculture and Home Economics Building on the campus of New Mexico State University in Las Cruces, New Mexico.

Members present were: L. J. Koong (Chair), R. R. Bay, S. D. Van Gundy, G. W. Ware, J. J. Zuiches, G. R. Evans.

#### 1.0 REGIONAL RESEARCH PROJECTS AND COORDINATING COMMITTEES CURRENTLY SCHEDULED TO TERMINATE ON OR BEFORE SEPTEMBER 30, 1988

- W-162 Interrelationships among Low Intensity Land Uses, Population Growth, and Public Lands in the West
- W-166 Characteristics and Feed Value of Barley and Western Protein Supplements for Swine
- W-167 Coping with Stress: Adaptation of Nonmetropolitan Families to Socioeconomic Changes
- W-169 Minimizing Occupational Exposure to Pesticides
- WRCC-27 Potato Variety Development
- WRCC-37 Maximizing the Effectiveness of Bees as Pollinators of Agricultural Crops
- WRCC-47 Climatic Data and Analyses for Applications in Agriculture and Natural Resources
- WRCC-60 Resistance and Resistance Management to Pesticides in Pests and Beneficial Organisms

#### 2.0 REQUESTS FOR PROJECT EXTENSIONS

No requests were submitted.

#### 3.0 REQUESTS FOR PROJECT REVISIONS

##### 3.1 W-045 Persistence of Pesticide Residues: Transport, Fate and Effects

A revised project outline bearing the above title was received from Administrative Advisor G. W. Ware (AZ) on behalf of W-045 Environmental Distribution, Transformation, and Toxicological Implications of Pesticide Residues.

RIC recommends approval of the project for a period of five years, from October 1, 1988 to September 30, 1993, with Dr. G. W. Ware (AZ) to continue as Administrative Advisor.

(Action of WDA: Approved)

##### 3.2 W-102 Integrated Methods of Parasite Control for Improved Livestock Production

A revised project outline bearing the above title was received from Administrative Advisor L. W. Dewhirst (AZ).

RIC recommends approval of the project for a period of five years, from October 1, 1988 to September 30, 1993, with Dr. L. W. Dewhirst(AZ) to continue as Administrative Advisor. Before the

outline is submitted to the Committee of Nine, minor editorial changes are recommended by RIC.

(Action of WDA: Approved)

3.3 W-126 Integration of Physiological and Morphological Criteria for Forage Plant Breeding

A revised project outline bearing the above title was received from Administrative Advisor J. L. Ozbun (WA).

RIC recommends deferral of approval to allow the committee to make recommended changes in the project outline.

(Action of WDA: Approved)

3.4 W-130 Freeze Damage and Protection of Fruit and Nut Crops

A revised project outline bearing the above title was received from Administrative Advisor K. E. Foster (AZ).

RIC recommends approval of the project for a period of five years, from October 1, 1988 to September 30, 1993.

(Action of WDA: Approved)

3.5 W-168 Seed Production and Quality Investigations

A revised project outline bearing the above title was received from Administrative Advisor J. L. Ozbun (WA).

RIC recommends approval of the project for a period of five years, from October 1, 1988 to September 30, 1993 with Dr. J. L. Ozbun (WA) to continue as Administrative Advisor. Before the outline is forwarded to the Committee of Nine, minor editorial changes are recommended.

(Action of WDA: Approved)

3.6 IR-4 A National Agricultural Program: Clearances of Chemicals and Biologics for Minor or Special Uses

A revised project outline bearing the above title was received from Administrative Advisor G. W. Ware (AZ).

RIC recommends approval of the project for a period of five years, from October 1, 1988 to September 30, 1993 with Dr. G. W. Ware (AZ) to continue as Administrative Advisor.

(Action of WDA: Approved)

#### 4.0 REQUESTS FOR ESTABLISHMENT OF NEW PROJECTS

##### 4.1 W- Farm and Ranch Survival and Growth

A project outline bearing the above title was received from Administrative Advisor C. C. Kaltenbach (WY) on behalf of the Ad Hoc Technical Committee.

RIC recommends that the project outline be rejected. RIC noted options that the technical committee has: (1) rewrite the project outline, addressing the concerns of the RIC reviewers; (2) petition for a WRCC; (3) allow the Ad Hoc status to terminate.

(Action of WDA: Approved)

##### 4.2 W- Crop Loss Assessment in the Western United States

A project outline bearing the above title was received from Administrative Advisor M. V. Wiese (ID) on behalf of WRCC-28 Developing, Implementing, and Coordinating Research on Crop Loss Appraisals.

RIC recommends that the project outline be rejected. RIC appreciates the efforts of WRCC-28 in developing the outline and suggests that the committee resubmit an outline addressing the comments of the RIC reviewers.

(Action of WDA: Approved)

#### 5.0 REQUESTS FOR ESTABLISHMENT OF AD HOC TECHNICAL COMMITTEES

No requests were submitted.

#### 6.0 REQUESTS FOR WRCC RENEWALS OR EXTENSIONS

##### 6.1 WRCC-01 Beef Cattle Breeding Research in Western Region

A request for a three-year extension of WRCC-01 was received from Administrative Advisor B. M. Jones (NV).

RIC recommends approval of the petition for a period of three years, from October 1, 1988 to September 30, 1991 with Dr. B. M. Jones (NV) to continue as Administrative Advisor.

(Action of WDA: Approved)

##### 6.2 WRCC-24 Diseases and Pests of Grape Crops

A request for a three-year extension of WRCC-24 was received from Administrative Advisor H. Ferris (CA-D).



RIC recommends approval of the petition for a period of three years, from October 1, 1988 to September 30, 1991 with Dr. H. Ferris (CA-D) to continue as Administrative Advisor.

(Action of WDA: Approved)

#### 6.3 WRCC-28 Developing, Implementing, and Coordinating Research on Crop Loss Appraisals

A request for a one-year extension of WRCC-28 was received from Administrative Advisor M. V. Wiese (ID).

RIC recommends approval of the extension of WRCC-28 for a period of one year, from October 1, 1988 to September 30, 1989 with Dr. M. V. Wiese (ID) to continue as Administrative Advisor.

(Action of WDA: Approved)

#### 6.4 WRCC-40 Western Rangeland Research

A request for a three-year extension of WRCC-40 was received from Administrative Advisor W. A. Laycock (WY).

RIC recommends approval of the petition for a period of three years, from October 1, 1988 to September 30, 1991 with W. A. Laycock (WY) to continue as Administrative Advisor.

(Action of WDA: Approved)

### 7.0 REQUESTS FOR ESTABLISHMENT OF NEW OR AD HOC WRCC'S

#### 7.1 WRCC- Adaptive Control of Surface Irrigation Systems

A petition for a WRCC bearing the above title was received from Administrative Advisor K. E. Foster (AZ) on behalf of the Ad Hoc Technical Committee W- Adaptive Control of Surface Irrigation Systems.

RIC recommends approval of WRCC-65 Adaptive Control of Surface Irrigation Systems for a period of three years, from October 1, 1988 to September 30, 1991 with Dr. D. J. Matthews (UT) to serve as Administrative Advisor.

(Action of WDA: Approved)

#### 7.2 WRCC- Immigration Reform and U.S. Agriculture

A petition for a WRCC bearing the above title was received from Associate Director D. E. Schlegel (CA-B) and Director E. G. Sander (AZ).

RIC recommends approval of Ad Hoc Technical Committee W- Immigration Reform and U.S. Agriculture from March 23, 1988 to July 31, 1989 with Dr. J. J. Zuiches (WA) to serve as Administrative Advisor.

(Action of WDA: Approved)

7.3 WRCC- Effects of Mother Absence in the Development of Children

A request for establishment of a WRCC for the above title was received from Associate Directors D. E. Schlegel (CA-B) and C. E. Clark (UT).

RIC recommends approval of Ad Hoc WRCC- Effects of Mother Absence in the Development of Children from March 23, 1988 to July 31, 1989 with Dr. R. Cate (WA) to serve as Administrative Advisor.

(Action of WDA: Approved)

7.4 WRCC- Biology and Control of the Russian Wheat Aphid

A petition for a WRCC bearing the above title was received from Directors R. D. Heil (CO) and G. A. Lee (ID).

RIC recommends approval of WRCC-66 Biology and Control of the Russian Wheat Aphid for a period of three years, to September 30, 1991, with Drs. L. E. O'Keefe (ID) and G. A. Lee (ID) to serve as Co-Administrative Advisors.

(Action of WDA: Approved)

8.0 FOLLOW-UP OF AD HOC TECHNICAL AND COORDINATING COMMITTEES

8.1 W- Adaptive Control of Surface Irrigation Systems

See Agenda Item 7.1 (above).

8.2 W- Effects of Africanized Honey Bees on Pollination by Solitary Bees and European Honey Bees

Administrative Advisor W. W. Allen (CA-B) has sent out a solicitation for participation. No formal project outline has been received.

8.3 W- Firm Survival and Growth

See Agenda Item 4.1 (above).

8.4 WRCC- Sustainable Agriculture

To be discussed at WDA meeting 3/23-24/88 (Agenda Item 17.1).

8.5 WRCC- International Marketing

The Ad Hoc committee met 1/20-21/88 and has submitted a request to Western Directors for identification of additional participants

having a background in international marketing with technical expertise in post harvest physiology, food science and technology, sociology and food and packaging engineering.

## 9.0 ADMINISTRATIVE ADVISOR ASSIGNMENTS

RIC makes the following appointments to or changes in Administrative Advisor assignments effective immediately:

- W-130      Freeze Damage and Protection of Fruit and Nut Crops -- J. N. Seiber (CA-D) to replace K. E. Foster (AZ)
- W-164      Postharvest Technology and Quarantine Treatments for Insect Control in Horticultural Crops -- E. Gerloff (ARS-CO) to replace Co-Administrative Advisor W. G. Chace (ARS-CA)
- W-171      Germ Cell and Embryo Development and Manipulation for the Improvement of Livestock -- B. M. Jones (NV) to replace L. J. Koong (OR)
- W-175      Consumer Health Influenced by Clothing and Household Fabrics -- H. F. McHugh (CO) to replace Sharon Wallace (NV)
- W-177      Domestic and International Marketing Strategies for U.S. Beef -- T. R. Dutson (OR) to replace B. M. Jones (NV)
- IR-1        Introduction, Preservation, Classification, Distribution and Evaluation of Solanum Species -- V. Van Volk (OR) to replace M. V. Wiese (ID)
- WRCC-21    Revegetation and Stabilization of Deteriorated and Altered Lands -- A. Gale (WY) to replace K. E. Foster (AZ)
- WRCC-23    Textile and Clothing Research Coordination -- J. Thompson (WA) to replace Sharon Wallace (NV)

## 10.0 OTHER BUSINESS

### 10.1 WRCC- International Marketing

RIC recommends extension of Ad Hoc WRCC- International Marketing to July 31, 1988 to allow the committee time to develop a formal petition.

(Action of WDA: Approved)

## ADMINISTRATIVE ADVISOR ASSIGNMENTS AS OF 3/23/88

ADMINISTRATIVE ADVISOR	WESTERN REGIONAL PROJECTS		WESTERN REGIONAL COORDINATING COMMITTEES
Allen, W.W. (CA-B)	W-110	W-AFRIC BEES	WRCC-43
*Bell, E. (FS-CA)	W-133+		
Briggs, D.M. (NM)	W-166	IR-005+	W-179
**Brink, K.M. (CO)			WRCC-11
Bulla, L.A. (WY)	W-172		
**Burger, R.E. (CA-D)			WRCC-59
**Cate, R. (WA)			WRCC-CHILDREN:
Clark, C.E. (UT)	W-122	IR-006+	
Dewhirst, L.W. (AZ)	W-102	W-151	
Dutson, T.R. (OR)	W-177		
**Ferris, H. (CA-D)			WRCC-24
**Fukuto, T.R. (CA-R)			WRCC-60
Gale, A. (WY)			WRCC-21
Gardner, W. (CA)	W-154		WRCC-47
*Gerloff, E. (ARS-CO)	W-164+		
**Gifford, F. (NV)			WRCC-56
Heil, R.D. (CO)	W-160+	IR-007+	W-106
Heimsch, R. (ID)			WRCC-50
**Hillman, J.S. (AZ)			WRCC-52
Hughes, J.M. (CO)	W-133+	W-162	WRCC-63
Jones, B.M. (NV)	W-171		
Kaltenbach, C.C. (WY)	W-112	W-FARM SURV	WRCC-01
Kefford, N.P. (HI)	W-082		
Koller, L.D. (OR)			WRCC-46
Koong, L.J. (NV)	W-173	W-174	
**Laycock, W.A. (WY)			WRCC-40
Lee, G.A. (ID)	W-170	W-147	WRCC-66+
**Linton, A.C. (MT)			WRCC-39
**Lund, L.J. (CA-R)			WRCC-30
Lyons, J.M. (CA-D)	W-158	W-164	
**Mathre, D.E. (MT)			WRCC-29
Matthews, D.J. (UT)			WRCC-65
McHugh, H.F. (CO)	W-153	W-175	
**Nelson, M.R. (AZ)			WRCC-20
Niehaus, M.H. (CO)	W-006	W-157	

\* USDA research administrators

\*\* Other research administrators

+ Designates Co-Administrative Advisor in a project with Co-Advisors

## ADMINISTRATIVE ADVISOR ASSIGNMENTS AS OF 3/23/88

ADMINISTRATIVE ADVISOR	WESTERN REGIONAL PROJECTS			WESTERN REGIONAL COORDINATING COMMITTEES	
Nielsen, D.R. (CA-D)	W-128			WRCC-62	
**O'Keefe, L.E. (ID)				WRCC-66+	
Oldenstadt, D.L. (WA)	W-178			WRCC-INT MKTG:	
Ozbun, J.L. (WA)	W-126	W-168			
**Plowman, R.D. (UT)				WRCC-37	
**Rasmussen, H.P. (WA)				WRCC-27	
Rice, R.R. (AZ)	W-167	W-176			
**Rogers, L.F. (WA)				WRCC-55	
Schlegel, D.E. (CA-B)	W-161+			WRCC-67	
Seiber, J.N. (CA-D)	W-130				
**Shoemaker V. (CA-R)				WRCC-42	
Smith, D.W. (NM)	W-155				
**Smith, O.E. (OR)	W-161+				
**Studer, H. (CA-D)				WRCC-51	
**Thompson, J. (WA)				WRCC-23	
Van Gundy, S.D. (CA-R)	W-084	W-134			
*van Schilfgaarde, J. (CO)	W-160+			WRCC-54	
Van Volk, V. (OR)	W-132	IR-1+			
Ware, G.W. (AZ)	W-045	W-169	IR-4+		
**Warkentin, B.P. (OR)				WRCC-61	
**Weiser, C.J. (OR)				WRCC-17	WRCC-58
Welsh, J.R. (MT)	W-150				
**Wiese, M.V. (ID)				WRCC-28	
Woodburn, M.J. (OR)	W-143			WRCC-57	
Zuiches, J.J. (WA)	W-118	IR-2+	W- IMMIGRAT.	WRCC-64	

\* USDA research administrators

\*\* Other research administrators

+ Designates Co-Administrative Advisor in a project with Co-Advisors

March 21, 1988

## WESTERN DIRECTORS' SPECIAL ACCOUNT

## FINANCIAL REPORT - MARCH 1988

ITEM	ASSESSMENT	INCOME	EXPENSE	BALANCE
OCTOBER 1 BALANCE				15,950.53
ALASKA				15,950.53
ARIZONA				15,950.53
CALIFORNIA				15,950.53
COLORADO				15,950.53
GUAM				15,950.53
HAWAII				15,950.53
IDAHO				15,950.53
MONTANA				15,950.53
NEVADA				15,950.53
NEW MEXICO				15,950.53
OREGON				15,950.53
UTAH				15,950.53
WASHINGTON				15,950.53
WYOMING				15,950.53
TOTAL	0.00	0.00		15,950.53

DATE	TRANSACTION	INCOME	EXPENSE	BALANCE
01-Oct-87	BALANCE			15,950.53
11-Nov-87	ESCOPE - KALTENBACH - ORLANDO		672.07	15,278.46
01-Jan-88	ESCOPE - E. CLARK - TUCSON, ETC		1,495.08	13,783.38
02-Mar-88	ESCOPE-KALTENBACH-D.C.		741.25	13,042.13
12-Dec-87	OCTOBER INTEREST	98.40		13,140.53
12-Dec-88	NOVEMBER INTEREST	103.32		13,243.85
01-Jan-88	DECEMBER INTEREST	101.68		13,345.53
24-Mar-87	JANUARY INTEREST	95.12		13,440.65

March 21, 1988

WESTERN DIRECTORS' AT LARGE ACCOUNT  
FINANCIAL REPORT - MARCH, 1988

ITEM	ANNUAL ASSESSMENT	INCOME	WATER REF ASSESSMENT	WATER REF INCOME	BALANCE
OCTOBER 1 BALANCE					20,126.33
AM.SAMOA	500.00	500.00	0	0	20,626.33
MICRONESIA	500.00	500.00	0	0	21,126.33
ALASKA	3,840.00	3,840.00	1,000	1,000	25,966.33
ARIZONA	6,828.00	6,828.00	1,500	1,500	34,294.33
CALIFORNIA	10,582.00	10,582.00	2,000	2,000	46,876.33
COLORADO	3,455.00	3,455.00	1,500	1,500	51,831.33
GUAM	3,740.00	3,740.00	300	0	55,571.33
HAWAII	5,011.00	5,011.00	1,000	1,000	61,582.33
IDAHO	6,048.00	6,048.00	1,500	1,500	69,130.33
MONTANA	6,397.00	6,397.00	1,000	1,000	76,527.33
NEVADA	4,924.00	4,924.00	1,000	1,000	82,451.33
NEW MEXICO	5,103.00	5,103.00	1,000	1,000	88,554.33
OREGON	7,632.00	7,632.00	1,500	1,500	97,686.33
UTAH	6,501.00	6,501.00	1,000	1,000	105,187.33
WASHINGTON	9,000.00	9,000.00	1,500	1,500	115,687.33
WYOMING	5,739.00	5,739.00	1,000	1,000	122,426.33
TOTAL	85,800.00	85,800.00	16,800.00	16,500	122,426.33
DATE	TRANSACTION	INCOME	EXPENSE		BALANCE
01-Oct-87	BALANCE				122,426.33
01-Jan-88	TRANSFER TO COLORADO STATE UNIV.		38,927.39		83,498.94
01-Jan-88	TRANSFER OF FUNDS TO COLO.		25,000.00		58,498.94
17-Feb-88	NASULGC FOR WATER ASSESSMENT		15,300.00		43,198.94
10-Dec-87	OCTOBER INTEREST	60.00			43,258.94
17-Dec-87	NOVEMBER INTEREST	63.00			43,321.94
06-Jan-88	DECEMBER INTEREST	62.00			43,383.94
11-Feb-88	JANUARY INTEREST	138.00			43,521.94
20-Mar-88	REIMBURSE CSU		1,500.00		42,021.94
	BALANCE	323.00	80,727.39		

Notes: FY1987 assessment from American Samoa has not been received.  
 Colorado's assessment is reduced by \$4200 for office space rental.  
 Colorado paid their water assessment directly to NASULGC and to this account.  
 \$1500 is being reimbursed to CSU.

COOPERATIVE STATE RESEARCH SERVICE  
REPORT TO THE  
WESTERN ASSOCIATION OF AGRICULTURAL EXPERIMENT STATION DIRECTORS  
MARCH 23-24, 1988

1. Budgets. The Congress has passed and the President has signed a full year continuing resolution for FY 1988. Details of the Department's FY 1989 budget request became available on February 16, 1988. It has been sent to you as a Station Letter. The FY 1990 budget is in preparation.

2. The Competitive Research Grants Program. The total support for competitive grants increased from \$40,651,000 in FY 1987 to \$42,372,000 in FY 1988 with the increase in animal science. Approval was given for use of funds for Plant Science Centers, but no specific appropriation was provided. The Forestry Competitive Research Grants Program was reduced from 6 million in FY 1987 to 3 million in FY 1988. The next Policy Advisory Committee meeting is March 25, 1988.

3. Animal Health. Section 1433 once again was added by the Congress for FY 1988. Similarly, the Special Grants Program was added and Animal Science in Competitive Grants was increased by \$1.7 million. In the Special Grants program, 364 proposals were received for \$45 million with only \$5.7 million being available to fund 47 grants.

4. Animal Care Guidelines. The Guide for the Care and Use of Agricultural Animals in Agricultural Research and Teaching is at the printers and should be ready for mailing in the near future. Twenty-five copies of the guide will be mailed to each SAES Director's office. Additional copies of the guide will be available at a cost of \$5.00 per copy from Association Headquarters, 309 West Clark Street, Champaign, Illinois 61820.

5. CSRS Facilities. A contract has been signed for office space in a new building nearing completion and layout plans are being developed for CSRS to occupy the third floor. Occupancy by late spring of this year is anticipated. The new building is located adjacent to L'Enfant Plaza at 9th and D St., SW and is known as the Aerospace Building, not to be confused with the Smithsonian Air and Space Museum or the NASA building in the same part of town.

6. Low-Input Agriculture. Congress has appropriated \$3.9 million in the FY 1988 budget to implement a research and extension program in low-input agriculture. An organizational meeting to discuss a preliminary version of the guidelines to be used in managing this program was held January 28, 1988 in Washington, D.C. The programs will have both research and extension components. ESCOP and ECOP representatives have been invited from each region. Patrick Madden from Pennsylvania State University will represent CSRS in implementing this program in partnership with A. J. Dye, Extension Service, Washington, D.C.

7. Water Quality. The interest in water quality remains high. The bills introduced earlier in this session are still alive. Cooperating institutions are also interested in moving ahead with this number 1 research priority, and are contemplating a unified structure for a research program. Individual institutions are already making priority adjustments to address the more urgent State and regional water quality needs.

8. Plant Science Centers. The Centers will be supported in FY 1988 by a \$2 million commitment from the National Science Foundation (NSF), a \$2 million commitment from the Cooperative State Research Service, and a \$2.2 million



commitment from DOE. The deadline for submission of proposals was March 1, 1988. Please contact Dr. Machi Dilworth, USDA's representative, on questions concerning the program at (202) 475-5042.

9. Smithsonian Exhibit. "The Search for Life" exhibit located at the Smithsonian's Museum of American History is very popular. Advance scheduling of tour groups of 10-20 people is recommended. The exhibit will be in Washington, D.C. through March 31, 1988. It will then tour the United States for approximately two-three years. It will then return to the Smithsonian Institute where it will become a permanent exhibit. Over 35,000 people have viewed it since December.

10. Staffing. We are pleased to be able to report new additions to the CSRS scientific staff. Dr. James Parochetti has joined CSRS in the area of Weed Science and Dr. Adell Brown, Jr., came to us for an IPA assignment from Southern University to work in our Office of Small-Scale Agriculture. Dr. Preston Jones (formerly with LSU) joined us to be responsible for Agronomy, and Dr. Berlie Schmidt (formerly with Ohio State University) has taken on Soil Scientist responsibilities; both reported November 1. We are delighted that Dr. Colien Hefferan has joined CSRS in the position of principal home economist, replacing Dr. Mary Heltsley. Dr. Hefferan was formerly the supervisory home economist with the Family Economics Research Group, Agricultural Research Service. Dean Lee Kolmer (IA) joined us on a temporary assignment. Dr. Estel Cobb will retire as Deputy Administrator for Plant and Animal Sciences on April 1, 1988. He has been unusually effective both as a scientist and as an administrator. His successor will be chosen through a nation-wide open competitive search which is beginning now. Dr. E. M. Wilson will carry those responsibilities as Acting Deputy Administrator while Dr. John Naegele will fill in behind Dr. Wilson as Acting Deputy Administrator for Regional Research and Special Grants. Dr. Naegele will continue to lead the agency effort in strategic planning and leadership development. Several IPA's and national searches will be used to fill expected retirements that are scheduled over the next year. More on this at the meeting.

11. Biotechnology. CSRS continues to work with all involved parties to assure research guidelines for safe field experimentation and to discourage the proliferation of potential conflicting State laws and regulations. The timely adoption of these guidelines is critical to agricultural biotechnologic research in both industry and the academic institutions.

12. Office of Agricultural Biotechnology. The USDA's Office of Agricultural Biotechnology (OAB) has been placed under the direct authority of the deputy secretary of agriculture by Secretary Lyng. Dr. Alvin Young and Dr. Daniel Jones, respectively, have been named director and deputy director. OAB will perform a coordinating role in USDA biotechnology policy and procedures, reviews of environmental safety of proposed agricultural biotechnologic research and production, and in the activities of the Agricultural Biotechnology Research Advisory Committee (ABRAC). ABRAC is currently being established by USDA to review biosafety aspects of agricultural biotechnologic research and research guidelines. The first meeting of ABRAC is proposed for March 23-24, 1988, in Washington, D.C.

13. National Biological Impact Assessment Program (NBIAP). NBIAP is a CSRS program established under the authority of the Assistant Secretary for Science and Education. It is intended to provide the scientific underpinning for assessing and monitoring the potential impacts of biotechnological processes and

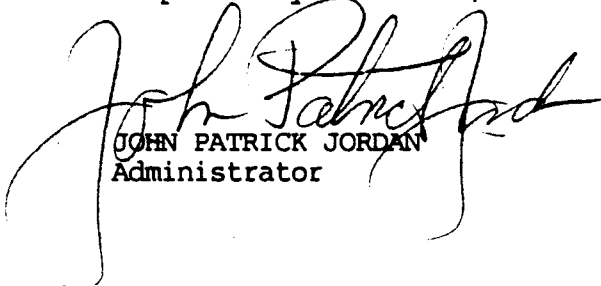
products on human welfare and the environment. NBIAP activities will be conducted in three major areas: research, monitoring, and information exchange. An ad hoc working group, chaired by Dr. N. P. Clarke, met November 19-20, 1987. The purpose of this meeting was to provide advice from the scientific community to CSRS in the structuring of NBIAP. Further scientific input is anticipated from a later summer symposium, now in planning by the Division of Agriculture Biotechnology Committee, the University of California, and CSRS NBIAP staff.

14. As outgrowth of the two Winrock meetings, several food safety and animal health bills are before Congress. They will undoubtedly be discussed in great detail at the meeting.

15. New Directors Workshop. The 1988 CSRS/ESCOP New Directors Workshop will be held June 19-21, 1988 at the Hyatt Regency Hotel, Capitol Hill, Washington, D.C. An agenda, registration and hotel accommodation information have been forwarded to you.

16. Honor Awards Program. We received sixteen outstanding nominations from the SAES system and have submitted eight nominations for final review by the Secretary's Honor Awards Committee. This committee will meet late March and we will have the results by early April. The awards will be presented by Secretary Lyng on Wednesday, June 22, 1988.

Respectfully submitted,



JOHN PATRICK JORDAN  
Administrator

REPORT TO WESTERN ASSOCIATION AGRICULTURAL EXPERIMENT  
STATION DIRECTORS  
Las Cruces, NM

PERSONNEL

Dr. Bill Chace reported to Stoneville, Mississippi, as Area Director in mid-January 1988. He was Associate Area Director in the newly formed Pacific West Area beginning July 1987.

Two scientists have been transferred to Bozeman, MT from Albany, CA as part of the Biological Control of Range Weeds team that is being developed to work on biological control methods of leafy spurge and the knapweeds.

The APHIS funded grasshopper control demonstration program is supporting ARS scientists at Twin Falls, ID and Sidney, MT under the direction of the Rangeland Grasshopper Research Lab. This program is designed for a 5 year demonstration and research program. The research design for this program consists of 1,000,000 acre blocks of land.

CONSTRUCTION

Several major construction projects are in various stages of planning or construction. These include National Small Grains Germplasm Research Facility, Aberdeen, ID; new Salinity Laboratory, Riverside, CA; Yakima Research Laboratory, Yakima, WA; National Seed Storage Laboratory, Fort Collins, CO. Construction of the National Forage Seed Production Research Center, Corvallis, OR was completed in late 1987 and 10 scientists will soon be on board. The new rangeland grasshopper research facility on the campus of Montana State University was completed in early 1987 and the scientists have moved into the building.

PROGRAM

The realignment of ARS Area Offices was completed by July 30, 1987 and we are now in the process of pulling research programs and scientists together.

The major initiatives that received added research funding in FY 88 included Reduction of Fat in Red Meat programs at Miles City, MT, Plant Germplasm Enhancement programs at Logan, UT and Fort Collins, CO.

FOREST SERVICE REPORT TO  
WESTERN AGRICULTURAL EXPERIMENT STATION DIRECTORS  
Las Cruces, N.M., March 23, 1988

Appendix F

BUDGETS:

The President's budget proposal (\$136.8 million) for Forest Service Research in FY1989 is approximately 5% less than the FY88 program of research. Some increase is proposed in Forest Protection research, primarily in Eastern insect and disease programs, with fairly major decreases in Resource Analysis Research and Timber Management Research. Research in timber management in the West will be reduced by over \$1 million and watershed research in the West will be reduced by nearly \$500,000 in the President's proposal.

The forestry competitive grants program is proposed for termination again. This program started with \$8 million in FY1985, and no money was proposed in FY88, however Congress restored it to the \$3 million level for this year. Funding comes in the Forest Service appropriation but it is administered by the Office of Grants and Program Systems, CSRS.

PERSONNEL:

Several major changes in Forest Service Research leaders have recently occurred at the national level and in the West. Dr. Jerry SESCO, former Station Director in Asheville, N.C., now heads the national research program as Deputy Chief, Research, in the Washington Office. He replaces Dr. John Ohman, who has retired. Jerry was an Assistant Director at the Intermountain Station in Ogden, some years ago, and worked with the Western region planning process.

In the West, two Experiment Station Directors have changed, or are in the process of changing. Dr. Charles Philpot is now Director of the Pacific Northwest Station at Portland with responsibility of research in Alaska, Washington, and Oregon. At the Pacific Southwest Station in Berkeley, Roger Bay is retiring the end of March. A replacement has not yet been named.

With some stabilization of budgets in the last two years, Stations have been recruiting and hiring a few new scientists in fire research, molecular biology, and forest wildlife biology.

PROGRAMS:

The Rocky Mountain Station will be moving two Research units, or a total of eight scientists, from Arizona State University in Tempe, to the Northern Arizona University campus at Flagstaff. Arizona State has requested the Forest Service Laboratory be closed for expansion of campus facilities. Wildlife scientists and Soil and Water scientists, and their projects, will be involved.

Major program changes at the Intermountain Research Station include: initiation of a Fire Chemistry Research Unit at Missoula Intermountain Fire Sciences Laboratory; termination of a Forest Products Utilization Research Unit at the Missoula Forestry Sciences Laboratory; and a major increase in program in the Engineering Technology Research Unit at Moscow with emphasis being given to developing a replacement for the Universal Soil Loss Equation for forestry purposes.

The Pacific Southwest Station in California has organized a new Research and Development program in Redding, CA, which will be increasing research on ~~vegetation~~ management problems associated with the regeneration of forest lands. Station scientists at Riverside, CA, have received several major grants to further ~~research~~ on the effects of atmospheric pollutants on forest vegetation in Sequoia National Park and in the Colorado Front area along with continuing studies of ozone impacts in Southern California.



*An estimated 200 expert systems  
will be required in agriculture  
to help farmers make decisions.*

## EXPERT SYSTEMS PEGGED FOR RAPID GROWTH

William C. Norris

Progress in artificial intelligence (AI) will be the key to the full integration of the computer with its human partners. By concentrating on knowledge representation — the machine counterpart to human memory — researchers are already delivering practical results in expert systems. Although full-fledged machine intelligence has not yet been achieved, limited but commercially viable expert systems are beginning to emerge in the marketplace.

AI will eventually become so architecturally embedded in systems and products that it will cease to exist as a separately identifiable entity. It is impossible to predict the commercial timing in all AI fields now being explored. But expert systems that truly rival capabilities of the human expert in a wide variety of fields will probably be available in the mid-1990s.

**Agricultural Applications.** Expert systems will become prevalent in applications where knowledge bottlenecks are present, where job performance is inconsistent, where a process must be performed more rapidly than is currently possible, where adverse working conditions and tedious or repetitive tasks make human involvement unpleasant, where rapid change is being experienced, and where knowledge-intensive tasks are key.

Given those requirements, the range of opportunities for expert systems applications is vast in fields such as manufacturing, medicine, process control, agriculture, and education. Tomorrow will see many more examples that few if any of us even dream about.

One field to benefit from expert systems application is agriculture. An estimated 200 expert systems will be required to answer any question that a farmer might pose or to help with a decision. Each system would address specific areas such as conservation practices, tillage machinery, marketing, pest control, and fertilizer.

Individual expert systems will be further assembled to produce decisions for the total farm. The addition of relevant computer knowledge bases, will even facilitate decisions at the county, state, and federal levels. Given the expert systems tool, the productivity of agriculture will be increased substantially. Furthermore, this increase will occur across the board, including the small farmer who for decades has lacked resources to gain access to the most relevant information that had been available to large farmers.

**Education Potential.** The public schools of our country represent an enormous untapped area for applying expert computer-based education systems. New computer-based education systems will, in effect, place a personal tutor within reach of each student. And as this occurs, knowledge-based expert systems will lead the way.

Fortunately, computer-assisted instruction can now

provide high-quality educational experiences for all youngsters. The instruction management and student testing components of these systems, which may include embryonic expert systems, have reached a level of sophistication well beyond anything imagined just a few years ago.

Today's computer-based education systems are close to being expert systems. For example, in the area known as computer-adaptive testing, students are not only tested but guided through a variety of learning situations based on their responses. The system measures each student's ability to respond to questions of varying complexity. It branches to easier or harder material as the student's answers are analyzed. It then records a profile of the student's capabilities for future reference and testing.

The system also provides refresher material in areas of suggested weakness in the student's prior knowledge. But if a student is doing well, it accelerates and increases the complexity of questions. The student's performance profile is constantly monitored and tested according to system rules that recommend to a teacher the next steps in helping the student to learn.

**Evolutionary Progress.** The computer industry is midway through its second generation of contribution to society. The first generation was characterized by the computer's isolation from all but a few of us. In this second generation, we are seeing its gradual but inexorable emergence into, and acceptance by, society. The third generation, which will dawn near the end of this century, will see the computer as an indispensable assistant in meeting a vast array of needs in our society.

Many needs can be identified today. They include the need for a cleaner environment; alternative energy sources; more jobs; more effective, less costly education and training; and more efficient production of food. They are critical today, and will become even more urgent as the world's population multiplies.

Perhaps most important, in the long term, the technologies of computers and communications will provide individuals and small communities with the opportunity to pursue their individuality to a degree not possible today. At the same time, they will provide the only analytical resource capable of dealing with the incredibly more complex interdependence that will follow.

Clearly, the appropriate perspective for the next generation of computing is one that concentrates on the

*(continued on page 42)*

*William C. Norris is chairman emeritus of Control Data Corp., Minneapolis, MN. He presented these remarks at the National Computer Conference in 1986.*

## JOINT COUNCIL ON FOOD AND AGRICULTURAL SCIENCES

## Report to

Western Association of Agricultural Experiment Station Directors  
L. W. Dewhurst

The Joint Council met in Washington, D. C. January 20-22, 1988 in a regularly scheduled session to hear discussions on the following topics.

1. Forestry Education, Extension, Research: Issues/Challenges
2. Sustainable/Low-Input Agriculture
3. National Extension Initiatives
4. Activities/Plans by the National Committees and Regional Councils
5. Changing Directions in Trade and Agricultural Policy

The presentations by Forestry follows an established pattern of the Joint Council to hear in depth presentations on various broad academic areas. These are exceptionally well done and informative. The report of the National Agricultural Research Committee (NARC) as noted in number 4 above is appended. As always, Neville Clark does an excellent job of this.

The next meeting of the Joint Council is scheduled for April 14-15 in Washington, D.C. This will be my last meeting as a member of the Joint Council as I will have completed my two-year assignment. This meeting will be to establish the national priorities for the Fiscal Year 1990 Priorities for Research, Extension and Higher Education Report. The Report will be completed by June 30, 1988 and you should receive copies shortly thereafter.

The Joint Council remains the only integrative planning and summarizing body in the agricultural system. While equal representation tends to equate with average mediocrity rather than selective excellence, the Joint Council has risen above this generalization. It is truly the "only act in town" and does an excellent job. Each of us should read the mandated reports that emanate from its deliberations.

I have been privileged to serve on the Joint Council.



JOINT COUNCIL MEETING  
JANUARY 20-22, 1988  
WASHINGTON, D.C.

REPORT  
THE NATIONAL AGRICULTURAL RESEARCH COMMITTEE

I. PREPARATION OF RESEARCH INITIATIVES

- A. Prepared and submitted in Spring of 1987
- B. Input incorporated into Joint Council report
- C. Research community well represented in Joint Council
- D. New Research Initiatives under development
  - 1. ESCOP mid-term plan document to be published January, 1988.
  - 2. Other parts of System developing input
  - 3. Select at NARC meeting February 17, 1988
  - 4. To Joint Council by March 1, 1988

II. RESEARCH ACCOMPLISHMENTS

- A. Prepared and submitted to Joint Council in Spring of 1987
- B. Long term and annual accomplishments used for first time
- C. Enhanced quality of documentation
- D. New Research Accomplishments under development
  - 1. Candidates for Long term accomplishments topics being identified, discussion at next meeting, submission to Joint Council on March 1, 1988.
  - 2. Call for Current Activities and Cooperative Activities Accomplishments on December 14, 1988
  - 3. Current and Cooperative Accomplishments to Joint Council May 1, 1988

III. DEVELOPMENT OF NARC BY-LAWS

- A. Changing leadership and loss of corporate memory
- B. NARC subcommittee drafted by-laws
- C. Deal with appointments, terms, procedures
- D. Draft Circulated
- E. Adoption expected in February, 1988

IV. ATTACHMENTS

- A. NARC Research Initiatives, 1987
- B. ESCOP Mid Term Update of Research Priorities (1988)
- C. Draft of NARC By-Laws

PRIORITY ORDER OF INITIATIVES BY AVERAGE ACROSS REGIONS			Average of 4 Regions	Regional % Ranking			
Initiative				NE	SO	NC	WE
1.	Maintain & Protect Water Quality & Quantity	<u>*1</u>	3.35	1	1	1	1
2.	Biotechnology		3.85	1	1	1	1
3.	Genetic Improvement of Econ. Important Plants		6.93	1	1	1	1
4.	Sustaining Soil Productivity		7.75	1	1	1	2
5.	Improved Management of Crop Pests and Diseases		7.93	1	1	2	1
6.	Food Process. Preserv. & Quality Enhancement		8.68	2	1	2	2
7.	Animal Efficiency in Food Production	<u>2</u>	9.10	2	2	1	2
8.	New & Expanded Uses for Ag. & Forest Products		9.18	3	2	1	2
9.	Integrating Agricultural Technologies		9.28	3	2	1	1
10.	Interrelationships of Food, Nutrition & Health		9.35	1	3	2	1
11.	Marketing of Agricultural and Forest Products		10.10	3	2	2	2
12.	Animal Health and Disease	<u>3</u>	10.25	2	2	3	3
13.	Impact of Ag. & Forestry Pol. on Global Mkts.		12.15	3	3	2	3
14.	Rural Family and Community Well-Being		13.58	4	4	3	3
15.	Agricultural and Forest Land Use		13.73	2	3	3	3
16.	Energy Efficient Systems		14.95	3	4	3	4
17.	Sensors & Computing Systems for Food & Ag.	<u>4</u>	15.05	4	3	3	4
18.	Productivity of Range and Pastureland		15.28	4	3	3	3
19.	Forest Productivity		15.73	4	4	4	4
20.	Effects of Atmospheric Deposit. on Ecosystems		16.63	2	4	4	4
21.	Plants for the Urban Environment		17.33	4	4	4	4

\*1 = top 25%

2 = upper mid 50%

3 = lower mid 50%

4 = bottom 25%



# Table 4: New Initiatives and Objectives

- 1 Maintain & Protect Water Quality & Quantity
  - Groundwater Quality
  - Water Quantity
  - Water Use Efficiency
  - Conservation Practices
  - Water Use Policy
  - Household Water Use
- 2 Biotechnology
  - Plant Productivity
  - Plant Disease Resistance
  - Nutritional Quality of Plants
  - Biological Control of Pests
  - Biologically Active Materials
  - Diagnostic & Immunologic Products
  - Animal Disease Resistance
  - Animal Development & Productivity
  - Impacts of Biotechnology
- 3 Genetic Improvement of Economically Important Plants
  - Gene Characterization
  - Germplasm Acquisition & Maintenance
  - Plant Breeding
  - Resistance to Pests
  - Soil Microorganisms
  - Consumer Preferences
  - New Uses for Plant Products & Components
- 4 Sustaining Soil Productivity
  - Erosion-Soil Property Relationships
  - Soil Conservation Policy
  - Soil Conservation Economics
  - Status of Soil Productivity
  - Tillage Management Interactions
  - Soil Dynamics
- 5 Improved Management Of Crop Pests
  - Incidence, Prediction, & Management
  - Pesticide & Pest Management
  - Quantifying Constraints to Plant Productivity
  - Epidemiological Systems
  - Biological Control Techniques
  - Integration of Pest Management Into Crop Production Systems
- 6 Food Processing, Preservation, & Quality Enhancement
  - Processing and Preservation
  - Quality Enhancement
  - Food Safety
  - By-Products and the Environment
- 7 Animal Efficiency In Food Production
  - Animal Genetics
  - Reproductive Physiology
  - Animal Nutrition
  - Animal Protein and Lipid Synthesis
  - Animal Management Systems
- 8 New And Expanded Uses For Agricultural And Forest Products
  - New and Alternative Crops
  - Processing Technologies
  - Added Value
- 9 Integrating Agricultural Technologies
  - Assessment of New Technologies
  - Market Forces & Enterprise Profitability
  - Capital Investment & Financial Requirements
  - Integrated Systems
  - Alternative Systems
  - Optimal Input Systems
- 10 Interrelationships Of Food And The Nutritional And Health Status Of People
  - Human Nutritional Requirements
  - Dietary Practices
  - Nutritional Quality of Foodstuffs
  - Bioavailability of Nutrients
  - Health Influences from Diet
- 11 Marketing Of Agricultural And Forest Products
  - Supply, Demand, & Price Relationships
  - Grades & Standards
  - Market Efficiency & Performance
  - International Market Development
  - Market Strategies & Power
  - Consumer Preferences & Quality
- 12 Animal Health And Disease
  - Immunological Advances
  - Integrated Health Management
  - Epidemiology of Animal Diseases
  - Residue & Toxicology Studies

NEW INITIATIVES AND OBJECTIVES (Continued)

- 13 Impact Of Agricultural And Forestry Policy On Global Markets
  - Commodity, Factor, & Financial Market Relationships
  - Political Economy of domestic & Foreign Commodity Policy
  - Comparative Productivity Growth & Competition in World Markets
  - Impacts of Emerging Technological Changes for Public Policy
  - Policy & Institutional Design
- 14 Rural Family And Community Well-Being
  - Economic Alternatives & Diversification
  - Family Stress Factors
  - Displacement Assistance
  - Resource Management
  - Environmental & Safety Factors for Families
  - Organizing Capacities & Governance of Communities
  - Interdependence Among Agriculture, Families & Communities
- 15 Agricultural And Forest Land Use
  - Land Use Policies, Land Values, & Tax Base
  - Land Use Alternatives
  - Recreation Resource Management
  - Consolidation of Forest & Agricultural Land Information
- 16 Energy Efficient Systems
  - Efficient Plant & Animal Production & Processing Systems
  - Efficient Energy Conversion Technologies
  - Alternative Sources
  - Extraction Procedures & Practices
- 17 Sensors And Computing systems For Food And Agriculture
  - Sensor Technology Development
  - Electronic Systems for Plant & Animal Production
  - Electronic Systems for Food Processing
- 18 Productivity Of Range And Pastureland
  - Rangeland Ecology & Management
  - Plant/Animal Interactions
  - Water Management
  - Plant Improvement
  - Weed & Brush Management
- 19 Forest Productivity
  - Silvicultural Techniques & Practices
  - Genetics & Superior Tree Production
  - New Processes, Products & Uses for Wood
  - Forest Health
- 20 Effects of Atmospheric Deposition on On Ecosystems
  - Chemical Exposures
  - Amount-Response Relationships
  - Accumulation of Toxicants in Plants and Animals
- 21 Plants For The Urban Environment
  - Plant Materials
  - Management & Maintenance Strategies

## WESTERN ASSOCIATION OF AGRICULTURAL EXPERIMENT STATION DIRECTORS

March 1988

UAB Report

Colin Kaltenbach

I have been asked by Chairman Donoho to continue as the ESCOP representative to the Users Advisory Board. Lanny Boyd and I attended the recent meeting in Washington, D.C. where the main order of business was response to the executive budget. Following the usual message from Dave Gibbons, OMB, the board felt obliged to hold the executive line. Although the subcommittee charged with developing recommendations for the CSRS budget proposed a response reasonably close to the NASULGC recommendations, the full board failed to concur and in the end, restoration of Section 1433 Animal Health Funds and a small increase in Higher Education were the only recommended changes.

As you know, we tried to get UAB to begin budget considerations early in the process. We had minimal success this year but given their experience last month I believe the board will be more receptive to year-long consideration of budget issues. We will continue to work toward this end.

## National Agricultural Research Committee (NARC)

### Purpose, Organization and Procedures

#### 1. Purpose and Activities

##### 1.1 Relationship to the Joint Council

NARC is one of three functional committees established by the Joint Council to foster planning and coordination among the State Agricultural Experiment Stations, research agencies of the USDA, 1890 Colleges and Tuskegee Institute, and other institutions, organizations and firms that conduct research in food, agriculture and forestry. NARC reports annually to the Joint Council.

##### 1.2 Relationship to Other Joint Council Committees

NARC provides a liaison member to the National Extension Committee and the National Higher Education Committee, both of which are functional committees established by the Joint Council. These two committees provide a liaison member to NARC. The purpose is to interact directly on issues of mutual concern and interest.

##### 1.3 Methodology for Selection of Executive Secretary within USDA

The Executive Secretary for NARC shall be appointed by the USDA Assistant Secretary for Science and Education.

##### 1.4 Matters Handled by NARC as an Individual Committee

NARC is responsible for:

- 1.41 Noting changes in research needs in the food, agriculture and forestry, public and private research systems at the national, regional and local levels,
- 1.42 Serving as a forum for the leaders of USDA, State and private research organizations to mutually address problems of importance to food, agricultural and forestry research,
- 1.43 Seeking effective interactions with budget processes, and
- 1.44 Identifying and analyzing agricultural research policy issues.

## 1.5 Matters Recommended by NARC to the Joint Council for Final Decision

- 1.51 National research priorities,
- 1.52 Investments of funds and other resources to meet identified research needs and exploit research opportunities,
- 1.53 Agricultural research policy directions, and
- 1.54 Research accomplishments for inclusion in reports.

## 2. Organization

### 2.1 Voting Memberships and Method of Selection

- 2.11 Eight representatives of regional SAES associations, two elected by each of the four regional SAES Director's associations.
- 2.12 Chair, ESCOP National and Regional Planning Committee.
- 2.13 Six representatives of the United States Department of Agriculture
  - 2.131 Administrator and Deputy Administrator (NPS) of the Agricultural Research Service
  - 2.132 Administrator and Deputy Administrator of the Cooperative State Research Service
  - 2.133 Administrator of the Forest Service
  - 2.134 Administrator of the Economic Research Service
- 2.14 One representative of the 1890 Research Directors elected by the 1890 Association of Research Directors
- 2.15 One representative of the Association of Administrators of Home Economics elected by the AAHE.
- 2.16 One representative of the Association of American Veterinary Medical Colleges elected by the AAVM
- 2.17 One representative of the National Association of Professional Forestry Schools and Colleges, NAFSC.
- 2.18 (1) One representative of the American Association of State Colleges and Universities elected by AASCU

- (2) One representative of the American Association of State Colleges of Agriculture and Renewable Resources elected by the AASCARR

2.19 Three representatives of the private sector elected by the Agricultural Research Institute

## 2.2 Nonvoting Liaison Members

2.21 National Extension Committee Liaison

2.22 National Higher Education Committee Liaison

2.23 Human Nutrition Information Service

## 2.3 Election of Officers and Duties

### 2.31 Officers and Their Election

The officers shall be Co-Chairs, one from the United States Department of Agriculture and one from the Association of State Agricultural Experiment Stations, each elected for a two-year term in alternate years but can be re-elected, and an Executive Secretary. The Executive Secretary will be provided by USDA.

### 2.32 Duties of Officers

#### 2.321 Co-Chairs

The Co-Chairs provide leadership, direction and counsel for all activities of NARC. They cause initiative to be taken on matters of importance to national research planning, policy and funding. They chair the meetings of NARC, prepare the agenda for those meetings, as sign duties and coordinate the activities of all subcommittees. They are responsible for maintaining communications with all public and private food, agricultural and forestry research agencies.

#### 2.322 Executive Secretary

The Executive Secretary fulfills all of the secretarial duties of NARC. The Executive Secretary will arrange for the recording, preparation and distribution of all minutes of NARC meetings. In cooperation with the Co-Chairs, the Executive Secretary will prepare a list of all current NARC members at the close of the last meeting of the calendar year and distribute it with the minutes of that meeting. If the Executive Secretary is unable to serve, the Co-Chairs shall designate an acting recording secretary.

### 2.323 Record Maintenance and Transfer

New officers are responsible for maintaining and passing on to their successors complete sets of official documents of a continuing and directive nature.

## 2.4 Meeting Dates

There will be one (1) regular meeting scheduled for NARC each calendar year, usually held in February. The Co-Chairs are encouraged to call special meetings to consider emergency issues.

### 2.41 Meeting Agenda

In advance of each meeting, the Co-Chairs of NARC will request the members to submit items for the agenda. The Co-Chairs shall distribute the agenda to all members at least one (1) week prior to the NARC meeting.

## 2.5 Responsibility of NARC Members

Members are responsible for explaining the actions of NARC to their constituent groups and to bring topics from their respective groups to NARC for consideration and action.

## 3. Subcommittees

Subcommittees shall be established to meet special needs and extend NARC's capacity to serve its constituencies.

### 3.1 Establishing Subcommittees

Subcommittees are established by the Co-Chairs of NARC upon the advice and consent of NARC membership. Membership needs of the subcommittees are determined by NARC. With the establishment of each subcommittee, the following information is to be recorded in NARC minutes:

- a. Name and category of subcommittee,
- b. Purpose and specific charge to the subcommittee,
- c. Membership needs - duration of terms, and
- d. Special subcommittee needs.

### 3.2 Subcommittee Categories

3.21 Standing Subcommittees are established for an indefinite period of time with specific purposes and a stated charge. The Chair and subcommittee members are appointed by NARC Co-Chairs. Members are divided into terms for staggered period of service.

3.22 Ad Hoc Subcommittees are established for a specific purpose and automatically discontinued when that purpose has been fulfilled. The Chair and members are appointed by NARC Co-Chairs. Members are not divided into terms of service.

#### 3.23 Liaison Representation

Representatives of NARC to other group committees are appointed by the Co-Chairs of NARC, and serve at the will and pleasure of the Co-Chairs. Such representatives have the same reporting responsibility as do subcommittees.



## WESTERN ASSOCIATION OF AGRICULTURAL EXPERIMENT STATION DIRECTORS

March 1988

## Western Regional Council Report

Colin Kaltenbach

The Western Regional Council met at Chico State University, Chico, California, February 4-5, 1988. Dr. Elmer Clark kindly represented WDA in my absence. In addition to WDA the meeting was attended by representatives from CAHA, Joint Council, ES, AAVMC, AASCU/AASCARR, USDA-ES, AAHE and ARS.

Following is a list of priorities adopted by this group for research, extension and higher education. The narrative description supporting each of these priorities has been provided to Harriet Sykes for inclusion in the minutes of this meeting. A strong experiment station influence is noted.

Western Regional Priorities

1. Protect the quality and increase the supply of water
2. Enhance scientific knowledge and expertise.
3. Enhance profitability and global competitiveness of United States agriculture.
4. Expand biotechnology and its application to improve the production and utilization of food and fiber.
5. Improve human nutrition and understanding of diet/health relationships.
6. Improve forest and rangeland management and productivity.
7. Improve food processing, quality, distribution, and safety.
8. Improve genetically economically-important plants.
9. Develop new and expanded uses of agricultural and forest products.
10. Strengthen family and community well being.
11. Sustain soil productivity.
12. Increase animal efficiency and production.

## **FY90 PRIORITIES FOR WESTERN REGIONAL COUNCIL**

Developed by  
Western Regional Council  
February 4-5, 1988

### **Introduction**

Although the Western region of the United States has many concerns similar to other regions, it has a special character which has a direct impact on priorities established by the Western Regional Council. The Western region is characterized by diversity. The distribution of the population is extreme, ranging from highly-populated areas to large, unpopulated areas. Demographics of the population indicate that the percentage of people with Hispanic or Asian origins is accelerating.

The agriculture of the West also reflects diversity with a wide range of elevations, soil types, and climatic conditions. The people of the region have a special interest and concern regarding the use of natural resources, especially water. Over 100 different commodities are produced. Farms range from small specialty-crop farms to some of the largest dairies and agribusinesses in the nation. International trade has a direct impact in the Western region, with a special emphasis on the "Pacific Rim." The priorities developed for the Western region reflect not only its unique concerns, but also the changing role of agriculture domestically and worldwide. The agricultural, educational and research institutions of the West also reflect the West's diversity. The current restructuring of society and agriculture has required that science and educational institutions respond with new and unique programs which foster economic development for individual states and for the United States as a whole. With increased competition for resources and technology, priorities are being set by all of the institutions. Increased cooperation among institutions and with private industry is increasing. Unique relationships between private and public institutions will be essential in maintaining competitiveness in United States agriculture.

### **Western Regional Priorities**

The overall priorities, listed in rank order, are:

1. Protect the quality and increase the supply of water.
2. Enhance scientific knowledge and expertise.
3. Enhance profitability and global competitiveness of United States agriculture.
4. Expand biotechnology and its application to improve the production and utilization of food and fiber.
5. Improve human nutrition and understanding of diet/health relationships.
6. Improve forest and rangeland management and productivity.
7. Improve food processing, quality, distribution, and safety.
8. Improve genetically economically-important plants.
9. Develop new and expanded uses of agricultural and forest products.
10. Strengthen family and community well being.
11. Sustain soil productivity.
12. Increase animal efficiency and production.

## Narrative Description of Priorities

### Priority 1: Protect the quality and increase the supply of water.

**Situation:** Water is an essential nutrient for animals, plants, and people and is a necessity for industrial purposes. It is crucial that a concentrated effort be made to effectively manage this resource to protect the quality and to ensure sufficient quantity. Approximately 86% of the water resource in the continental United States is in groundwater aquifers. Agriculture uses about 68% of the groundwater withdrawn to produce the nation's food supply. One-half of the people in the United States depend upon it for drinking water. In the West, most water comes from precipitation falling on mountain forests and rangelands. There is concern that this resource is being threatened by toxic chemicals from various sources. While the dependence on groundwater is increasing, there is also concern that airborne pollutants from industrial and urban sources are washed down by precipitation to contaminate surface water supplies. The future of agriculture and forest production, economic stability, in-stream fisheries, and the health and well being of people rests upon a dependable supply of good water.

**Thrust:** Utilize the united resources of research, extension, and higher education to ensure an adequate quantity and acceptable quality of water while sustaining agriculture, forestry, and industrial and municipal activities.

#### Objectives:

1. Increase efforts to train engineers, foresters, and other scientists in state-of-the-art technology to enhance a systems approach to dryland water management.
2. Design innovative programs for transfer of technology to the user.
3. Develop methods to predict the environmental fate of agricultural and forest chemicals and assess risks of groundwater contamination.
4. Develop techniques to increase water yield and availability for in-stream and downstream uses.
5. Develop water management and irrigation systems that minimize water quality degradation.
6. Determine effects of surface and subsurface flow in forest and agricultural areas on the transport of sediments and chemicals to provide data for developing regulatory guidelines, to improve watershed-management practices, and to reduce erosion and sedimentation from forest and rangeland.
7. Develop integrated systems and procedures including economical, nonchemical crop production practices, and new varieties and species of crops that will conserve existing water supplies and prevent soil erosion.
8. Develop models for the allocation, efficient pricing, and equitable distribution of water resources.
9. Improve management practices to prevent salinity damage to highly productive crop producing areas.
10. Improve irrigation efficiency to reduce energy requirements and the importation of waterborne salt.

### Priority 2: Enhance Scientific Knowledge and Expertise.

**Situation:** The continued development of human capital is critical to the ongoing success of the nation's food, agricultural, and forest resource system. Expertise in the agricultural and complimentary sciences is of paramount importance if the United States is to regain leadership and the competitive edge in global economy. To meet this challenge, greater efforts are needed to attract and retain quality students in food and agricultural sciences, curricula

and faculty need to be improved, facilities and instrumentation must become contemporary, and better information and dissemination of career opportunities must be developed.

**Thrust:** Attract and retain increased numbers of quality students, women, and minorities in food, agricultural, home economics, and forest resource programs. Improve curriculum development in light of changing technology and social conditions. Provide adequate facilities and contemporary instrumentation for faculty and students in food, agriculture, forest resource research, and teaching.

**Objectives:**

1. Attract academically strong students from both rural and urban areas by means of career information publicity and scholarships.
2. Develop recruitment programs specifically targeted toward ethnic minority youth to assure adequate representation among college graduates in food, agriculture, and natural resources.
3. Increase number of graduate students who have an undergraduate background in agriculture, home economics, or natural resources, as appropriate, to ensure a strong relevance of their future professional work to the needs of the national food, agricultural, and natural resource system.
4. Develop programs to attract non-traditional students (i.e., older, re-entry students, and others located at sites removed from campus who are taught by television-interactive networks).
5. Promote K through 12 classroom programs that provide information and experiences for mainstream teachers and pupils to improve the image of careers in food, agriculture, and natural resources. Youth and farm organizations such as FHA, HERO, 4-H, FFA, and the Farm Bureau can be effective local resources for these classroom programs.
6. Promote strong faculty and peer advisory programs in order to retain quality students.
7. Increase cooperative endeavors through multi-disciplinary efforts such as coordinating councils to monitor existing inter- or multi-disciplinary programs or to develop new ones.
8. Seek to have more agricultural and home economics courses accepted for general education requirements.
9. Update and/or extend facilities and equipment to support new and continuing programs through both internal and private funding.
10. Develop internship programs to extend student opportunities for "real world" training or career development.
11. Internationalize curriculum to make the university a more viable institution for recruiting and teaching international students and for the purpose of contributing to developing countries. Increase skills needed by United States students for careers in international development. Increase the awareness of United States students of the global nature of agriculture and the importance of international trade.
12. Work with community advisory councils and industries to identify the needs and gain support for new and existing programs.
13. Provide a continuum of faculty development programs for recruitment and pre-entry through retirement and emeritus status.
14. Articulate problems that preclude an orderly educational progression of students from community/two-year colleges and general programs to agriculture, home economics, and natural resource degree programs.

15. Enhance present value-added assessment of the quality of graduates of agriculture, home economics, and natural resources in post baccalaureate employment.

Priority 3: Enhance profitability and global competitiveness of United States agriculture.

Situation: During the 1970's and 1980's both the importance of the United States in world agricultural commodity markets and the importance of those markets to the financial health of United States agriculture increased. During the 1970's, world trade increased fourfold and United States exports increased sixfold. Over one-third of United States cropland was committed to production for export by 1980, and two out of every five tons of farm commodities traded worldwide were produced in the United States. Over 60 million acres were brought into production during the 1970's, virtually all for export production. Investments for expanded markets, accompanied by inflation, resulted in inflated land prices, increased costs of production, and increased farm debt. Yet, markets and prices expanded faster and profit levels supported the growing capacity. The same factors that supported expansion in the 1970's revised themselves in the 1980's. Growth in exports slowed due to slow economic growth abroad, expanded overseas productivity, debt problems in developing countries, domestic and trade policy decisions, and a high valued U.S. dollar. Profitability and asset values declined in response to the shock and financial health of agriculture deterioration.

Profitability with current United States agriculture is dependent upon expanded markets. Thus, the ability to compete in foreign markets is a key to the economic viability of agriculture. In turn, competitiveness is dependent upon both domestic and trade policies in the United States, other countries which do not distort trade flows, and productivity growth. Of increasing concern is the fact that many other countries have imported our agricultural production technology and have coupled it with inexperienced labor to create a new competitor for our products.

It is evident that the United States must be a low-cost producer to be competitive in both domestic and world markets. As well, adding value to these products prior to marketing will create more total income to the United States. Being a low-cost producer and adding value will require food producers and processors to have access to the latest and most up-to-date technology. The United States must remain a leader in providing new technology if the food and fiber sector is to remain profitable and competitive.

Thrust: Maintain competitiveness in the United States and world agricultural market place by expanding and maintaining United States leadership in new production and processing technologies. Increase availability of information on new technologies and ability to make wise and profitable decisions through research, teaching, and extension programs in the science and educational institutions.

Objectives:

1. Discover and evaluate new technologies that contribute to increased productivity and decreased per unit costs of production. (Investments in research and development and productivity growth are increasing faster in competing and market countries than in the United States.)
2. Encourage development of consortiums involving both private and public research sectors in order to make more rapid national advances in agricultural technology.
3. Develop decision, financial, and production management skills of farm operators.
4. Influence development of domestic and trade policies on competitiveness and the short- and long-term profitability of United States agriculture through providing a sound knowledge base.
5. Determine and analyze impacts of alternative marketing strategies, financial strategies, alternative enterprise combinations, and organizational strategies on profitability and competitiveness.
6. Determine and assess alternative markets for United States agriculture and value-added, agri-based products.

7. Develop value-added, agri-based products for domestic and world markets.
8. Enhance understanding of the linkages between the agricultural sector, the national macroeconomy and world economy and the impacts of change on profitability and financial health of the sector.
9. Internationalize agricultural curriculum at institutions of higher education to enhance understanding and ability of students to deal with problems of a global agricultural market economy.
10. Strengthen technology transfer process to enhance the competitive position of United States agriculture.
11. Develop integrated information systems to enhance the decision making capability of producers and processors.

**Priority 4: Expand biotechnology and its application to improve production and utilization of food and fiber.**

**Situation:** Recent advances in molecular and cellular biology have provided agricultural scientists with techniques to maintain increased production levels of economically important plants, animals, and microbes while reducing inputs. These advances improve the quality and quantity of food and fiber; increase resistance to environmental stresses, diseases, and pests of plants; and provide more sensitive diagnostic tools and effective vaccines for animal diseases. Biotechnology research through recombinant DNA (rDNA) techniques can give the United States agriculture and forest resources an enhanced potential to become more competitive by lowering costs of production and increasing international trade.

**Thrust:** Increase knowledge of molecular and cellular processes in plants, animals, and microbes, and the inheritance of these functions so that genetic materials can be utilized to improve the quality and quantity of food and fiber produced, and assure the environmental safety and compatibility of genetically modified products.

**Objectives:**

1. Use recombinant DNA materials to manipulate plant metabolism, alter composition of plant products, improve processing quality, and produce plants resistant to stress or herbicides.
2. Accelerate development of plant resistance to biotic stresses caused by diseases and insects by using genetic engineering.
3. Correct nutrient deficiency, prevent loss of nutrients during storage, and eliminate or modify undesirable nutritional properties of plants through genetic engineering.
4. Develop highly specific organisms that can be used to control insect pests of plants and livestock.
5. Use cultures of micro-organisms, plants, and animals to produce large quantities of biologically active materials such as growth and reproductive hormones and new vaccines or diagnostic tools.
6. Develop disease resistance in livestock species.
7. Augment and improve productivity in livestock by use of genetic engineering methods. Modify genetic systems to reduce levels of saturated fat in meats while retaining palatability.
8. Modify curriculum to include biotechnology techniques for undergraduate and graduate students. Develop systems for transferring biotechnology knowledge into management systems that can be used by producers.
9. Assess economic impact of biotechnology on the size of agricultural operations and the structure of rural communities. Assess the potential impact of introducing genetically engineered organisms into the environment.

10. Control quality parameters of plant and animal raw agricultural commodities and products through genetic engineering. Control the biodeterioration of fresh and lightly processed fruits, vegetables, and grains so that lucrative domestic and foreign produce markets may be expanded.
11. Develop biological agents to accelerate and alter agricultural and forestry by-products and biomass for greater value as feeds and energy sources.
12. Disseminate knowledge from biotechnology research in public institutions to a broad clientele in agricultural business and public sectors.
13. Facilitate transfer of biotechnology products and techniques into agri-business, production management systems, and other private sector areas, to increase production profitability and national competitiveness of agricultural, food, and forest products.

**Priority 5: Improve human nutrition and the understanding of diet/health relationships.**

**Situation:** The food production, processing and distribution system of the United States provides one of the highest quality food supply systems in the world. However, consumer preferences and dietary practices can be adversely influenced by social, cultural, ethnic, behavioral, economic, and environmental factors resulting in an inadequate diet. Consumers are often bombarded and confused by nutritional and diet/health recommendations which are based on unreliable or inadequate information. The ethnic diversity of population groups in the Western United States increases the challenge of providing adequate information.

**Thrust:** Improve the nutritional and health status of the population by developing reliable research information regarding dietary requirements, the relationship between diet and health, and the safety of the food system; by providing sound education, extension, and resident instruction programs to transmit the above research information to all American consumers; by developing integrated research and educational programs so that the food production system provides consumers with the highest quality food products; and by training an adequate number of nutritional and food researchers and educators to meet the needs of the research and educational system.

**Objectives:**

1. Determine more precisely the nutritional requirements of individuals as influenced by age, occupation, lifestyle, climatic conditions, and sex.
2. Identify economic, behavioral, social, cultural, and environmental factors that influence consumer preferences and dietary practices. Define effective techniques for nutrition and food safety education among various populations.
3. Measure effects of production, processing, and preparation practices on the nutritional quality of food products and develop new methods to maintain the highest quality food products.
4. Identify interactions among foods, their constituents, and other substances consumed as they affect the bioavailability of nutrients. Develop methods for measuring nutrient concentrations in tissues and fluids and relate to long-term health factors.
5. Define nature and magnitude of influence on health by certain food components such as lipids, saturated fats, cholesterol, chemical residues, and naturally occurring toxicants.

**Priority 6: Improve forest and rangeland management and productivity.**

**Situation:** The forests and rangelands of the West comprise 63% of the total forests and rangelands in the United States. Besides producing valuable food and fiber, these lands are key water production areas, provide valuable wildlife

habitat, and provide recreational opportunities such as skiing, camping, fishing, and wilderness solitude. Demands for goods and services have been growing rapidly. To meet these increased demands for products and amenities will require improved cost-effective management techniques in all areas of forest and rangeland concerns. Innovative programs in education and training of managers and scientists, and improved techniques in technology transfer, will also be needed in the immediate future.

**Thrust:** Improve the management of forests and rangelands by developing new techniques and systems to increase productivity, and protect and enhance environmental and social amenities.

**Objectives:**

1. Develop innovative technologies for improving forest regeneration and silvicultural practices to increase productivity and enhance other values.
2. Develop improved management systems for protecting forests and rangelands from fire, erosion, insects, and diseases, especially in the key wildland-urban interface.
3. Develop a better understanding of rangeland plant and animal systems to improve productivity for domestic livestock, and enhance wildlife and recreational values.
4. Develop new products and new uses for wood to expand domestic and international markets.
5. Develop a better understanding of forest and atmosphere interactions to predict and ameliorate impacts on key forest and rangeland watersheds.
6. Improve methods to better integrate forest, wildlife, and fishery management techniques to protect key resource values and maintain or improve productivity.

**Priority 7: Improve food processing, quality, distribution, and safety.**

**Situation:** More than two-thirds of the final cost of food to consumers is a result of postharvest activity, including processing, transportation, storage, preservation, and marketing. Consumers demand foods that are safe, wholesome, nutritious, tasty, and convenient, but at the same time are low in cost. Public concern continues to increase regarding the use of chemicals in the production and processing of these food products. Technology will be required in the future to decrease the level of chemicals in foods as well as to prevent environmental contamination by these chemicals. Additional precautions will also be required in the handling, recycling, and disposing of agricultural chemicals and waste products. Technologies must also be developed to maintain and improve the overall quality and safety of foods to meet consumer demands.

**Thrust:** Improve the food processing, quality distribution, and safety of foods by increased emphasis on developing research, teaching, and extension programs in the food sciences.

**Objectives:**

1. Increase knowledge of the basic physical, chemical, and biological properties of foods including the molecular and structural properties and their affects on processing, packaging, quality, and safety.
2. Increase understanding of the mechanisms of food spoilage.
3. Improve existing and develop new food processing systems to ensure safe and nutritious food products.
4. Develop methods to decrease contamination of foods and food products with environmental contaminants.



5. Develop educational programs to increase the knowledge of consumers, food processors, and food handlers regarding food safety.
6. Determine properties of waste products, and improve methods of disposal and utilization of waste chemicals from agricultural production, as well as waste materials from food processing.
7. Increase number of graduates in the food sciences to meet the demand for professionals in this area.
8. Increase transfer of new technology of users through extension programs and increased cooperation between the public and private sectors.

Priority 8: Improve genetically economically-important plants.

**Situation:** Plant productivity can be improved by effectively utilizing the diversity of genetic material worldwide and by applying technology of genetic manipulation and breeding. Many desirable traits can be genetically structured in plants and their inheritance can lead to highly efficient new varieties and cultivars that resist pests and environmental stresses such as drought, diseases, and insects. Genetic improvements alter the growing season requirements, provide vigor and production efficiency, and would reduce the need for chemical pest controls.

**Thrust:** Develop highly efficient plants that resist pests and environmental stressors.

Objectives:

1. Identify genetic elements that determine superior traits.
2. Intensify collection of a diversity of germplasm of economically important plants.
3. Develop techniques that will incorporate selected genetic material into cultivars for improved production efficiency and resistance to pests and diseases.
4. Determine nutritional relationships of plants with beneficial soil microorganisms and magnify the benefits through genetic modification of plants.
5. Utilize genetic variability to alter plant characteristics to meet consumer demands.
6. Improve understanding of the ecological structures and process relationships among populations, communities, ecosystems, and natural landscapes in forests and rangelands.

Priority 9: Develop new and expanded uses for agricultural and forest products.

**Situation:** Agricultural profitability would be enhanced and society would be benefitted if new and expanded uses were made of agricultural and forest products. The current supply and demand imbalance would be minimized and the naturally abundant resources in the United States for agriculture and forestry production would be optimized. There is ample potential to utilize these products for industrial and non-food purposes.

**Thrust:** Develop new agricultural and forest products to be used for industrial and non-food purposes.

Objectives:

1. Identify markets for new products.
2. Develop new crops for special needs in industry.

3. Develop processes to utilize materials from agriculture and forest production to make new products.
4. Develop technologies to convert low-value agricultural and forest by-products to high-value speciality products.

**Priority 10: Strengthen family and community well-being.**

**Situation:** Strong family units are vital to the existence of strong communities. Families have experienced the negative impacts of farm financial hardships as a result of changes in the United States and world economics, population shifts, unemployment, and job loss. The increasing number of women in the work force, an increasing number of single heads of households, and growing responsibilities for elderly family members as the life span lengthens, all precipitate different management responsibilities and practices. The survival of many families is dependent upon the economic vitality of the rest of the community which can provide them with non-agricultural jobs in other economic sectors. Survival is also dependent upon the enlightened perspective and decision-making capabilities of local leaders who will be shaping the future of their communities. Economic and social changes require sound research and educational programs to assist families and community leaders to find alternative solutions to emerging life-span development and resource-management issues.

**Thrust:** Strengthen and enhance economic, physical, social, and environmental well-being of rural communities, and educate families to effectively manage their resources.

**Objectives:**

1. Assist families and youth during the transition to non-farm environments by offering programs in stress management, financial management, home-based business development, and non-farm job training.
2. Teach leadership skills to volunteers, youth, and paraprofessionals.
3. Explore alternatives supporting the continuation and possible broader utilization of the Family Community Leadership Program.
4. Encourage public-sector entrepreneurs and family-based businesses.
5. Encourage local government and private-sector entrepreneurs to improve delivery of health, transportation, educational, environmental, energy, and other services.

**Priority 11: Sustain soil productivity.**

**Situation:** Soil resources are a primary determinant of the productivity of our crop, range, and forest lands. Accelerated erosion by wind and water leads to significant losses of organic matter and threatens long-term soil productivity. In addition to reduced soil productivity, erosion creates sediment which causes large and continuing in-stream and off-site damages resulting in additional cost to society. Erosion leads to productivity problems such as loss of effective water holding capacity, loss of plant nutrients and organic matter, and loss of surface-soil attributes which enhance infiltration of water and seed-bed characteristics. In an effort to minimize production cost and maximize economic stability, farmers utilize production methods, tillage practices, and equipment that often contribute to soil erosion and declining productivity. There is a serious lack of knowledge about the long-term success of these practices. This situation presents an opportunity and a challenge for the coordinated efforts of basic and applied researchers, teachers, extension workers, and soil conservationists to develop and implement management strategies.

**Thrust:** Develop economically-feasible, soil management systems for conserving the soil resources of the West for stable and productive crop, range, and forest lands.

Objectives:

1. Improve quantitative assessment of the impact of soil erosion.
2. Develop and employ management strategies to enhance soil productivity and crop quality.
3. Develop and implement management strategies to prevent salinization.
4. Determine extent and severity of soil compaction and its impact on soil productivity in agricultural and forestry practices.

Priority 12: Increase animal efficiency and production.

**Situation:** Animal products are major sources of many essential nutrients in the human diet. Research is needed to achieve optimal biological efficiency in the production of animal products. Animal protein is a high-quality, complete, balanced protein; however, the composition (i.e., muscle-to-fat ratio) of certain animal products must be altered to improve consumer acceptability and to accede to current dietary standards. Contemporary technology in molecular biology can improve the genetic, physiological, and nutritional process to optimize feed and forage utilization and can control cellular mechanisms responsible for synthesis of animal proteins and lipids.

Efficiency of animal production can also be increased dramatically by reducing the cost that animal diseases impose on productivity, presently estimated at 20% of gross annual income. More than 150 diseases of animals are transmissible to humans. Control or eradication of these diseases will improve and protect human health. Intensive animal production systems require greater integration of health programs to control both animal and human disease. Molecular biology offers unprecedented opportunities to develop highly sensitive diagnostic tools and more efficacious vaccines.

**Thrust:** Optimize biological efficiency of animals and control of animal diseases by improving genetics, reproduction physiology, nutrition, health management, and diagnostic capabilities to maintain an affordable, safe, and profitable food supply.

Objectives:

1. Develop genetic engineering techniques to enhance disease resistance, nutrition, and growth by utilizing genamic insertions and alterations to complement conventional breeding techniques to increase biological efficiency.
2. Improve control of environment, disease, and physiological factors that adversely affect estrus, ovulation, fertilization, and embryonic and perinatal survival of young. Develop improved techniques for gamete and embryo multiplication, in-vitro fertilization, sexing, storage, and transfer.
3. Identify and manipulate factors which increase nutrient availability; develop techniques to manipulate rumen microflora to enhance their utilization of cellulose and starch; identify processes to improve the availability, digestibility, and metabolic interactions of minerals; and define more precise nutrient requirements for animal growth and reproduction under various genetic and environmental conditions.
4. Identify mechanisms that control synthesis and degradation of protein and fat in food animals; identify the factors that control muscle and fat cell number; and seek genetic, nutritional, or endocrinological controls over these mechanisms.
5. Develop housing and management systems that will reduce animal stress, maintain environmental quality control, and optimize biological efficiency in the production of animal products.
6. Develop improved immunological techniques for prevention of animal diseases; develop methods for early and rapid detection of diseases and/or organisms contaminating animal products.

7. Determine incidence and economic impact of diseases, evaluate the effectiveness of disease-control methods, and define total animal-health management systems which address profitability of livestock operations.
8. Develop animal disease surveillance programs which will result in cost effective control and prevention of both domestic and exotic diseases.
9. Elucidate functional and morphologic changes induced by exposure to toxic chemicals and drugs.

COMMITTEE OF NINE MEETING  
DECEMBER 1, 1987  
WASHINGTON, DC

The Committee of Nine held its last meeting of 1987 on December 1, in Room 244-W, Administration Building, U.S. Dept. of Agriculture, Washington, DC. Present were A. M. Smith (VT) Chairman, S. E. Leland (KS), Secretary; R. R. Johnson (OK), R. L. Thompson (MN), K. W. Tipton (LA), G. W. Ware (AZ) [alternate for M. H. Niehaus (CO)], D. E. Schlegel (CA), M. J. Woodburn (OR), and L. J. Pierro (CTS). CSRS was represented by J. P. Jordan, C. I. Harris, E. M. Wilson, and L. T. Williams.

Filmore E. Bender (MD) was present to report on the Smithsonian Exhibit, "Search For Life". The exhibit will remain in Washington through April 30, 1988, then on the road to Baltimore and EPCOT Center as possible sites.

CSRS Report: CSRS moves to new quarters in March. Projects NE-123 and W-110 remain PENDING with conditional approvals. ESCOP will review the recommendations of the Committee on Interregional Projects, which met November 24. Committee of Nine wants to review the IR Committee's report before it is distributed to any other group. A Regional Research Accomplishments Report will receive a trial run at the May 1988 Committee of Nine meeting. Committee will select 10-15 approved RRF proposals, and contact the AAs requesting an accomplishment report similar to those for Hatch projects. Purpose is to enhance visibility of regional research, perhaps in Fertile Fields or as group nominations for USDA Honor Awards.

Pat Jordan presented Certificates of Appreciation to the following departing Committee of Nine members: Filmore E. Bender (MD), David E. Schlegel (CA), Albert M. Smith (VT), D. M. (Pete) Gossett (TN), Earl F. Patric (RI), Charles Johnston (OH), and Benjamin A. Jones, Jr. (IL).

Officers for 1988 are K.W. Tipton (LA), Chairman; M. J. Woodburn (OR), Vice Chairman; and R. L. Thompson (MN), Secretary. Committee meetings for 1988 are: May 17-19, Washington, D.C., September 13-15 (to be determined), and December 1, Washington.

The Committee CONDITIONALLY APPROVED RRF project S-XX Biology and Management of Insect Pests of Rice in the United States. (This was probably the lightest work-load in history!)

The FY 1988 Final Allotment was not approved because 13 states had not responded by the Nov. 20 deadline. Members of Committee were asked to contact the states in their respective regions and request immediate response. Approval was DEFERRED until all states had responded.

G. W. Ware (for M. H. Niehaus)  
March 11, 1988

## Report of the Committee on Interregional Projects

David E. Schlegel

March 21, 1988

The Committee met in November and the report of that meeting is attached. The Committee identified two categories of programs within the IR system: National Research Support Programs and National Research Programs.

National Research Support Programs include IR-1 & 2 which were recognized for their importance. These two programs as well as related regional germ plasm programs are proposed to be combined into a National Germ Plasm and Plant Introduction Support Program which would be coordinated at the national level to allow for joint planning among the four regions. IR-4 & 5 also fit into this program area.

National Research Programs of 5 years duration were proposed to replace the IR projects having a research orientation. In this proposal one new National Research Program, identified through the ESCOP research planning process, would be established each year for 5 years from off-the-top funds. After 5 years the first established program would terminate and be replaced by a new National Research Program. Under this program, both IR 6 and IR 7 would terminate unless they emerged as high priority through the ESCOP planning process.

After reading the draft of the report, I took issue with three points.

1) I felt that Cooperative Extension should have been involved from the start, with matching off the top funds in those cases where ESCOP and ECOP high priority issues coincide. The National Initiatives will all require strong Cooperative Extension involvement, and it should be from the start. It is not realistic to call them in after we have made all the decisions and expect them to be enthusiastic. I did not expect to get this written in because CE had had no input up to this point. I did, however, hope to get a statement in that mentioned the possibility.

2) The implication in the early draft was that both the off-the-top funding and the special research grants from Congress would be redirected every five years. The final draft is silent on special grants, but does not exclude their termination as a possibility. I objected to this on the basis that some projects are of such a magnitude and that they will be ongoing. They are high priority now and will continue to be high priority, and

deserve continued support, at least through the special grant process. Additionally, if we just roll over special grant funds to new causes, Congress is off the hook after five years as we will just redirect previously authorized funding... no new funding will be required.

3) The last is a relatively minor concern, but the report requires that only one half be awarded on a competitive basis, why not all or nearly all? I think we create problems for ourselves with this plan.

Ted Wilson identified my concerns in his letter of transmittal to Jordon. I have personally voiced these concerns to Jordon, and came away with the feeling that he was sympathetic with my view. I would be interested in learning of WAAESD's view of this proposal, and any instructions that you might have for any follow-up that you would like me to take.

The rationale for the National Research Program was that we cannot continue to identify new high priority research programs and expect them to be funded with new money. If we take the initiative and redirect some funds in to the area, we increase our chances of getting additional support from Congress. There have been clear signals along those lines for a number of years.

## Report of the Committee on Interregional Projects

January 22, 1988

The Committee composed of W. J. Benton, E. H. Cobb, C. W. Donoho, K. A. Huston, M. H. Neufville, D. E. Schlegel, and E. M. Wilson met on Tuesday, November 24, 1987 in Washington, D. C. After examining all aspects of Interregional Projects, the Committee makes the following observations and recommendations.

### I. Philosophy of IR Projects

The Committee reaffirms its belief in the continuing importance of the RRF program as a means of addressing high priority national and regional research needs. After careful examination of numerous historical documents relating to the legislative intent of the RRF and its subsequent implementation and evaluation, the Committee notes that some confusion about the role of RRF in SAES research reappears periodically. Clearly the RRF was not intended, like Hatch funds, to provide individual state stations with an annual formula allocation of resources. Rather it is a means of enabling two or more stations to join together in solving problems of common concern.

The Committee believes that the RRF continues to offer flexible approaches to regional and national research issues that should be exploited!

The Committee believes that regional issues currently are well-addressed through mechanisms established by each of the four regional associations of experiment station directors. However, the Committee believes that national priorities and responsibilities can be addressed more effectively by revamping the IR mechanism into a truly national approach by basing it on the planning mechanisms of ESCOP, NARC, and the Joint Council, or their successors.

The Committee notes that the historic "bottoms-up" approach of setting priorities from state to regional to national levels has served the nation and the agricultural research system well. The Committee developed its recommendation from this perspective.

The Committee recommends the present system of IR projects be replaced by a national system consisting of two major programs: (1) National Research Support Programs, and (2) National Research Programs.



## II. National Research Support and National Research Programs

1. National Research Support Programs - programs in this category would provide broad support on selected issues to the entire research system in an ongoing, efficient and timely manner. These support programs would continue to be funded by off-the-top funding and approved for 5 year periods. Prior to the end of each 5 year period, programs would be reviewed by a review panel of administrators and peers established by CSRS and the Committee of Nine. The panel would review the programs' progress, importance, and appropriateness for continued support in the Agricultural Experiment Station System. New programs in this category would be initiated by utilizing existing mechanisms for interregional projects. However, termination or continuation at the end of each 5 year period would be recommended to CSRS by the Committee of Nine.
2. National Research Programs (5 Year Duration)

### A. A New Concept: National Research Programs

A new system of national research programs is proposed to replace, over time, the IR projects having a research orientation. In this new system one new national research program would be established each year for a 5 year period. After 5 years, the first identified national research program would terminate, and a new replacement program would be established. This process would continue each year to provide a maximum of five national research programs being funded at any one time. No national research program could continue beyond 5 years. If that research effort needed to continue, it would be the responsibility of the regional associations or states to continue the research effort and funding.

### B. Identification of National Research Programs

Each year one national research program would be identified through the ESCOP research planning process. A Coordinating Committee would be appointed by CSRS to develop policy guidelines, and identify specific research thrusts to be undertaken in a national research program. After approval of the Coordinating Committee plan by the Committee of Nine and CSRS, each region would use the same title as the national research program and develop regional projects which would identify the specific research objectives to be undertaken in that region. These regional research projects would follow the same approval process used for

other regional projects to assure regional association, Committee of Nine, and CSRS approval of the research to be undertaken.

#### C. Funding of National Research Programs

A combination of national off-the-top RRF funding by the Committee of Nine and Special Research Grants (P. L. 89-106) would be used to fund each national research program (\$1 million from each source). Each region would receive its currently allocated share of RRF funds, and 25 percent of the Special Grants Funds. Administrative cost, for any coordinator, secretaries, or travel expenses, would not exceed 10 percent of the RRF and Special Grant Funds provided to support the regional effort. At least half the funds received by each region should be used to support a competitive program to undertake the objectives of the national programs. A general administrative process would be established for use in all regions, based on the experience gained from the regional IPM programs. CSRS will evaluate the regional competitive proposals and provide these evaluations to the regional associations.

#### D. Benefits of the New System

- (1) It maximizes the flexibility of the RRF to address current and emerging issues.
- (2) It uses the established SAES system for research planning to identify national research programs.
- (3) It uses the established regional research approval process to make funding decisions and identify research objectives.
- (4) It strengthens the ESCOP Budget actions; emphasizes the importance of Hatch and RRF funding; and identifies Special Grants needed to match the SAES Funding.
- (5) It provides the SAES with a system for responding promptly to national research issues on a continuing basis.
- (6) It may attract additional Federal funds.

### III. Recommendations for Current IR Projects

All existing Interregional Projects should continue to the end of their current approval period with the following provisions:

- (1) IR-1 and IR-2 (and their associated regional projects, NC-7, NE-9, S-9, and W-6) provide necessary support for the introduction, preservation, and utilization of plant germ plasm in Agricultural Research which needs to be continued on a long term basis and therefore clearly fit under the National Research Support Program. These projects should be combined into a national germ plasm and plant introduction research support program which would be coordinated at the national level to allow for joint planning among the 4 regions on plant germ plasm activities.
- (2) IR-4 and IR-5 fit under the National Research Support Programs as independent issues which may be continued based on periodic review by a review panel as described previously in this document. Consideration should be given to combining other pest related issues (NAPIAP and IPM) with IR-4 to form a national pesticide program in the same manner as recommended for the germ plasm program.
- (3) Both IR-6 and IR-7 have a definite research orientation (as opposed to support function). The continuation of these projects beyond their current approval period should depend upon their emerging as high national research priorities through the ESCOP planning process.

## WESTERN ASSOCIATION OF AGRICULTURAL EXPERIMENT STATION DIRECTORS

March 1988

## ESCOP/ECOP Interaction Report

Colin Kaltenbach

In response to the 1985 Farm Bill, ESCOP and ECOP appointed a joint committee to draft a document that would address cooperation between the experiment stations and extension services, particularly with respect to the CES role in adaptive research.

The committee provided a draft document which was approved in principal by ESCOP and ECOP at the land-grant meetings in Washington, D.C. Following minor changes, the attached copy was approved by both bodies in February of this year. A printed copy of this document should be mailed to all concerned in the near future.

Both ESCOP and ECOP are very happy with the consensus document. If the response of these groups is indicative, I believe the communities at large will readily adopt the suggested procedures.

## Mechanisms for Enhancing Cooperation between Experiment Stations and Extension Services in the Land-Grant University System

### Introduction

The Morrill, Hatch, and Smith-Lever Acts, among others, created the public institutional structure of U.S. Agriculture. These Acts assigned the responsibility for various activities to specific components of the land-grant institutions and created the land-grant model of teaching, research, and extension.

In 1887, Congress passed the Hatch Act which established our national system of state agricultural experiment stations. Subsequent acts of Congress have further endowed the experiment stations and further specified and broadened their research functions without altering their fundamental mandate of conducting "original and other researches, investigations, and experiments". In 1914, Congress passed the Smith-Lever Act establishing a national system of cooperative extension services. This legislation clearly gave cooperative extension the mission of education and technology transfer. The Smith-Lever Act was amended to include the phrase "development of practical applications of research knowledge" which recognizes a developing role of extension in research functions but raises questions about its relationship to the traditional experiment station role and leadership in research.

The assignment of agricultural \* instruction, research, and extension to administrative units within the same institution facilitated the integration of these activities and engendered joint priority setting. In general, agricultural research and educational activities have been well coordinated in the land-grant institutions because of this unique institutional structure. The system has been emulated by other nations.

### The Agricultural Research and Extension System

The agricultural research and extension system has evolved a much broader mission in helping people live and make a living. The breadth of the mission varies from state to state; regardless, research and extension activities can be classified into four general categories:

\*agricultural is used in the broadest sense to include forestry and other renewable natural resource-based economies, including the families and communities that are an integral part of all of them.

- 1) Basic research by which we learn how the physical, chemical, biological, economic, and social systems that comprise agriculture function.
- 2) Developmental research, by which knowledge generated through basic research is translated into potentially useful products and procedures for agriculture.
- 3) Adaptive research, by which the input products and procedures of agriculture are tested and compared and information is generated with which users can integrate these products and procedures into operational systems tailored to the specific soil, climatic, and socio-economic conditions of the nation's diverse agricultural regions and locales.
- 4) ~~Technology transfer, by which the information generated by adaptive research is transferred to users in the most usable form.~~ Education, counseling and information dissemination activities leading to the adoption and utilization of research information and technologies in usable form.

These activities should be viewed collectively as a stepwise research and extension system. Each step must be performed well. There should be balance among these activities. There should be strong linkages among these activities, so that information and feedback flow freely through the system and the users of the system are enabled to be the early adopters of effective new productivity-enhancing, cost-cutting, quality-improving agricultural technology and of new knowledge to improve their quality of life.

### Issues

The relationship of the agricultural experiment stations (AESs) and the cooperative extension services (CESs) to each other and to their external clientele are changing. These changes, coupled with the assumption of a greater role in adaptive research by CESs and the 1985 amendment to the Smith-Lever Act, have caused a number of issues to emerge that need to be addressed by the agricultural research and extension system in order to provide enhanced coordination and complementarity. These issues are:

- o Role of Extension Staff in Research: Many extension staff have the ability and desire to conduct applied research. What should be the mechanisms and procedures for allowing and encouraging extension specialists to participate in research?
- o Role of Research Staff in Extension Programming: Many research staff have the ability and expertise to make contributions to the extension education process. What procedures and appointments are available to support and encourage research staff to participate in the extension/education process?

- o In the continuum of technology development transfer from basic research to adoption, the role of AES and CES in adaptive research is unclear. What roles should AES and CES play in adaptive research and how can we encourage close coordination?
- o Are adequate quality control mechanisms in place to ensure appropriate quality in research and extension programs?
- o Priority setting: Priority setting processes are currently in place at both the national and state levels. What recommendations and suggestions can be made to encourage more coordination between research and extension at all levels?

### Policy Recommendations

#### 1. Responsibilities

The state AESs have the responsibility for agricultural research in the Land-Grant University system. Likewise, the state CESs have the responsibility for educational programs and technology transfer to agricultural producers and other agricultural interests in the states. These responsibilities were established and supported through the years from both national and state legislative activities and it is recommended that these respective responsibilities be reaffirmed.

While the mission and mandate of each agency is clear, there needs to be a reevaluation of working relationships between ~~research scientist and extension specialist~~ **research and extension faculty** working in applied and adaptive research.

The adaptive research program and related technology transfer activities should be organized and managed to:

- 1) foster communication and cooperation among research and extension personnel;
- 2) expedite the development and adoption of effective new agricultural technology;
- 3) clarify administrative responsibilities and minimize bureaucratic inefficiencies;
- 4) capture economies of scale of operations;
- 5) minimize redundancy; and
- 6) meet high standards of excellence with thorough and regular evaluations.

The "system" needs to assure that many research scientists have the opportunity to be involved in program planning and technology transfer

activities and many extension specialists have the opportunity to do appropriate research. Several mechanisms for accomplishing these goals are listed below.

## 2. Mechanisms at the National Level

Research (ESCOP) and Extension (ECOP) need to come together more actively for program planning and priority setting at the national level. ESCOP and ECOP individually now have effective priority setting procedures for developing and addressing national priority issues. It is recommended that these two planning processes come together and agree each year on one or more national program thrusts to be developed into joint action plans for inclusion in the federal budget request. It is further recommended that this joint planning process occur each year prior to discussion of budget development with the NASULGC Division Budget Committee or with USDA Science and Education agencies.

## 3. Mechanisms for Coordination and Integration at the State Level

It is recommended that College of Agriculture or equivalent units at land-grant universities, through their administrative structures for AESs and CESs, need to develop mechanisms to enhance joint program development, planning, priority setting, and evaluation. These mechanisms need to bring together faculty, specialists, and field staff to enhance communications and linkages between ~~campus research and field problem-oriented adaptive research and education.~~ fundamental research, field problem-oriented adaptive research and education. Mechanisms would involve but not be limited to:

- joint AES/CES task forces
- joint AES/CES budget initiatives
- joint AES/CES publications/media programs
- joint AES/CES five year planning process
- joint AES/CES program evaluations
- joint AES/CES collaborative initiatives that address significant emerging problems and issues
- joint reporting systems that enhance the linkage and identification of AES/CES programs and priorities.

## 4. Mechanisms for Coordination and Integration at Program/Faculty Level

While AES has the responsibility for research, extension faculty can play an important role in contributing to the fulfillment of that research mission. Thus, there should be at each institution mechanisms that allow for Extension faculty to conduct research and have that research be a part of the SAES system. Qualified Extension faculty should conduct research, even independent of research faculty as principal investigators where appropriate, but they should not conduct research independent of the SAES.

The joint appointment of an extension specialist in the Experiment Station whereby the Station plays a part of the specialist's salary, has **worked effectively in many states to provide coordination, integration and** quality control of the research conducted by the extension specialist. It



is recommended that AES and CES directors in states in which joint appointments are not already in use should be encouraged to explore this approach to provide research opportunities for extension specialists.

Extension specialists, however, could conduct research without the joint appointment if: a) the CES Director in coordination with the AES Director permits this flexibility on a 100% Extension appointment; and b) the specialist writes and has approved a Station research project where he/she is the principal or co-principal investigator. In other words, it is recommended that the ultimate basis for coordination, integration and quality control of extension staff conducting research be the formal research project subjected to the same peer review and other evaluations and reporting requirements as research projects written by Station scientists.

The CES has the responsibility for education and technology transfer in extending the knowledge resources of the land-grant university (and other institutions) to the people of the state. Research faculty can play an important role in contributing to the fulfillment of that extension mission and it is common for Station scientists, particularly those with applied research responsibilities, to conduct extension programs (often in an informal sense) without any Extension appointment. Just as an extension specialist can conduct research without a joint Station appointment, as described above, a Station scientist can conduct extension programs without a joint CES appointment. However, other than perhaps for some specific situations, it is recommended that AES and CES directors use joint appointments and develop other mechanisms whereby the extension programs activities of Station scientists are be integrated into the same CES program planning and priority setting processes subject to the same peer review and other evaluation and reporting requirements within extension programs as developed by extension faculty. While the specific mechanisms are best identified by each state, major extension programs conducted by Station scientists should be integrated into cooperative extension programs and priorities.

ESCOP-ECOP Committee on Enhancing Cooperation Between  
Research and Extension in the Land-Grant University  
System

Clive W. Donoho, Jr., Director, Georgia Agricultural  
Experiment Station, The University of Georgia

Don Holt, Director, Illinois Agricultural Experiment  
Station, University of Illinois

Leo F. Lucas, Dean and Director, Nebraska Cooperative  
Extension Service, University of Nebraska

Richard J. Sauer, Chair, Vice President for  
Agriculture, Forestry and Home Economics and  
Director, Minnesota Agricultural Experiment  
Station, University of Minnesota

Jerry Siebert, Assistant Vice President and Director,  
Cooperative Extension Service, University  
of California

D R A F T

IMPLEMENTATION PLAN  
FOR  
THE ESCOP SUBCOMMITTEE FOR RESEARCH PLANNING AND BUDGETS

FEBRUARY 16, 1988

ESTABLISHMENT:

The new ESCOP Subcommittee for Research Planning and Budgets was established by the Chairman in November, 1987. It brings together several closely related groups and formalizes practices in the terminal stage of budget advocacy that have been in operation in recent years. It provides for a critical new linkage between the planning and budget process.

CONSOLIDATION:

Figure one shows the conceptual relationships between the five groups under the overall committee. They are:

1. Special Initiatives Group
2. National Research Planning Group
3. 1991 Budget Development Group
4. 1990 Budget Development Group
5. Budget Strategies and Action Group

In recent years, there has been a growing confluence of the efforts of the Special Initiatives Committee and the Planning Subcommittee. In the Fy 1989 and 1990 Budget Committees, there has been a major effort to link the budget request to the ESCOP Strategic Plan. This has included making a three year projection of resources in the budget advocacy document. It has been common practice to call on the directors whose Congressmen and Senators were in critical appropriative positions in advocating the coming year's budget during the spring and summer, after the Administration's budget has been released. Thus, much of what is embodied in this new set of formal relationships has been underway for some time. However, formalizing the assignments and explicitly stating the interrelationships provides a new opportunity for streamlining efforts and improving efficiency.

BOARD OF DIRECTORS CONCEPT:

As shown in Figure One, the chairmen of the five Groups under the Committee are members of the Subcommittee for Research Planning and Budgets. It is envisioned that this Subcommittee will function as a Board of Directors for the overall activity of the individual groups. Through this mechanism, we can identify problems and opportunities, assure the new linkages are functional and avoid any unnecessary duplication of effort. Clearly, the Subcommittee and Board of Directors does not replace

the activity of the individual Groups, rather it facilitates communication between the Groups. Early on, it is proposed that the Board meet and discuss in detail both the immediate and longer range agenda for the Subcommittee and its constituent Groups.

#### NATIONAL RESEARCH SUPPORT AND NATIONAL RESEARCH PROGRAMS:

A committee on interregional projects has been developing some thoughts on modernizing philosophy and procedures on these efforts. Their concepts have not yet been fully enunciated, but there is emerging the idea of identifying a few key efforts to be promulgated at the national level that might involve the use of regional research funds (existing and new) on one-time five year commitments to major research initiatives. There would, in this concept, be a five year review of research support programs such as germplasm management. In any case, if this concept surfaces and is viable, it would appear that ESCOP would approach the development of such efforts through the planning process, linked closely with the Special Initiatives Group.

#### MAINTAINING LINKAGES WITH THE AFFILIATE GROUPS

It continues to be an ESCOP priority to maintain linkages with the Affiliate Groups, including Veterinary Medicine, Forestry, Home Economics and the 1890 Institutions. It is envisioned that this will be best done through a solid input into the National Research Planning Group. It is suggested that this, rather than continuing representation on the Special Initiatives Group would streamline the function of both efforts and give the necessary visibility to affiliate agendas.

#### CRITICAL LINKAGES BETWEEN GROUPS:

There needs to be a substantially closer linkage between Special Initiatives and National Research Planning Groups. This linkage has been effectively maintained through joint appointment across Groups and by special efforts of the chairs of the two Groups. It is suggested that before-the-fact planning by the Board of Directors on the separate and perhaps mutual agendas of these two Groups would be helpful. Perhaps the Special Initiatives Group will find it appropriate to focus on a smaller number of key studies that will lead to "national research initiatives"; the National Research Planning Group may need to develop more analytical capability in laying out the twenty or so initiatives and in portraying the base programs on a continuing basis. There has already been substantial progress towards these goals; more is possible and desired.

There is also an opportunity to formalize and enhance the relationship between the National Research Planning Group and the Budget Development Groups (year plus one and year plus two). It will be helpful to re-examine the transfer process and to deal more specifically how to choose what goes into any particular

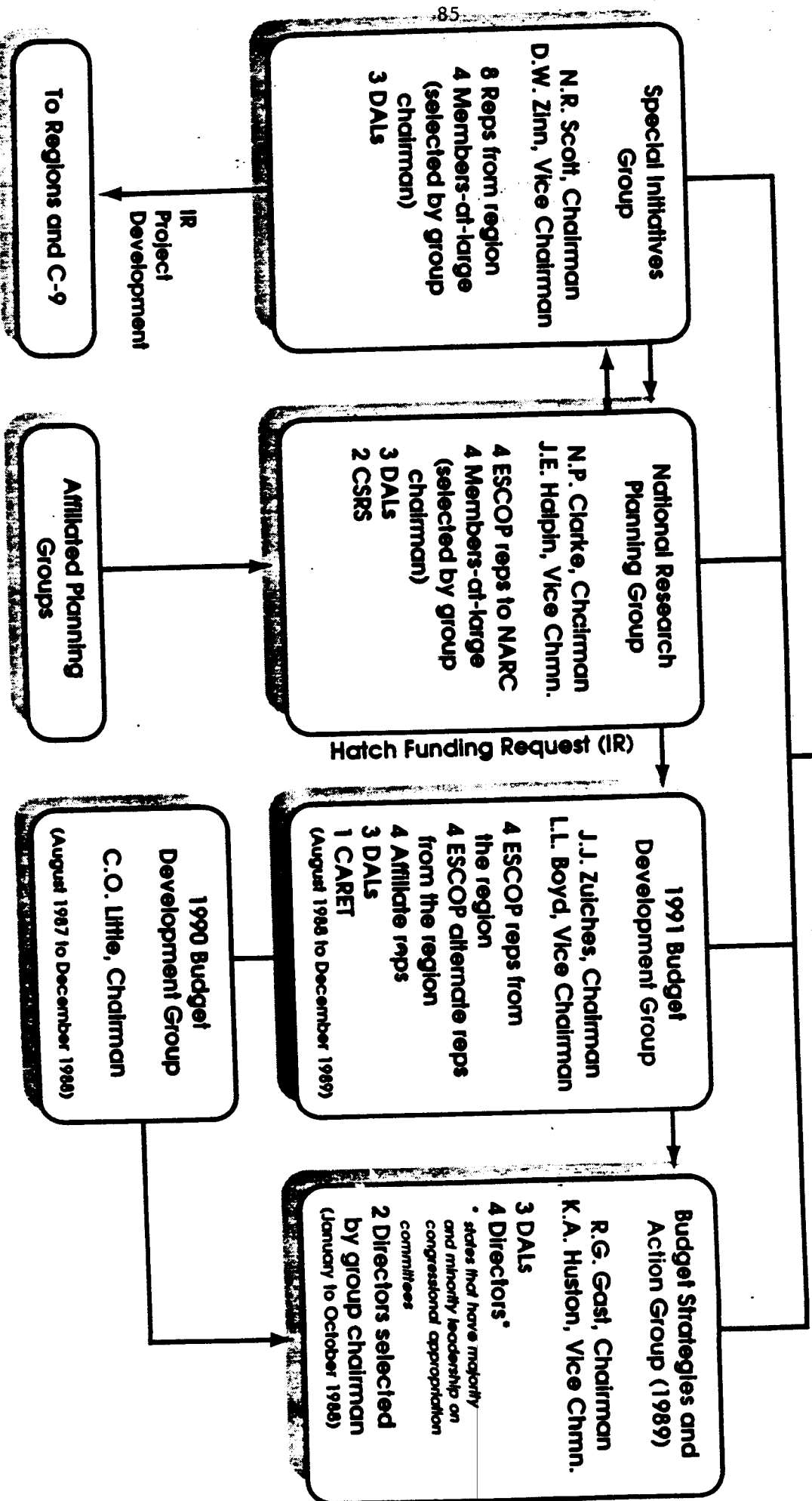
budget document. As our overall process matures, it will be important to develop methods for going through the usual land grant system and going around it to other federal funding agencies.

Transitioning from the Budget Development to the Budget Strategies and Action Group also requires some consideration, although this is done well in an informal way now. Specifically planning ahead for what is to be done and establishing commitments of key players can be improved. Methods to more effectively engage the Division of Agriculture's Budget Committee also needs some attention.

#### SUMMARY:

The new ESCOP Subcommittee for Research Planning and Budgets, with its five working Groups, offers a major opportunity to enhance the linkages between vital functions of ESCOP and to more efficiently and effectively use the time of members. The concept of a Board of Directors of the several Groups to develop and implement procedures for the Subcommittee appears to be key to the success. An early meeting devoted to establishing the functional charter for the Subcommittee is suggested.

**ESCOP Subcommittee for Research Planning and Budgets**  
 N.P. Clarke, Chairman  
 N.R. Scott, C.O. Little, J.J. Zuches, R.G. Gast  
 D.W. Zinn, J.E. Holpin, L.L. Boyd, K.A. Huston



**SUMMARY February 19, 1988**

**Needed  
Agricultural  
Science &  
Education  
Investments**



**A Report by the  
Fiscal 1989 Budget Committee**

**Division of Agriculture**

**National Association of  
State Universities and  
Land-Grant Colleges**

**TABLE I: FUNDING AUTHORITIES**  
(Thousands of dollars)

	<u>FISCAL 1988</u>	<u>FISCAL 1989</u>	
		<u>Executive Request</u>	<u>NASULGC Recommendations</u>
<b>Research</b>			
Hatch Act	\$155.545	\$155.545	\$168.922
McIntire-Stennis Act	17.500	12.975	25.000
Evans-Allen Program	23.333	25.333	25.333
Animal Health (Section 1433)	5.476	-0-	5.947
Research Grants (P.L. 89-106)			
Competitive Grants (Sec. 2b) *	42.372	54.500	54.500
Special Grants (Sec. 2c) *	31.185	4.977	63.935
Rangeland (P.L. 95-113)	475	-0-	475
Critical Materials (P.L. 98-284)	4.918	668	668
Aquaculture Centers (P.L. 95-113)	3.500	-0-	3.500
Agric. Productivity (P.L. 99-198)	3.900	-0-	3.900
Supp. & Alt. Crops (P.L. 95-113)	675	391	391
Federal Administration	<u>4.094</u>	<u>1.100</u>	<u>1.100</u>
<b>Total Research</b>	<b>\$292,973</b>	<b>\$255,489</b>	<b>\$353,671</b>
<b>Extension</b>			
Smith-Lever			
Formula	\$241.594	\$228.483	\$252.000
Special Programs *	77.458	46.691	147.676
D.C. Extension	935	970	1.000
Evans-Allen Program	18.291	18.291	23.000
1890 Facilities	9.508	-0-	10.000
Renewable Resources Extension	2.765	-0-	6.000
Federal Administration	<u>7.412</u>	<u>5.107</u>	<u>5.900</u>
<b>Total Extension</b>	<b>\$357,963</b>	<b>\$299,542</b>	<b>\$445,576</b>
<b>Higher Education</b>			
Graduate Training Grants	\$ 2.852	\$ -0-	\$ 10.000
1890 Strengthening Grants	1.902	2.000	2.000
Challenge Grants	<u>--</u>	<u>--</u>	<u>10.000</u>
<b>Total Higher Education</b>	<b>\$ 4,754</b>	<b>\$ 2,000</b>	<b>\$ 22,000</b>

\* See Table II for details

**TABLE II: GRANTS AND SPECIAL PROGRAMS**  
(Thousands of dollars)

	<u>FISCAL 1988</u>	<u>FISCAL 1989</u>	<u>Executive Request</u>	<u>NASU/LGC Recommendations</u>
<b>Research Grants P.L. 89-106</b>				
<b>Competitive Grants (Sec. 2b)</b>				
Biotechnology	\$ 19.016	\$ 21,616	\$ 21,616	\$ 21,616
Plant Sciences	12.126	12.126	12.126	12.126
Animal Sciences	6.000	7.000	7.000	7.000
Pest Science	2.853	-0-	-0-	-0-
Human Nutrition	2.377	3.000	3.000	3.000
Stratospheric Ozone	--	7.400	7.400	7.400
Plant Science Centers	--	3,358	3,358	3,358
<b>Subtotal</b>	<b>\$ 42.372</b>	<b>\$ 54.500</b>	<b>\$ 54.500</b>	<b>\$ 54.500</b>
<b>Special Grants (Sec. 2c)</b>				
<b>CONTINUING NATIONAL RESEARCH PROGRAMS</b>				
Integrated Pest Management	\$ 2.940	\$ -0-	\$ 2,940	\$ 2,940
Minor Use Pesticide Clearance	1.369	1.369	1,369	1,369
Minor Use Animal Drugs	229	229	229	229
Pesticide Impact Assessment	1.968	2.468	2,468	2,468
Rural Development Centers	475	-0-	475	475
Animal Health (Sec. 1414)	5.705	-0-	5,705	5,705
Aquaculture Research General	660	-0-	660	660
Tropical and Subtropical	3.091	-0-	3,091	3,091
Acid Precipitation	661	661	661	661
Biological Impact Assessment	--	250	250	250
<b>NEW NATIONAL RESEARCH INITIATIVES</b>				
Water Quality	--	--	25.000	25.000
Family Well-Being	--	--	2.000	2.000
Food Safety	--	--	5.000	5.000
<b>SPECIAL PROBLEM GRANTS *</b>	<b>14.087</b>	<b>-0-</b>	<b>14.087</b>	<b>14.087</b>
<b>Subtotal</b>	<b>\$ 31.185</b>	<b>\$ 4.977</b>	<b>\$ 63.935</b>	<b>\$ 63.935</b>
<b>Total Research Grants &amp; Special Programs</b>	<b>\$ 73.557</b>	<b>\$ 59.477</b>	<b>\$ 118.435</b>	<b>\$ 118.435</b>

\* Numerous special problem grants are established to address acute situations in specific states.



TABLE II: GRANTS AND SPECIAL PROGRAMS (Continued)  
(Thousands of dollars)

	<u>FISCAL 1988</u>	<u>FISCAL 1989</u>	
		<u>Executive Request</u>	<u>NASULGC Recommendations</u>
<b>Extension Special Programs</b>			
<b>NATIONAL INITIATIVES</b>			
<b>Water Quality &amp; Management</b>	\$ --	\$ --	\$ 15.000
<b>Nutrition, Health &amp; Food Safety</b>			
<b>Education Program</b>			
EFNEP	58.635	22.111	60.000
Improving Nutrition, Diet & Health	--	--	7.500
Food Safety Education	--	--	5.000
<b>Competitiveness &amp; Profitability of Agriculture</b>	--	10.000	15.000
<b>Revitalizing Rural America</b>	--	2.000	10.000
Rural Development Centers	903	-0-	900
<b>Alternative Agricultural Opportunities</b>	--	--	5.000
<b>National Priority Initiatives (Competitive Grants)</b>	<u>--</u>	<u>10.000</u>	<u>10.000</u>
<b>Subtotal</b>	<b>\$ 59.538</b>	<b>\$ 44.111</b>	<b>\$128.400</b>
<b>OTHER SPECIAL PROGRAMS</b>			
<b>Integrated Pest Management</b>	\$ 7.164	\$ -0-	\$ 7.500
<b>Pesticide Impact Assessment</b>	1,633	2.580	2.580
<b>Financial Management</b>	1,427	-0-	1.500
<b>Urban Gardening</b>	3,329	-0-	3,329
<b>Farm Safety</b>	970	-0-	970
<b>Counseling (Sec. 1440)</b>	3,350	-0-	3,350
<b>IRM</b>	<u>47</u>	<u>-0-</u>	<u>47</u>
<b>Subtotal</b>	<b>\$ 17,920</b>	<b>\$ 2,580</b>	<b>\$ 19,276</b>
<b>TOTAL</b>	<b>\$ 77,458</b>	<b>\$ 46,691</b>	<b>\$147,676</b>

November 20, 1987

**SUMMIT AGREEMENT  
BETWEEN THE PRESIDENT  
AND  
THE JOINT LEADERSHIP OF CONGRESS**

1. The elements of this agreement should provide for deficit reduction amounts that exceed the requirements of the Balanced Budget and Emergency Deficit Control Reaffirmation Act of 1987 and thus when fully implemented eliminate the need for sequestration.
2. The package outline is approved by the President, the Speaker, and the Majority and Republican Leadership of Congress.
3. The President and the Leadership of Congress agree to carry out this agreement.
4. The President's FY 1989 budget shall comply with the appropriations levels in this agreement.
5. For FY 1988 Congress shall present reconciliation and the continuing resolution (or other appropriations legislation) to the President concurrently.
6. Congress shall provide sufficient budget authority to achieve full levels of domestic, international affairs, and defense outlays, in both FY 1988 and FY 1989.
7. Agreed upon discretionary spending levels are as follows:

(IN BILLIONS OF DOLLARS)

<u>Category</u>	<u>FY 1988</u>		<u>FY 1989</u>	
	<u>BA</u>	<u>O</u>	<u>BA</u>	<u>O</u>
Domestic	\$145.1	\$160.3	\$148.1	\$169.2
International				
Affairs (150)	17.8	16.5	18.1	16.1
Defense (050)*	292.0	285.4	299.5	294.0

The President and Leadership agree that, in implementing this agreement, essential programs serving the poor, including the elderly, should be a priority.

\* Functional total includes mandatory spending.

8. Discretionary scorekeeping: Use CBO estimates with an agreed-upon list of discretionary accounts; no change in methodology from the current CBO-OMB understanding. CBO and OMB shall work together to resolve scoring methodology problems on mandatory accounts.

9. The following procedures will be utilized to implement this agreement for spending:
  - a. FY 1988 -- The agreement will provide ceilings for defense and non-defense domestic spending (including international affairs); the continuing resolution or other appropriations legislation will carry them out.
  - b. FY 1989 -- The FY 1988 reconciliation bill will specify:
    - i. agreed-upon defense and non-defense budget authority and outlay discretionary ceilings;
    - ii. the FY 1989 budget resolution, and committee 302(a) and (b) allocations pursuant thereto, shall be consistent with the agreement; and
    - iii. in the Senate, a three-fifths point of order will lie against a budget resolution that is inconsistent with the agreement.
  - c. Neither the Congress nor the President shall initiate supplementals except in the case of dire emergency. When the Executive Branch makes such a request, it shall be accompanied by a presidentially-transmitted budget amendment to Congress.
  - d. For FY 1988 in the Senate, before the continuing resolution (or other appropriations legislation) comes to the floor, a separate resolution will modify the relationship between reconciliation and defense spending, and adjust 302(a) allocations and budget totals for 311 purposes to conform with the agreement. The leadership will seek a waiver of points of order under sections 302 and 311 for the FY 1988 continuing resolution if it conforms to this agreement.
10. The \$9 billion in receipts in 1988 and the \$14 billion in receipts in 1989 are gross figures and the ingredients composing these figures will be determined through the regular legislative process and conference agreement, subject to the President's signature or veto.
11. Pending the enactment of legislation to implement this agreement, the President shall take such action consistent with current law as may be necessary to reduce the effects of sequestration and provide for minimal disruption of on-going governmental programs and services during this interim period.

20-Nov-87  
02:23 PM

# PROPOSED BUDGET COMPROMISE

FY 1988      FY 1989

## REVENUES

Hard taxes.....	9.00	14.00
IRS compliance (net).....	1.60	2.90
User fees.....	0.40	0.40
	----	----
subtotal, revenues.....	11.00	17.30

## SPENDING

Defense (func. 050).....	5.00	8.20
Non-defense discretionary.....	2.60	3.40
1989 effect of 1988 2% pay....	0.00	2.40
ENTITLEMENTS:		
Medicare.....	2.00	3.50
Farm price supports.....	0.90	1.60
GSL balances.....	0.25	0.00
Federal personnel.....	0.85	0.85
	----	----
subtotal, entitlements.	4.00	5.95
Debt service.....	1.20	3.50
	----	----
subtotal, spending.....	12.80	23.45

## ADDITIONAL SAVINGS

PBGC premiums.....	0.40	0.40
VA origination fee extension..	0.20	0.20
VA loan guarantee.....	0.80	1.00
Asset sales.....	5.00	3.50
	----	----
subtotal.....	6.40	5.10

	----	----
GRAND TOTAL.....	30.20	45.85

Reconciliation - Agriculture

DEC 18 1987

*REMIT*  
Savings  
(\$ in millions)

	<u>88</u>	<u>89</u>	<u>90</u>	<u>88-89</u>
1. Target price reduction of 1.5% for 1988 and 1989 crops	210	505	270	715
2. Other crop price support reductions of 1% 1988 and 1989 crops	30	32	10	62
3. Loan rate cap for 1988 crop at 3% <u>1/</u>	65	150	45	215
4. Decoupling (0/92) Permanent change in law	20	425	425	445
5. Paid Land Diversion 10% at \$1.75 for 1988 and 1989 crops	568	227	+499	795
6. Definition of a person Huckaby permanent change in law	0	80	210	80
7. County loan rate differential limit to 2 percent. Permanent change in law	0	+25	+13	+25
8. Savings from commercial storage for FY 1988 and 1989	60	170	0	230
9. Oat ARP reduced to 5% for 1988 and 1989 crops	30	22	0	52
10. Farmer owned reserve trigger 1988 only	13	0	0	13
11. Yield protection if 10% above the 1985 level	0	+75	+115	+75
12. Outlay reduction of 1.4 percent for Honey program in 1988 crop	<u>1</u>	<u>0</u>	<u>0</u>	<u>1</u>
Total savings	997	1,511	333	2,508

1/ The Secretary is given discretion to reduce the loan rate for the 1989 crop year by an additional 2% more than the 5% reduction authorized in current law. If implemented, savings would be reduced in 1989 and 1990 due to higher deficiency payments required.

Items Earmarked in the FY 1988  
Full-Year Omnibus Continuing Resolution (P.L. 100-102)  
That Were Not Requested in the President's Budget

(in millions of dollars)

**RATIONALE**

1. o Low priority projects, which because they are required to be funded within the base appropriations, simply prevent implementation of high priority projects.
2. o Project is wasteful because proper preparatory activities haven't been carried out.
3. o Beneficiaries are easily identified and fully able to pay.
4. o Projects funded benefit a special interest group.
5. o Projects funded benefit a very limited area and have no national significance.
6. o Projects funded have been previously evaluated for their national application and rejected as strictly State or local responsibilities.
7. o Projects funded could have been funded by a State within formula allocations but were rejected as low priority by the state.
8. o Special directives for specific research projects to be conducted by specific interest groups in order to avoid the normal competitive process.
9. o Projects that would not be funded by anyone except for the stature of individual members of Congress.
10. o Funding is for non Federal staff, which is difficult to stop once begun.

### Rationale for Pork List Items

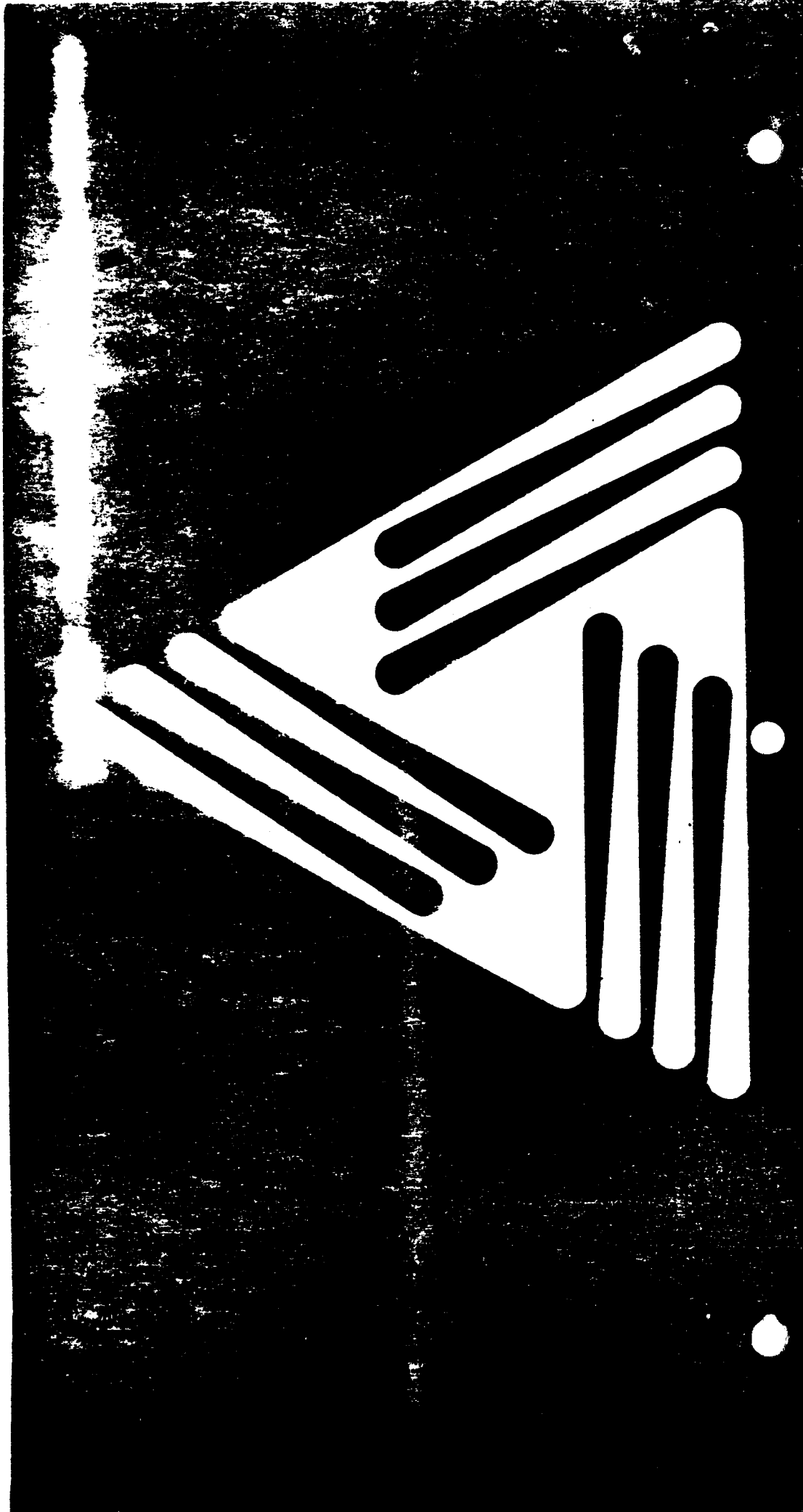
- o Low priority projects, which because they are required to be funded within the base appropriations, simply prevent implementation of high priority projects.
- o Legal loopholes are created to provide special treatment when there are no special circumstances to merit that treatment, (includes special exemptions from competition, for cost sharing, or for single purpose projects).
- o Beneficiaries are easily identified and fully able to pay.
- o Projects funded benefit a special interest group.
- o Projects funded benefit a very limited area and have no national significance.
- o Projects funded have been previously evaluated for their national application and rejected as strictly State or local responsibilities.
- o Projects funded could have been funded by a State within formula allocations but were rejected as low priority by the State.
- o Funds are provided only to perpetuate a previously initiated special interest project with no new purpose or identified output.
- o Special directives for specific research projects to be conducted by specific interest groups in order to avoid the normal competitive process.
- o Projects that would not be funded by anyone except for the stature of individual members of Congress.
- o Language that precludes the implementation of "good-government" and administrative activities that improve the cost-effectiveness of government and reduce wasteful spending.



United States  
Department of  
Agriculture  
Extension  
Service

# Cooperative Extension System National Initiatives

## *Focus on Issues*







## National Initiatives Linkages

Aid Association for Barbarians "Agricultural Age" (magazine) Agricultural Research Institute Agricultural Council of America Agway, Inc. American Agri Women American Association for the Advancement of Science American Association of Cereal Chemists American Association of Crop Insurers American Association of Retired Persons American Association of University Women American Bankers Association American Cancer Society American Council of Life Insurance American Council on Alcoholism American Council on Consumer Interest American Dental Association American Dietetic Association American Dry Pea & Lentil Association American Farm Bureau Federation American Farmland Trust American Forest Council American Forest Association American Heart Association American Home Economics Association American Humanities, Inc. American Institute of Cooperation American Medical Association American Medical Institute American Physiological Society American Public Health Association American Rice Growers Association American School Food Service Association American Sheep Producers Council, Inc. American Society of Agricultural Engineers American Society of Biological Chemists American Soybean Association American Sugar Beet Growers Association American Veterinary Medical Association Association for Youth Development in Home Economics Association of Consulting Foresters Association of Junior Leagues, Inc. Association of Official Seed Certifying Agencies Baby Scouts California Antelope Advisory Board California Pezachio Commission Campbell Soup Company Center for Agriculture and Resource Development Center for Environmental Research Center for Volunteer Development Chicago Board of Trade Children's Defense Fund Citizens Network for Foreign Affairs Connecticut ACIR Cotton Council Council for Agricultural Science and Technology County Women (magazine) Crop Science Society of America	Davenport Chamber of Commerce Department of Agriculture Agricultural Cooperative Service Agricultural Marketing Service Agricultural Research Service Agricultural Stabilization and Conservation Service Cooperative State Research Service Economic Research Service Farmers Home Administration Food and Nutrition Program Food and Nutrition Service Food Safety and Inspection Service Foreign Agricultural Service Forest Service Human Nutrition Information Service National Agricultural Library Office of Budget and Program Analysis Office of Consumer Affairs Office of Higher Education Office of International Cooperation and Development Soil Conservation Service Department of Commerce Department of Defense Department of Education Department of Health and Human Services Administration for Children, Youth, and Families Alcohol, Drug Abuse, and Mental Health, Office of Substance Abuse Prevention Public Health Service, Centers for Disease Control Department of Housing and Urban Development Department of Justice Department of Labor Department of Transportation Department of the Treasury E. I. DuPont Company Environmental Protection Agency Environmental and Energy Study Institute Executive Office of the President Office of Management and Budget, Natural Resources Division, Agriculture Branch Farm Credit Administration Farm Foundation Farm and Industrial Equipment Institute Farmland Industries "Farmers Digest" (magazine) "Farmers Digest" (magazine) Federal Reserve Bank Federal Reserve Bank of Minneapolis Food and Drug Administration Food Marketing Institute Food Foundation Forest Farmers Association Freswater Society Georgia Peanut Association Gerontological Society of America Girl Scouts Gold Nist, Inc. Grey Panthers	Holler Farms, Inc. House Agriculture Committee House Committee on Education and Labor Human Resources Subcommittee House Select Committee on Aging House Select Committee on Children, Youth, and Families Independent Bankers Association Institute for Alternative Agriculture Institute of Food Technologies International Association of Fish & Wildlife Agencies Iowa Farm Bureau Iowa Geological Survey "JPM Practitioner" (magazine) Jevke and Associates Land O'Lakes League of Women Voters March of Dimes Birth Defects Foundation Monsanto National Agricultural Chemicals Association National Assembly National Association for the Education of Young Children National Association of Conservation Districts National Association of Counties National Association of County Agricultural Agents National Association of Extension 4-H Agents National Association of Extension Home Economist National Association of State Foresters National Association of State Universities and Land Grant Colleges Commission on Home Economics Office of Governmental Relations—Food and Agriculture National Association of Towns and Townships National Association of Wheat Growers National Audubon Society National Catholic Rural Life Conference National Cattlemen's Association National Center for Appropriate Technology National Center for Food & Agriculture Policy/Resources for the Future National Corn Growers Association National Council of Churches National Council of Parents and Teachers National Council on Family Relations National Dairy Herd Improvement Association National Dairy Promotion & Research Board National Education Association National Extension Homemakers Council, Inc. National Farmers Organization National Farmers Union National Food Processors Association National 4-H Council National Grange National Homemakers Council National Institute of Alcohol Abuse and Alcoholism	National Livestock and Meat Board National Livestock Producers Association National Milk Producers Federation National Organization on Adolescent Pregnancy and Parenting National Peach Producers Council National Pork Producers Council National Potato Promotion Board National Red Cherry Institute National Research Council Board of Agriculture National Restaurant Association National Rural Electric Cooperative Association National Rural Electric Women's Association National Science Foundation National Urban League National Woodland Owners Association National Wool Growers Association Nurserymen's Association Philip Morris, USA Potash & Phosphate Institute President's Council on Physical Fitness and Sports Produce Marketing Association Regional Rural Development Centers R.J. Reynolds Tobacco Rohde Research Center "Rural Enterprise" (magazine) Senate Committee on Finance Senate Committee on Labor and Human Resources Subcommittee on Aging Subcommittee on Children, Family, Drugs and Alcoholism Sheep Industry Development Program Society for Nutrition Education Society for Range Management Society of Wood Science & Technology Soil and Water Conservation Society of America Soil Conservation Society Soil Science Society of America Southeastern Poultry & Egg Association "Southern Living" (magazine) Southern Poultry & Egg Association Tennessee Valley Authority The Fertilizer Institute "The New Farm" (magazine) The Quess National Center United Way of America Volunteer/The National Center on Citizen Participation White House Office of Consumer Affairs Wildlife Management Institute for Wildlife International Institute for Agricultural Development W.K. Kellogg Foundation Women Involved in Farm Economics World Bank Youth Policy Institute, Inc.
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# National Initiatives Task Forces

## Coordinating Committee Co-chairs

Chesler Black, NC  
Denzil Clegg, ES/USDA

## Coordinating Committee

Patrick J. Borch, MN  
John S. Bortum, ES/USDA  
Richard Fowler, DE  
Vivian Jennings, ES/USDA  
Leo Lucas, NE  
Ava D. Rodgers, ES/USDA  
O. E. Smith, OR  
Donald S. Storrer, ES/USDA  
John A. Vance, ES/USDA  
Leahy Williams, 1890 Extension, LA

## Alternative Agricultural Opportunities

**Co-chairs**  
Charles A. Finkus, NE  
C. David McNeal, Jr., ES/USDA

## Task Force Members

Damaris Bradish, WA  
Larry della Bretonne, LA  
Frank Brewer, MI  
Richard E. Fowler, DE  
Marlene Futz, ID  
William Gaskin, GA  
Jesse Harless, MS  
Dwayne Ingram, FL  
Kirby Madison, CA  
R. David Smith, NY  
Don Tilmon, DE  
Thomas Zacher, MN

## Building Human Capital

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Glen Johnson, MI  
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Mary Ellen Payne, NM  
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Alan Snider, PA  
Paul Warren, KY

## Competitiveness and Profitability of American Agriculture

**Co-chairs**  
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Walter J. Walla, TX

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Marilyn Purdie, MS  
**Task Force Members**  
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Karen Penner, KS  
Norma Roberts, LA  
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## Reritalizing Rural America

**Co-chairs**

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Ayse Somersan, WI

## Task Force Members

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Ray Campbell, OK  
Jim Christenson, KY  
Doug Dunn, AZ  
Glen Krohn, SC  
Mike Levi, NC  
Bonnie McGee, NH  
Mike Turner, NE  
John Vance, ES/USDA  
Ron Williams, KY  
Russ Youmans, OR

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**Co-chairs**  
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Fred Swader, ES/USDA

## Task Force Members

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N. Goetz, OR  
George Goldman, CA  
Gary Jackson, WI  
Peter Korschung, LA  
Ann T. Lemley, NY  
L. M. Muldrow, SC  
Whinnie Peele, VA  
Joseph A. Phillips, NC  
Jack Watson, AZ  
Dick Weismiller, MD  
Leahy Williams, LA

## Staff for the National Initiatives Project:

Patricia Calvert, ES/USDA  
Virginia Conklin, ES/USDA  
Hollis Hall, ES/USDA  
Richard Liles, NC  
Don West, ES/USDA

## Cooperative Extension System National Initiatives

- 1 Alternative Agricultural Opportunities
  - 1a Maintaining Profitability While Protecting the Environment
  - 1b Evaluating New Enterprises
  - 1c Exploring Non-Farm Income Sources
- 2 Building Human Capital
  - 2a Facilitating Career Preparation and Transition
  - 2b Preparing Youth for Responsibility
  - 2c Developing Leaders
  - 2d Renewing Volunteerism
- 3 Competitiveness and Profitability of American Agriculture
  - 3a Improving the Economic Efficiency and Integration of the Agricultural System
  - 3b Developing, Applying and Transferring Technology
  - 3c Balancing Human Health, Nutrition and Environmental Concerns with Competitiveness and Profitability Goals
  - 3d Adjusting Profitability to Global Market Changes
  - 3e Strengthening Business and Community Support Systems
  - 3f Developing Long-Term Agricultural Policy That Considers Both National Needs and Global Realities
  - 3g Ensuring That Overall U. S. Fiscal, Monetary and Trade Policies Are Consistent With the Nation's Goals for International Agricultural Trade
  - 3h Integrating Marketing Strategies into the Production Management System
  - 3i Ensuring That The Agricultural System Has An Adequate Supply of Competent Professionals
- 4 Conservation and Management of Natural Resources
  - 4a Sustaining a Productive Natural Resource Base
  - 4b Marketing Natural Resource Products and Services
  - 4c Natural Resources Public Policy Education
- 5 Family and Economic Well-Being
  - 5a Family Financial Instability
  - 5b Children at Risk
  - 5c Vulnerable Youth
  - 5d Family Disruption and Dislocation
  - 5e Responsibility for Dependent Elderly
- 6 Improving Nutrition, Diet and Health
  - 6a Dietary Practices Related to Lifestyle Factors and Health
  - 6b Confidence in the Safety, Quality and Composition of the Food Supply
- 7 Revitalizing Rural America
  - 7a The Diminishing Economic Competitiveness of Rural Areas
  - 7b Dependence on Too Few Income Sources
  - 7c Growing Service Demands Accompanied by Diminishing Resources
  - 7d Adjusting to the Impacts of Change
  - 7e Need for Skilled Community Leadership
  - 7f Quality of the Natural Resource Base
- 8 Water Quality
  - 8a Public Understanding of the Nature and Importance of Water Resources
  - 8b The Impacts of Chemicals on the Water Supply
  - 8c Water Conservation
  - 8d Community Control of Water Quality

# Research Initiatives

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**A Research Agenda for the  
State Agricultural Experiment Stations**

**The Experiment Station Committee on Organization and Policy  
The Cooperative State Research Service**

Table 4: Resource Needs by Initiative

INITIATIVE	FUNDS (THOUSANDS)	
	ONE-TIME	CONTINUING
<b>Natural Resources</b>		
*Sustaining Soil Productivity	\$18,750	\$11,951
*Maintaining and Protecting Water Quality and Quantity	48,225	25,440
Forest Profitability	12,875	7,650
Rangelands and Pasturelands	7,500	6,000
Effects of Atmospheric Deposition	4,600	2,790
<b>Animal Sciences</b>		
*Biological Efficiency of Animals	31,875	13,500
Animal Health and Disease	42,500	18,000
<b>Plant Sciences</b>		
Genetic Improvement of Plants	13,875	9,750
Improved Management of Crop Pests and Disease	11,250	7,500
Agriculture in the Urban Environment	7,500	6,000
<b>Economic and Social Concerns</b>		
Short-Term Adjustments for Enhancing Economics of Agriculture	9,000	7,200
*Agricultural Policy in a Global Setting	7,500	6,000
Market Penetration and Efficient Marketing of Agricultural and Forestry Products	3,000	2,400
Rural Family and Community Well-Being	7,500	6,000
*Interrelationships of Food and the Nutritional and Health Status of People	31,750	16,200
<b>Multidisciplinary Issues</b>		
*Biotechnology	91,375	38,700
Computer Technology for Agricultural Management	21,250	9,000
Robotics in Agriculture	10,625	4,500
Processing and Quality Enhancement	42,500	18,000
Energy Efficient Systems	5,400	3,060
*Integrating Agricultural Technology	15,000	12,000
<b>Total</b>	<b>\$443,850</b>	<b>\$231,641</b>

(\* denotes top 25 percent of new research initiatives)

## Biological Efficiency of Animals

Dollars x 1,000

Objective	Scientist Years	START-UP COSTS		ANNUAL COSTS			1st Yr. Total
		Facilities	Equipment	Personnel	Operating Expenses	Equipment	
Animal Genetics	20	\$ 4,500	\$ 4,000	\$2,400	\$ 720	\$ 480	\$12,100
Reproductive Physiology	20	4,500	4,000	2,400	720	480	12,100
Animal Nutrition	20	4,500	4,000	2,400	720	480	12,100
Animal Protein and Lipid Synthesis	15	3,375	3,000	1,800	540	360	9,075
<b>SUBTOTALS</b>		<b>\$16,875</b>	<b>\$15,000</b>	<b>\$9,000</b>	<b>\$2,700</b>	<b>\$1,800</b>	
<b>TOTALS</b>	<b>75</b>	<b>\$31,875</b>			<b>\$13,500</b>		<b>\$45,375</b>

Fig. 2. Investment Strategy

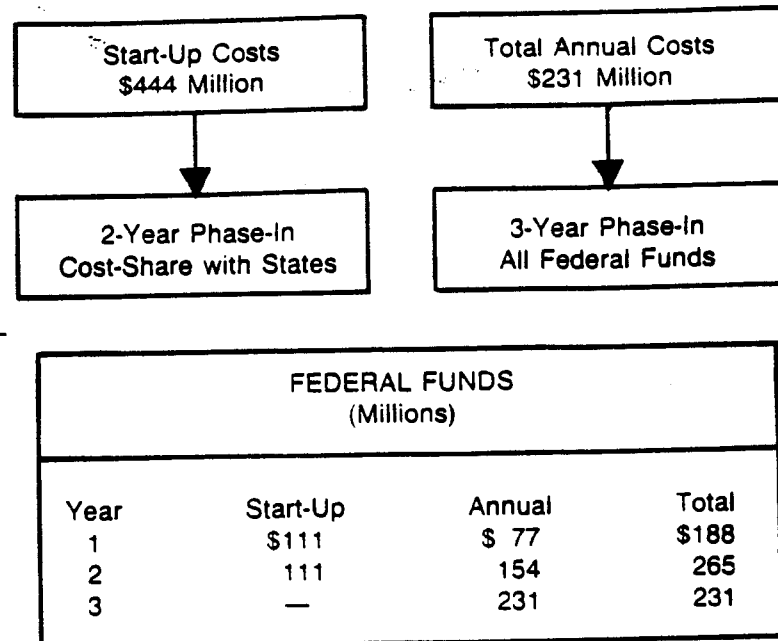


Table 5: New Initiatives and Objectives

<ul style="list-style-type: none"> <li>*Sustaining Soil Productivity <ul style="list-style-type: none"> <li>*Erosion-Soil Property Relationships <ul style="list-style-type: none"> <li>Soil Conservation Policy</li> <li>Soil Conservation Economics</li> <li>Status of Soil Productivity</li> </ul> </li> <li>*Tillage Management Interactions</li> </ul> </li> <li>*Maintaining and Protecting Water Quality and Quantity <ul style="list-style-type: none"> <li>*Groundwater Quality and Quantity</li> <li>*Water Use Efficiency <ul style="list-style-type: none"> <li>Chemical and Sediment Movement</li> </ul> </li> <li>*Water Yield <ul style="list-style-type: none"> <li>Conservation Practices</li> <li>Use Policy and Economics</li> </ul> </li> </ul> </li> <li>Forest Profitability <ul style="list-style-type: none"> <li>*Silvicultural and Protection Techniques to Increase Yields of Timber <ul style="list-style-type: none"> <li>Techniques for Producing Superior Tree Varieties</li> </ul> </li> <li>New Manufacturing and Processing Technologies</li> <li>New Products and New Uses for Wood</li> </ul> </li> <li>Rangelands and Pasturelands <ul style="list-style-type: none"> <li>Rangeland Ecology</li> <li>Plant/Animal Interactions</li> </ul> </li> <li>Water Management <ul style="list-style-type: none"> <li>Plant Improvement</li> </ul> </li> <li>Management Systems</li> <li>Weed and Brush Management</li> </ul>	<ul style="list-style-type: none"> <li>Effects of Atmospheric Deposition on Crops, Forests, Livestock, Wildlife and Associated Ecosystems <ul style="list-style-type: none"> <li>Determine Chemical Exposures</li> <li>Pollutant-Stress Relationships</li> <li>Dose-Response Relationships</li> <li>Intensive Field Investigations</li> <li>Effects of Toxic Metals</li> </ul> </li> <li>*Biological Efficiency of Animals <ul style="list-style-type: none"> <li>*Animal Genetics</li> <li>*Reproductive Physiology <ul style="list-style-type: none"> <li>Animal Nutrition</li> <li>Animal Protein and Lipid Synthesis</li> </ul> </li> </ul> </li> <li>Animal Health and Disease <ul style="list-style-type: none"> <li>*Immunological Advances <ul style="list-style-type: none"> <li>Integrated Health Management</li> </ul> </li> <li>Animal Care</li> <li>*Embryo Transfer</li> </ul> </li> <li>Genetic Improvement of Economically Important Plants <ul style="list-style-type: none"> <li>*Genetics and Breeding <ul style="list-style-type: none"> <li>Pest Resistance</li> <li>Environmental Stress</li> <li>Physiological and Morphological Parameters</li> </ul> </li> <li>Soil Microorganisms</li> </ul> </li> </ul>
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Table 5: New Initiatives and Objectives (continued)

**Improved Management of Crop Pests and Diseases**

- \*Incidence, Prediction, Biocontrol
- Biocide Management
- Quantifying Constraints to Plant Productivity
- Epidemiological Systems
- Biological Control Techniques
- Integration of Pest and Disease Management Into Crop Production Systems

**Agriculture in the Urban Environment**

- Plant Materials for Non-Traditional Environments
- Maintenance Strategies for Plants in Diverse Environments

**Short-Term Adjustments for Enhancing the Economics of Agriculture**

- \*Lower Unit Production Costs
- Improved Risk Management
- Alternative Financial Management Strategies
- Resource and Social Implications of Adjustments

**\*Agricultural Policy in a Global Setting**

- Commodity, Factor, and Financial Market Relationships
- Political Economy of Domestic and Foreign Commodity Policy
- \*Comparative Productivity Growth and Competition in World Markets
- Impacts of Technological Change
- \*Policy and Institutional Design

**Market Penetration and Efficient Marketing of Agricultural and Forest Products**

- Supply, Demand, and Price Relationships
- Grades and Standards
- Market Efficiency and Performance
- International Market Development
- Market Strategies and Power

**Rural Family and Community Well-Being**

- \*Family Stress Factors
- Environmental and Safety Factors for Families
- Economic Alternatives for Non-Metropolitan Areas
- Organizing Capacities of Communities
- Future Governance Systems for Non-Metropolitan Areas

**\*Interrelationships of Food and the Nutritional and Health Status of People**

- Human Nutritional Requirements
- Dietary Practices
- Nutritional Quality of Foodstuffs
- Bioavailability of Nutrients
- \*Dietary Health Risks

**\*Biotechnology**

- Plant Productivity
- Plant Disease Resistance
- Nutritional Quality of Plants
- \*Biological Control of Pests
- \*Biologically Active Materials
- \*Diagnostic and Immunologic Products
- Animal Disease Resistance
- \*Animal Development and Productivity
- \*Environmental Impact of Biotechnology

**Computer Technology for Agricultural Management**

- \*Production Management/Decision Models
- Farm-Related Cost Accounting Models
- Expert Systems for Management/Decision Making
- Price and Income Policies and Foreign Trade

**Robotics in Agriculture**

- \*Basic Research for Sensor Technology Development
- Electronic Systems for Plant Production
- Electronic Systems for Animal Production
- Electronic Systems for Food Processing

**Processing and Quality Enhancement**

- Processing
- Biotechnology
- Food Safety
- By-Products and the Environment

**Energy Efficient Systems**

- Efficient Plant and Animal Production and Processing Systems
- Conversion Technology
- Energy Assessment

**\*Integrating Agricultural Technology**

- \*Assessment of New Production Technologies
- Impacts of Market Forces on Enterprise Profitability
- Capital Investment and Financial Requirements
- Develop Integrated Farming Systems

(\*denotes top 25 percent in priority)

## WESTERN ASSOCIATION OF AGRICULTURAL EXPERIMENT STATION DIRECTORS

March 1988

## ESCOP Report

Colin Kaltenbach

The ESCOP Interim Committee met in Washington, D.C., February 18-19. Development of a response to the executive budget represented a major effort during this meeting. The proposed NASULGC budget has been widely distributed.

Other major items of business included a restructuring of the ESCOP Planning/Special Initiatives/Budget Subcommittees. A flow diagram which outlines structure and interaction of the various committees will be provided in a separate handout. Hopefully, the reorganization will reduce some redundancy and improve our budget presentation process.

Other items of interest included adoption of revised ESCOP publication procedures, an update of the Communications Subcommittee activities, a review of the ARS plant variety protection policy and an update of research planning activities.



ESCOP  
PEST CONTROL STRATEGIES  
SUBCOMMITTEE

To Western Agricultural Experiment Station Directors  
March 24, 1988

The Committee, composed of Dick Rohde (MA), Bill Brown (LA), Ben Jones (IL) and George Ware (AZ) Chairman, met on November 10, 1987, in conjunction with the NASULGC meeting in Washington. We agreed to pursue the assembling of representatives from all pest-control related agencies, committees, and informal groups, as recommended by the Western Directors in July, 1987.

Ray Miller, Chairman of the National IPM Coordinating Committee, subsequently agreed in principle with the plan and asked us to place the subject on the next IPM meeting agenda. (Dick Rohde and George Ware are also members of the IPM Committee.

At that meeting, February 16-17, 1988, the subject was accepted as a viable step forward in developing the next pest control strategy.

Consequently, the ESCOP PCS Committee will meet on April 28, 1988, for a full day's meeting at the Breckenridge Kings Inn, St. Louis, MO, to identify the missing links in existing technology. Our expanded list of guests includes: Keith Douce (APHIS Survey Program), John Fulkerson (National Biol. Impact Assess. Program.), Ed Glass (NRC, Committee on Pesticide Resistance), Don Holt (ESCOP Committee on Expert Systems), Ron Kuhr (Natl. IPM Coord. Committee), Bob Kupelian (Natl. Dir. IR-4), Dave MacKenzie (ESCOP Biotechnology Subcom., and Committee on Movement of Biotic Agents), Merritt Nelson (Biocontrol Subcommittee of ESCOP PCS Committee), Eldon Ortman (Host Plant Resistance), Nancy Ragsdale (Natl. Pesticide Impact Assess. Program), Robert Riley (CSRS-IPM Coord.), and Henry Studer (Pesticide Application Technology, WRCC-51 Admin. Advisor).

G. W. Ware  
March 11, 1988

WESTERN ASSOCIATION OF AGRICULTURAL EXPERIMENT STATION DIRECTORS  
1988 Spring Meeting, New Mexico State University, Las Cruces, NM  
March 23-24, 1987

DAL Report  
L. L. Boyd

This report covers the time period from the Fall meeting at the NASULGC meeting in Washington, DC, November 11, 1987 through March 18, 1988. I participated on your behalf in the following activities that required travel during this period.

11/30 CO-MT-WY Plant Science Ctr meeting, Denver, Airport Ramada  
12/15-16 ASAE Winter meeting, Chicago, IL, Hyatt-Regency  
12/17 DAL meeting with Donoho, CSRS, Washington, DC  
1/20 DAL meeting, CSRS, Washington, DC  
1/20 ARI Govrnmnt Liaison Committee with Gast & DALs re FY89 Budget promotion  
1/20 Bill Kerrey re Water Initiative  
1/21 Extension Conference/Joint Council, Washington, DC  
1/28 Utah Agr Exp Station Centennial, Logan, UT  
1/29 Planning meeting (for Summer Joint Meeting), Denver  
2/9-10 NISARC, Capitol Holiday Inn, Wash., DC in p.m.  
2/16 Dept. of Commerce-Sensitivity Analysis Demonstration  
2/16 Search for Life Exhibit  
2/16 ESCOP Research Planning & Evaluation Subcommittee, Wash, DC  
2/17 NARC, Rm 3019, South Bldg, USDA, Washington, DC  
2/17 FY89 ESCOP Budget Subcommittee (evening), Wash., DC  
2/17 FY89 ESCOP Budget Strategies Subcommittee, Cosmos Club, 5:30 pm  
2/18-19 ESCOP Interim, NASULGC, Washington, DC  
2/19 DAL meeting, CSRS, Washington, DC  
2/22 Joint Summer Meeting Planning Session, Ft. Collins  
2/25 Michigan Experiment Station Centennial program  
2/29-3/1 Users Advisory Board, L'Enfant Plaza Hotel, Washington, DC  
3/2 FY90 ESCOP & ECOP Budget Subcommittee, Baton Rouge, LA  
3/3 Joint Summer Meeting Planning Session, Ft. Collins  
3/14-16 DAL Meeting, re Farm Bill plans, Clemson, SC

ESCOP. Clive Donoho is taking an extremely active role. Prior to the meeting at the NASULGC meeting, he proposed significant changes in the research planning and budget subcommittee structure. These were presented to the full ESCOP Committee then. ESCOP offered some suggestions for modifications and authorized the Interim Committee to take action at its Winter meeting. The changes were approved at the February 18-19, 1988 Interim Subcommittee meeting. I am giving you a handout that was prepared by Neville Clarke for distribution at the February 16, 1988 meeting of the ESCOP Research Planning and Budgets Subcommittee. The diagram on the last page is the new structure as conceptualized by Donoho. I believe it links the various activities well and am quite pleased with the role that I will have in budget development. Re the Budget Strategies group, it is important for all to realize that we still need considerable effort by each of you with your Congressional delegations, even if you don't have anyone on a key Committee or Subcommittee. Also, it is important for you to authorize me to make some state Congressional office visits, if you can not get it done on a timely basis. If I am to make such "Hill" visits, I will need to have you formally introduce me via a letter, so your delegation members and staff are assured that I am there in your behalf for the ESCOP developed national research program. I have no problem with visiting Committee Staff offices on behalf of ESCOP activities. It is your state offices for which I seek authorization and introduction.

OMB. Clive Donoho has met with the DALs nearly every time we have been together. I believe this is useful for him and us. At our last meeting in Clemson last week, we discussed the statements made by David Gibbons, Associate Administrator for Natural Resources of OMB, in three presentations he has made in 1988 to agricultural administrators, i.e. Directors of Extension meeting jointly with the Joint Council, CAHA (I think with CARET) and the Users Advisory Board. I am giving you a handout that he gave to Ext/JtC. Some, but perhaps not all of you, are aware of the agreement that the President made with Congress in November, 1987 to make it possible to get an FY88 budget approved and to keep from triggering the Gramm-Rudman-Hollings bill provisions. Gibbons stated emphatically that there could be no trade-offs between defense and the discretionary programs. He also stated that available funding for the foreseeable future could only decrease. Note the page showing the projected reductions in USDA budgets. He encouraged Extension to join with other Agencies such as EPA to provide the delivery for "mandated" activities. He indicated similar opportunities exist for research. He indicated that he approved "mandated" programs with little questioning, even if he didn't agree with them, because he didn't want to battle in court and lose. He laid out both the necessary conditions and the sufficient conditions for approval of a program. His main emphasis was on sufficient conditions as follows:

- 1) Is the issue a national problem and is it a federal responsibility?
- 2) Is the program conducted/planned in the most cost effective way? Can private, state or local agencies handle it? Do the costs exceed the benefits? Does it have a beginning, middle and end point?
- 3) What is the priority relative to other discretionary programs?
- 4) Are there identifiable beneficiaries who can and should bear the costs?

The DALs and Donoho in addition to several others with whom we have discussed Gibbons presentations believe that we need to meet with him and also get him to at least one experiment station in each region. North Carolina State apparently has moved forward on their own. The DALs and Donoho are suggesting that we take him to the following locations: 1) Wooster, OH in the North Central, 2) Penn State in the Northeast and 3) Davis, CA in the West. We think that both Ohio and Pennsylvania can pick him up and return him in a University owned plane. We would need to use commercial transportation for California. We are proposing that if these three visits can be worked out that the states in the regions help with the costs. They probably will be minor enough that they could come from the DAL operating budgets. This concept will be pursued at the May ESCOP meeting, so give me, Kaltenbach, Oldenstadt and Heil your views, particularly if you object to it.

FY89 ESCOP budget. You received a copy of the latest version of this by mail, but I decided to distribute it again here. You will note that our major emphasis is on the Water initiative and that it is joint with Extension. I think all of us believe this to be a top priority, especially because we, along with Extension, employed Bill Kerrey to help push it with the Congress. Bill wanted to discuss his activities with us here, but found it necessary to be in Washington, DC this week. He will try to make the summer meetings. He has received encouragement with Congressional staff relative to the importance of water quality, but real reservations about the availability of funds and particularly at the \$40 million level (i.e. \$25m for research and \$15m for extension). He has talked with some of you by telephone and also sent Dialcom requests. I urge you to respond promptly. If you have questions about what he is requesting, call him or me. While I don't serve on the "advisory group"

to assist him, he does talk with all of the DALs frequently. A small document about the FY89 revised budget request is due from the printers soon and will be sent to you. Because this is a major election year, I along with many others expect the Congress to deal with the FY89 budget much earlier than they have recently. Therefore, I urge you to get your points made early and to get local support groups to reinforce them, when the Congressman/woman is in the home district campaigning. I believe their ears and minds are more receptive then.

**FY90 ESCOP budget.** We are moving slowly in developing the amounts to be requested. There is a view that we can promote programs without amounts, and then determine the amounts as we get more "feel" for what is likely in the FY89 budget. Also, we have some of the planning done from the FY89 three year projections. Clive Donoho and others have pushed hard for ESCOP and ECOP to have some joint thrusts, if it makes sense. In any effort to review possibilities and develop these, Oran Little (FY90 ESCOP Budget Chair), Neville Clarke, Keith Huston and I met in Baton Rouge, La on March 2, 1988 with Zerle Carpenter (FY90 ECOP Budget Chair from Texas) and Howard Diesslin. We came up with the following six issues with the first three considered to be the highest priority for both ESCOP and ECOP.

- 1) Water quality and quantity
- 2) Food safety (agricultural chemicals, additives, microbial)
- 3) Diet, health and nutrition
- 4) Sustainable agricultural systems
- 5) Natural resources other than water
- 6) Rural revitalization [relatively low priority for ESCOP]

We agreed that all six likely would appear in each of the two budgets. We expect each COP to develop individual strong statements or joint statements that would be harmonious (i.e. have common elements) in support of the budgets. We will seek other common elements for reinforcing statements or substatements. I also am distributing a single page listing the Cooperative Extension System's National Initiatives. I excerpted these from their recent publication, "Cooperative Extension System National Initiatives - Focus on Issues". This was released in January, 1988 during a national workshop in Washington, DC. If your Cooperative Extension Director has not shared a copy of it with you, I recommend that you ask him/her to do so.

Also be certain that you share "Research Initiatives - A Midterm Update of the Research Agenda for the State Agricultural Experiment Stations, January 1988" with him/her. Also, I encourage you to provide copies of the "Update" to your state Commodity organizations and urge them to provide input to their National offices for our four year update next year. The National offices have been alerted that we will be seeking their input later this year.

I would like to review briefly with you how the FY89 ESCOP budget was developed from the Research Initiatives planning document, especially the projections into FY90 and FY91. The handout of excerpts from Research Initiatives is helpful in doing this. Figure 2 from page xv shows the suggested "investment strategy". During the FY89 budget development process, the Subcommittee decided to request increases based upon the top 25% (indicated by asterisks) of the objectives shown in Table 5, page xv. The remaining objectives were divided between FY90 and FY91. Summarized costs are shown in Table 4. These were developed from the individual objective cost estimate tables like the one for Biological Efficiency of Animals shown below Table 4. The top 25% of the objectives "costed out" annually at \$101,000,000 plus \$20,000,000 for water leaving \$110,000,000 to be divided equally between FY90 and FY91. Because

the 25% plus water was so large, Gast decided that he could not include any of the \$222,000,000 one time "start up" costs. The Dialcom I sent on March 13, 1988 referred to these. My view is that we probably need to depend entirely upon the States for facilities, but expect the Federal government to at least "cost share" the research equipment. I believe that we can leverage the States on equipment regularly with some Federal funds. We also could leverage states on facilities at times, but the amounts are usually much larger and states appears to have much more rigid priorities for buildings than they do for equipment.

NISARC is closely related to SAES federal research budget success in my opinion. I thought that this year's program was particularly strong. I am distributing a copy now. I should have included it with the copy of the Department of Commerce Sensitivity Analysis document. I'd appreciate feed back on the usefulness of the Sensitivity Analysis document. Many of you may not be aware that NISARC was formed in the early 1970s to seek the support of Commodity and Trade organizations, particularly those based in or with Washington, DC offices, for the CSRS budget requests. Roy Kottman, who was handling the Budget at that time, was instrumental in the formation of NISARC. Initially we had excellent participation by both the Industry representatives and by the Experiment Stations. Over the years participation has diminished probably partly because of changing personnel and tighter economic conditions. We had about twenty from Industry this year with about half of them from the DC area. SAES participation by the Northeast has been the best, because in recent years they have scheduled their Spring meeting immediately following NISARC and likely because they are closer to DC. The North Central usually is next, followed by the South and then the West. This year on Van Volk of Oregon attended from the West. We need to decide if NISARC can still be functional or if there is a better way to obtain Industry support for our research budgets. If we still need NISARC, and I believe we do, then every Director needs to make an effort to have his Station participate. Also, the DALs, CSRS and at least some Directors must make an effort to rekindle interest by Industry. I will make a presentation and lead a discussion on NISARC at the May ESCOP meeting. Please give this some thought and let Kaltenbach, Oldenstadt, Heil and me have your views.

**Centennial Activities.** As indicated I participated in the programs at Utah and at Michigan and have shared the program outlines with you as I did the Cornell program last year. I hope these are useful to those of you still planning programs. I was particularly impressed with Utah's highlighting the activities of each scientist by showing a slide of him/her. Pat Jordan and I also had an opportunity to observe and discuss research with two Utah research groups, whose research was not the usual. At Michigan the focus was on change. Futurist Joel Barker set the stage with his presentation on "The Power of Paradigms". I'm distributing his two page handout. I'd recommend him to you, if you're looking for a futurist. I'd also recommend David Snyder, who did an excellent job at the ASAE meeting last December. President Max Lennon of Clemson did the wrap up at the evening banquet with particular emphasis on the global nature of all of our activities and ways to best prepare our students, our constituents and ourselves to deal with it.

**UAB.** The primary issue of Users Advisory Board meeting was to hear budget presentations by the various agencies and to make its recommendations to the Congress. The budget response was prepared by various subcommittee. David Gibbons presentation (discussed above) had its impact on UAB decision to hold to the "bottom line" of the Executive budget. The CSRS subcommittee of Walzer (Chair), Edwards, Arant, Sigue and Chapman were ready to go with ESCOP's revised, but were outvoted by a narrow margins. The ERS subcommittee recommend-

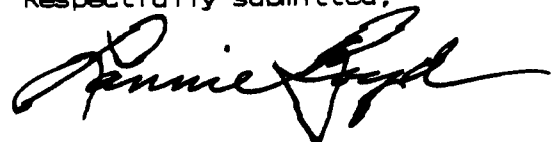
ed moving \$2.6 million from ERS, which ended up in the CSRS recommendations. William Lockard, Jr., a Veterinarian from Texas, suggested that they try to move some of the support payment funds to research, but no one else picked up on this. I discussed this later with Lynn Lowe, a farmer member from Arkansas. I believe he would support this concept. I plan to contact Lockard about the idea before the UAB May meeting and to talk with him about it then. It seems almost certain that over the next few years support payments will diminish appreciably. Perhaps we could get some for research without all of the reductions going toward overall deficit reduction. Jack Marvel of Monsanto, who was on the Board previously but had to drop off while relocated in Europe, was elected Chair of the UAB. Jane Anderson, who works for the CA beef industry, was elected Vice Chair. I want to reemphasize the importance of contact with the UAB members from each of your states, if any. I think we may be close to being able to get them to advocate increases in research funding rather than "holding the line".

**Farm Bill.** The Farm Bill will be rewritten in 1989. The DALs reviewed it briefly last week. We are preparing some suggestions for changes. We will meet with Ben Jones of IL, Chair of the ESCOP Legislative Subcommittee in April. We need your suggestions, if any. For example, Illinois is proposing to add language that would permit a 5% carryover of formula funds, so they can be used more efficiently. It is important to recognize that the Illinois Experiment Station does not allocate State funds. These are done via the Dean. As a result they do not have the flexibility that many of you have with both State and Federal funds at your disposal. Even so, I think the carryover concept could suggest that we aren't pressed for funds. How can we include language in the 1989 Farm Bill that will mandate certain things be done within a time frame, so OMB will have to agree to funding them? I believe we need to seriously consider such actions. As you probably know the 1985 Farm Bill is a collection of additions including those from 1981 to the 1977 Farm Bill, which was essentially rewritten from scratch. The DALs decided that we didn't think it worth the effort to start from scratch in 1989. It appears that we would have to do the major part of the work and then take it to the Staff of the House Agr Committee. We may need to rethink this. I would appreciate your views on this. This likely also will be an agenda topic at the May ESCOP meeting.

**Committee of Nine.** Likely the Report of the Committee on Interregional Projects already will have been discussed by this time. However, I do want to make certain that you know that the Committee has submitted a report to Pat Jordan. Pat likely will take no action until the Committee of Nine has had an opportunity to review the report and discuss it at its May, 1988 meeting. As soon as that happens, I expect that the report will be released for discussion at the summer meetings of the regional associations. Members of the Committee of Nine already may have a copy. If so, our C-9 representatives and/or Pat may wish to comment on it, or seek your input in advance of the May meeting.

I continue to enjoy my assignment as your representative in various activities and at various functions. I know all of you are very busy. However, it would be comforting to have a little more feedback at time, so I could be more certain that I project your views. Again I invite you to make suggestions about how I can most effectively assist you. Thanks.

Respectfully submitted,



10:30 - 11:00 Discussion  
11:00 - 11:30 NISARC Business Meeting  
12:00 Adjourn

NOTES

NATIONAL INDUSTRY-STATE AGRICULTURAL RESEARCH COMMITTEE  
(NISARC)  
(A Standing Committee of the Agricultural Research Institute)

WINTER MEETING PROGRAM  
  
NEW APPROACHES TO COMPETITIVENESS IN U. S. AGRICULTURE

February 9-10, 1988

Holiday Inn Capitol  
550 "C" Street, S.W.  
Washington, DC

AGRICULTURAL RESEARCH INSTITUTE  
9650 Rockville Pike  
Bethesda, Maryland 20814  
(301) 530-7122

NATIONAL INDUSTRY-STATE AGRICULTURAL RESEARCH COMMITTEE (NISARC)  
(A Standing Committee of the Agricultural Research Institute)

WINTER MEETING  
February 9-10, 1968

Holiday Inn Capitol  
550 "C" Street, S.W.  
Washington, DC

PROGRAM

"NEW APPROACHES TO COMPETITIVENESS IN U.S. AGRICULTURE"

Tuesday, February 9  
P.M.

COLUMBIA ROOM NORTH

1:00 - 1:30 Federal Perspectives on Enhancing Competitiveness

The Honorable Bruce Merrifield, Assistant Secretary  
for Productivity, Technology and Innovation  
United States Department of Commerce

1:30 - 2:00 The State of Washington and Washington State University  
Approaches to Enhance Competitiveness of Washington  
Agricultural Products

Dr. C. Alan Pettibone, Washington Department of  
Agriculture

2:00 - 2:30 The American Soybean Association Programs for New Product  
Development and Alternative Uses

Dr. Keith J. Smith, American Soybean Association

2:30 - 3:00 Break

3:00 - 3:30 The National Corn Growers Program for New Utilization

Mr. Jeff Gain, National Corn Growers Association

3:30 - 4:00

Influencing Research Directors in the State Agricultural  
Experiment Stations - The 1969 Experiment Station Com  
on Policy (ESCOF) Planning Cycle

Dr. Neville P. Clarke, Texas A&M University

4:00 - 4:30

FY 1969 Executive Budget Recommendations for Cooperative  
State Research Service Research Programs

Dr. Robert G. Gast, Michigan State University

4:30 - 5:00

Discussion

5:30 - 6:00

Speaker: Alan Tracy, Special Assistant for  
Agricultural Trade and Food  
Assistance, The White House

6:00 - 6:30

Reception

Wednesday, February 10  
A.M.

COLUMBIA ROOM

8:30 - 9:00 Getting to the New Age in Agriculture

Mr. Skip Stiles, Administrative Assistant to  
The Honorable George E. Brown, Jr., United  
States Congress

9:00 - 9:30

The State of Iowa and Iowa State University Approaches  
Enhancing Competitiveness: The National Center for Food  
Industrial Agricultural Product Development

Dr. Robert Jolly, Iowa State University  
Dr. Dennis Olson, Iowa State University

9:30 - 10:00

National Dairy Board Programs for Product Research

Dr. Marlin Harmon, Product Research Office,  
National Dairy Board, Logan, Utah

10:00 - 10:30

Specialized Product Utilization Laboratories

Dr. Daryl Lund, Rutgers, The State University of New Jersey



Joel Arthur Barker's

## The Power of Paradigms© Summary Notes 2.2.88

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8311 Windbreak Trail, St Paul, MN 55042-9521 612 228 0103

1. Strategic Exploration is the missing link in strategic thinking  
Institutions such as the Michigan Agricultural Experiment Station are the embodiment of the exploratory phase
2. Three keys to the 21st century in every field:  
**anticipation                  innovation                  excellence**
3. Understanding *Paradigms* helps us with the first two
4. Definition: a paradigm is a set of rules and regulations, (either explicit or implicit) that: 1) defines boundaries; 2) tells you what to do to be successful within those boundaries
5. All research is concerned with either creating new paradigms or extending established ones. Too often, the second effort gets, by far, the greatest attentions
6. All revolutionary change is, by definition, a paradigm shift
7. Therefore, to better understand the world we live in and the world that is coming, we need to understand more about paradigms.
8. Four essential points about paradigm change:
  - a. New paradigms are created/discovered while the paradigms they are to replace *are still successful*;
  - b. The person who shifts paradigms is almost always an outsider and whose new idea is almost always rejected initially. This resistance by insiders is triggered by a need to protect the investment in the dominant paradigm;
  - c. The paradigm pioneers who choose to follow a new paradigm early, make their decisions to switch without benefit of objective evidence. For that reason their justification for changing will always be *nonrational!* They decide intuitively and such decisions require great courage.
  - d. When people change their paradigms, their perceptions of the world change substantially. This is called the *paradigm effect* and explains why two people can look exactly the same direction and see very different things. The paradigm effect also explains why so many experts have made such bad predictions.
9. It is because of paradigms that there are two very different responses to innovation: *innovation that enhances* the prevailing paradigm is readily accepted and strongly supported; *innovation that changes* the paradigm is fought with great vigor because it destroys the present investment.

10. **The Going-Back-to Zero Rule:** when a paradigm shifts, everyone goes back to zero. Old leverage, while it may help, is no guarantee of success. This rule explains why some small new companies can take on old, established companies and meet them evenly. Just look at IBM and Apple.
11. The paradigm shift question: what thing is impossible to do right now, but if it could be done, would fundamentally change the way you do what you do?
12. Key characteristics of Paradigms:
  - a. Paradigms are common and functional;
  - b. They reverse the old adage--"I'll believe it when I see it." The truth is closer to "I'll see it when I believe it."
  - c. Too strong a belief in a paradigm can create **paradigm paralysis**, a terminal disease of certainty. This is also known as "hardening of the categories."
  - d. In turbulent times we need to develop **paradigm pliancy**, a purposeful flexing of our paradigms on a regular basis;
  - e. The greatest gift humans have is to be able to *choose to change* our paradigms.
13. **Conclusions:**
  - a. By understanding how paradigms influence our thinking, we can gain some control over them;
  - b. There is a special payoff that comes from listening to "screwy" ideas--they keep us flexible!
  - c. We must develop parallel structures to promote new paradigms while using the remaining strength of the mature paradigm as it plateaus;
  - d. A special kind of leader is needed to facilitate paradigm shifts. This is a special role that the Ag Station **MUST** play
  - e. This concept reinforces the power and the need for "cross-over" discussions between different groups and different fields--especially between the technical and the nontechnical
14. **Final thoughts:**

*"It is important not to mistake the edge of the rut for the horizon."*

**Those who say it cannot be done should get out of the way of those who are doing it!**

"No corporation gets hit by the future between the eyes; they get it in the temple." Dick Davis

**You can and should shape your own future; if you don't, someone else surely will! JAB**

#### References:

*The Structure of Scientific Revolutions*, Thomas Kuhn, U of Chicago Press, 1962

*Discovering the Future: The Business of Paradigms*, Joel Arthur Barker, ILI Press, 1985  
(to order, call 612 228 0103. VISA or Mastercard is required)

EXPERIMENT STATION COMMITTEE ON ORGANIZATION AND POLICY  
Policy on Publications Identification and Distribution  
Revised March, 1988

This version of the policy statement was developed by the Directors-at-Large for ESCOP with considerable input from interested Directors, CSRS administrators and faculty, and staff of the National Agricultural Library. Individuals charged with preparing publications for ESCOP should contact the Cooperative State Research Service for the assignment of a publication number and for mailing labels. At the time of this revision, the responsible people in CSRS are: Mrs. Fannie Tolver (202-447-8752) and Dr. E. M. (Ted) Wilson (202-447-4587). Suggestions for changes in this document and the mailing lists should be directed to the above and to the DALs.

### 3.4 ESCOP Publications

#### 3.41 Cover

- (1) The title of the publication.
- (2) A Publication of the Experiment Station Committee on Organization and Policy.
- (3) In cooperation with the Cooperative State Research Service (only if this is the case).
- (4) ESCOP Identifying Symbol (This must be identified. We recommend the use of the 1975 logo or the five letters, ESCOP.)
- (5) The year of the publication in arabic numerals and/or a series identification, e.g. 88-3.

3.42 Title Pages: The title pages shall include the following essential information. Publishers may vary the location of the information on the individual title pages.

#### 3.421 Title Page

- (1) The full title of the publication.
- (2) Source, i.e. the name of the author, compiler or editor, personal or corporate, or any combination of these. This includes committees.
- (3) Acknowledgement statement, i.e. the names of others who have made a significant contribution to the publication.
- (4) The name of the publisher.
- (5) The place of publication and the complete corporate address including zip code of the publisher should appear on the back of the title page.
- (6) The year of the publication in arabic numerals and/or a series identification, e.g. 88-3.

#### 3.422 Back of the Title Page

- (1) The copyright notice and related information, if applicable
- (2) Photo copying authorization statement: "Information contained in the publication is in the public domain and may be reproduced without permission. However, citation of the source is expected and will be appreciated."
- (3) Non-discrimination statement as follows: "State Agricultural Experiment Stations and the U. S. Department of Agriculture are equal opportunity employers and information contained in this publication is available to everyone without regard to race, color, religion, sex, age or handicap." This information alternatively can be placed on the outside of the rear cover page.

### 3.43 Distribution of Publications to and by the National Agricultural Library (NAL)

- 3.431 National Agricultural Library: A minimum of three (3) copies of the publication shall be deposited by the publisher with NAL immediately after publication. NAL would appreciate more copies if the publication would be suitable for overseas exchange. It is recommended that the publisher contact NAL to determine how many copies over three (3) NAL desires.
- 3.432 NAL will catalog (or index) the publications which will become part of the AGRICOLA data base.
- 3.433 Publications will be listed in AGRICOLA or the Bibliography of Agriculture; be loaded into DIALOG and BRS for machine access throughout the country; and be sent to FAO for inclusion in the AGRIS international data base.
- 3.434 NAL will place the publication in its collection and provide interlibrary loan.
- 3.44 The publisher will distribute single copies to the appropriate libraries and other organizations listed below. The Cooperative State Research Service will provide mailing labels and will keep the mailing list current with the assistance of the Directors-at-Large and others.
- (1) Library of Congress.
  - (2) Libraries of both the 1862 and 1890 Land Grant Universities and their branch units.
  - (3) Libraries of the AASCARR institutions.
  - (4) Libraries of selected private universities.
  - (5) Libraries of selected private organizations. An attempt will be made by the DALs to provide these labels based upon subject matter interests of the industries.
  - (6) All Congressional Offices
  - (7) Others to be designated by ESCOP, e.g.
    - (a) Offices of relevant Congressional Committees.
    - (b) Offices of the Chair of relevant Committees.
- 3.45 The publisher will distribute two (2) copies to the following USDA agencies:
- (1) Science and Education
  - (2) Cooperative State Research Service
  - (3) Agricultural Research Service
  - (4) Forest Service
  - (5) Economic Research Service
  - (6) Agricultural Marketing Service
  - (7) Federal Extension Service
  - (8) Human Nutrition Information Service
  - (9) Soil Conservation Service
  - (10) APHIS
  - (11) Foreign Agricultural Service
  - (12) Office of International Cooperation and Development
- In addition, the following two groups should receive the copies indicated:
- (13) Joint Council on Food and Agricultural Sciences - 40 copies
  - (14) Users Advisory Board (UAB) - 30 copies

3.46 The publisher will send two (2) copies to the following other Federal agencies:

- (1) Department of Commerce
  - (a) National Oceanic and Atmospheric Administration
- (2) Department of Interior
  - (a) United States Geological Survey
- (3) Department of Transportation
- (4) Department of Energy
- (5) Department of Health and Human Services
  - (a) National Institutes of Health
  - (b) Food and Drug Administration
- (6) Department of Defense
- (7) Environmental Protection Agency
- (8) National Science Foundation
- (9) White House Office of Science and Technology Policy

3.47 The publisher will distribute individually addressed single (1) copies to:

- (1) Each State Agricultural Experiment Station. This will be accomplished by sending two (2) copies to each full Director. See "2" below.
- (2) Each Director, Associate Director and Assistant Director of the State Agricultural Experiment Stations
- (3) Each Director-at-Large
- (4) Each non-Director Administrative Technical Representative
- (5) Each 1890 Research Administrator
- (6) Selected Deans of Colleges of Home Economics that have active research programs linked to Agricultural Experiment Stations
- (7) Each College of Veterinary Medicine Dean
- (8) Agricultural Representative on the NASULGC staff
- (9) Executive Director, Agricultural Research Institute

3.48 The publisher will distribute the appropriate number of copies to each of the other Committees on Organization and Policy (COPS) and the following other groups:

- (1) Extension Committee on Organization and Policy (ECOP) - 20 copies.
- (2) Resident Instruction Committee on Organization and Policy (RICOP) - 20 copies.
- (3) International Committee on Organization and Policy (ICOP) - 20 copies.
- (4) Council of Administrative Heads of Agriculture (CAHA) - 20 copies.
- (5) Council for Agricultural Research, Extension and Teaching (CARET) - 60 copies.

3.49 The publisher shall consult with the Cooperative State Research Service prior to publishing to determine the number of copies that CSRS desires for later distribution.

ESCOPE PUBLICATIONS MAILING LISTS  
March, 1988

Hard copy mailing lists for the following groups are available from either CSRS (Mrs. Fennie Tolver or Dr. E. M. Wilson) or Dr. L. L. Boyd, Director-at-Large, Western Association of Agricultural Experiment Station Directors, 16 Administration Building, Colorado State University, Ft. Collins, CO 80523. dBASE III Plus files on diskettes also can be provided, if desired.

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Two (2) Copies Each

Associate and Assistant Directors, Agricultural Experiment Stations  
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Research Administrators, 1890 Institutions and Tuskegee  
One (1) Copy Each

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## NORTHEASTERN REGIONAL ASSOCIATION OF STATE AGRICULTURAL EXPERIMENT STATIONS



### MANAGING RESEARCH IN THE PUBLICLY SUPPORTED AGRICULTURAL RESEARCH SYSTEM



Hatch Act Centennial  
1887-1987

### Research Managers' Workshop for Newly Appointed Administrators

Capitol Holiday Inn  
550 C Street, S.W.  
Washington, DC  
June 1-4, 1987

- 8:00 am The Executive-Congressional Process  
Dr. Dale Stansbury, Director  
Governmental Relations for  
Agriculture, NASULGC
- 8:45 am Building Federal Budget  
Recommendations for the Cooperative  
State Research Service, and the Office  
of Grants and Program Systems, USDA  
Dr. C.R. Krueger, Associate Director  
The Pennsylvania Agricultural  
Experiment Station and Chairman,  
FY1988 ESCOP Budget Subcommittee
- 9:30 am Discussion with Session IV Speakers
- 10:00 am Refreshment Break and  
Group Discussion

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#### SESSION V

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- 10:30 am Public-Private Partnership  
Industry's Mission and Role in Support  
of SAES Programs  
Dr. Gideon Hill  
Director of Biology  
Research and Development  
E.I. du Pont de Nemours and  
Company
- 11:30 am The Agricultural Research Institute  
(ARI) Mission and Role in Support of  
Agricultural Research  
Mr. Stan Cath, Executive Director  
ARI, Bethesda, MD
- 12:15 pm Lunch—Check out of Hotel

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#### SESSION VI

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- 1:30 pm Information Resources  
The National Agricultural Library (NAL)  
Utilizing Its Resources  
Mr. Joseph Howard, Administrator  
NAL, Beltsville, MD
- 2:15 pm The Current Research Information  
System (CRIS)—Utilizing Its Resources  
Mr. John Myers, Director  
NAL, Beltsville, MD
- 3:00 pm Workshop Evaluation
- 3:30 pm Adjourn

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**Program**


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**Monday, June 1**

3:00-6:00 pm Check into Hotel  
 6:00-8:00 pm Registration—Reception

**Tuesday, June 2**


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**SESSION I**


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Introduction  
 8:00 am Welcome and Introductions  
           Dr. Dale W. Zinn, Director-at-Large  
           Nature of Participants  
           Expected Workshop Outcomes  
           Procedures and Sequences  
 8:30 am Your Role as a Research  
           Administrator—Putting It All Together  
           Dr. Donald F. Crossan,  
           Dean and Director  
           College of Agriculture  
           The University of Delaware  
 9:45 am Refreshment Break and  
           Group Discussion

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**SESSION II**


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Management for Productivity—  
 Interpersonal Relations  
 10:15 am Administration, Department Head,  
           Faculty—A Perspective of Their  
           Relative Roles and Expectations  
           Dr. Lamartine (Lam) Hood  
           Dean and Director  
           College of Agriculture  
           The Pennsylvania State University  
 11:45 am Lunch  
 1:00 pm Interpersonal Relations—  
           You and Your Employees  
           Dr. James Harris, Head  
           Personnel and Leadership  
           Development  
           University of Georgia  
 3:00 pm Refreshment Break  
 5:00 pm Recess for Dinner

**Wednesday, June 3**

8:15 am Interfacing the State Agricultural  
           Experiment Station/State Cooperative  
           Extension Programs—Overcoming  
           Roadblocks  
           Dr. Myron D. Johnsrud  
           Administrator  
           Cooperative Extension Service, USDA

9:30 am Refreshment Break and  
           Group Discussion  
 10:00 am Managerial Experiences of a  
           Department Head—A Case Study  
           Dr. J.P. Wangness  
           Head, Department of Dairy and  
           Animal Science,  
           The Pennsylvania State University  
 11:30 am Group Luncheon  
           The National Science Foundation—  
           Restoring Competitiveness to U.S. S&T  
           Dr. Mary Clutter  
           Senior Science Advisor  
           Director's Office  
           National Science Foundation

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**SESSION III**


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The Publicly Supported Agricultural  
 Research System  
 A State-Federal Partnership  
 1:15 pm Regional-National Integration of State  
           Agricultural Experiment Stations  
           Dr. Dale W. Zinn, Director-at-Large  
           NE Regional Association of State  
           Agricultural Experiment Stations  
 2:15 pm The State Agricultural Experiment  
           Station System—Mission and Role  
           Dr. Keith Huston, Director-at-Large  
           North Central Regional Association  
           of State Agricultural Experiment  
           Stations  
 3:00 pm Refreshment Break and  
           Group Discussion  
 3:30 pm The Cooperative State Research  
           Service—Mission and Direction of  
           Future Activities  
           Dr. John A. Naegele, Chairman  
           Strategic Planning Committee  
           Cooperative State Research Service,  
           USDA  
 4:30 pm The Agricultural Research Service  
           Mission—Cooperative Interactions  
           Dr. William Tallent  
           Assistant Administrator for  
           Cooperative Interactions  
           Agricultural Research Service, USDA  
 5:15 pm Recess for Dinner

**Thursday, June 4**


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**SESSION IV**


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The Federal Legislative Appropriations  
 Process in Support of Agricultural  
 Research



WESTERN ASSOCIATION OF AGRICULTURAL EXPERIMENT STATION DIRECTORS  
 Workshop for Newly Appointed Research Administrators  
 Especially Department Chairs/Heads & Others in Similar Roles

RESEARCH MANAGEMENT IN THE LAND GRANT UNIVERSITY SYSTEM  
 Denver, Reno or Salt Lake City Convention Motel  
 August xx, 1988

March 21, 1988 DRAFT

First Day

6:00 pm - 8:00 pm Registration and Reception

Second Day

SESSION I

Introduction

Welcome and introductions  
 Workshop procedures  
 Expected workshop results

L. L. Boyd  
 Director-at-Large

The Role of the Department Chair/Head  
 as a Research Administrator-Integrating All Functions

J. L. Ozbun, Dean  
 Washington State University

Refreshment Break and Group Discussion

SESSION II

Management for Productivity - Interpersonal Relations

The Role of the Department Chair/Head  
 with Faculty as Their Representative to  
 Deans and Other Higher Administrators

M. H. Niehaus, Dean  
 Colorado State University

Interpersonal Relations - The Department  
 Chair/Head and Faculty/Staff/Graduate  
 Student Colleagues

Outside Speaker to be  
 selected

Refreshment Break followed by Small Group  
 Discussions

Dinner and Open Evening - Small Group and  
 One on One Discussion Encouraged

Brief papers available to  
 stimulate discussion

Third Day

Linking Agricultural Experiment Station and  
 Cooperative Extension Programs - Minimizing  
 Deterents

K. R. Farrell, Vice Pres.  
 University of California

Refreshment Break and Group Discussion

Case Study - Lessons Learned by an  
 Experienced Chairs/Heads; examples of  
 what works and what doesn't

Two Dept. Chairs/Heads  
 to be selected - one in  
 bio-sciences and one from  
 the social sciences

Third Day Continued

Group Luncheon with an excellent speaker on opportunities and challenges in the agricultural sciences

Perhaps Al Young

SESSION III

The State-Federal Partnership in the Publicly Funded Agricultural Research System

Regional-National Integration of the State Agricultural Experiment Stations

L. L. Boyd  
Director-at-Large

The Cooperative State Research Service - It's Relationship to the SAES, Other USDA Agencies, the Congress and the Executive

A CSRS Representative  
Possibly Pat Jordan

Refreshment Break and Group Discussion

The Agricultural Research Service - Mission and Cooperative Interactions

W. H. Tallent, Asst. Admin.  
or Gary Evans, Area Dir.

The Current Research Information System - How to Use It and What it Requires from You

John Myers, CRIS  
Ted Bauer

Fourth Day - Half Day

SESSION IV

The Appropriations Process - Budget Development and Promotion; Role of the Directors and of Support Groups

The FY1989 ESCOP Budget Development and Promotion Process

R. G. Gast, Director  
Michigan State University

The Role of CARET in Budget Development and Promotion

Dick Joyce, CARET Rep  
from Oregon

Refreshment Break and Group Discussion

The Role of the Agricultural Research Institute in national research planning and promotion

ARI Officer from the Region

The Role of CAST in Objectively Delineating Issue for the Public and the Congress

CAST Board Member/Officer  
from the region

ADJOURN

**REPORT**  
**for**  
**WESTERN REGIONAL AQUACULTURE CONSORTIUM**  
**WAAESD Meeting March 23 & 24**  
**Las Cruces, New Mexico**

The Western Regional Aquaculture Consortium has not met since October. The next meeting of the WRAC Board of Directors will be in Seattle, Washington on March 29, 1988. Thus, there is minor activity to report since the last WAAESD meeting.

The targeted annual budgets for the six emphasis areas are as follows:

- IHN - \$200,000/year (2 years)
- Alternate Protein - \$150,000/year (2 years)
- Extension - \$60,000/year (continuous)
- Broadstock Improvement - \$100,000/year (3 years)
- Broadstock Nutrition - \$100,000/year (3 years)
- Shellfish Workshop - \$25,000 (spend in 1988)

All the subcontracts for the various projects were to be sent to project leaders by the first week in March. The projects will be funded for the designated periods and then new proposals will be considered for funding on a cyclic basis.

The federal executive and CSRS budgets for next year do not contain funding for aquaculture centers. However, NASULGC recommends \$3.5 million for the centers. The Congressional Appropriation Committees will have to restore the line in order for continuation of the program.

SUMMARY: FEDERAL LOW INPUT (LIA) AGRICULTURE PROGRAM

March 20, 1988

David E. Schlegel

General information about the Federal Low Input Agriculture (LIA) Program and some of the guidelines to be applied were forwarded to each station earlier this year (under date of February 16). As a result of this announcement, a meeting was held at the San Francisco Airport on March 17, 1988 to discuss the focus of the West's program, the review process and to begin the process of identifying individuals and institutions of all types that might be involved in the program. Participants in this meeting were selected to cover the various groups identified in the legislation that appropriated the \$3.9 million authorized for this program. A number of you, as well as your counterparts in Cooperative Extension and members of the ad hoc WRCC committee, were contacted in identifying participants for that meeting. A list of participants is attached.

The message that this was not a business as usual program served as a unifying force. There was excellent input from all present. Surprisingly, there was 100% turnout at this meeting with only six days lead time. A summary of the outcome of that meeting is given below:

Program focus: The discussion about this issue took the most time, we arrived at a consensus surprisingly easily. We were motivated significantly by the deadlines facing us...we have to have our recommendations for the use of the first year's funds by mid-June. The topics identified as the focus of the West's plan of work included the following:

There is an urgent need for the development of a database that allows us to catalogue the knowledge that we have and identify data gaps. (This was the highest priority item in the Ad Hoc WRCC's priority list.) It was noted that the California program had begun a strong effort in this area, trying to link LIA expertise to existing research, recognizing that if it doesn't link it isn't discarded, but is identified for future investigation. Montana through AERO (Alternative Energy Research Organization) is also developing a database. There was clear support for database development through the identification of producers practicing LIA and a systems analysis. It was recognized that this is a 3-5 year program. It was widely recognized that there is a real paucity of data about costs and benefit in traditional agriculture, and what exists for LIA is of better quality... a real problem for making the necessary comparisons.

It was felt that the first step was to identify successful low input farms or farms in transition, then find out what they are doing that is different and finally how and why it works. There is a need to design experiments or get information that will aid farmers in the transition from high external input farming to low input farming. This could be done by going out and monitoring some low input farms that are successful over a number of years.

There was also a consensus that the number of projects should be limited, but that they should be sizeable because interdisciplinary, inter-institutional research involves support for numerous people. To do otherwise would make it impossible to get the multidisciplinary, multi-institutional programs that are mandated. It was agreed that funding should be made for two years, with future incremental funding going to strengthening ongoing programs and to initiating new ones.

Outreach has to be built into each project.

Careful consideration was given to the review process and the role of the Administrative Committee. The initial effort went toward identifying individuals to serve on a technical committee to review proposals. Concern was given for disciplinary and institutional mix, but as the process developed there was a growing sense that given the time constraints, the individuals around the table would have to serve as the technical committee for this first year. The group present was disciplinary diverse, approximately equally divided between AES and CE, included farmers, private research organization and a producer group. Additional reviewers will be brought in to meet specific needs.

The question raised immediately involved the eligibility of the technical committee members to participate in research and/or education projects. Those present were among the leaders in the area, and did not wish to be excluded. Madden said that this had been discussed in CSRS and would not be a problem from their point of view. Others on the committee were more concerned about perception and worried that we would again be accused of functioning as an "old boys' club." The decision was that technical committee representatives could participate, but would be excluded from the room during discussion of the proposals in which they are involved. The Administrative Committee would review all Technical Committee actions, and none of the Administrative Committee could be an applicant for funds.

(The above organization and review structure is for FY 1988-89 only. Before the next cycle begins, a more formal structure must be developed.)

An announcement, based on the discussions of last week, will be out very shortly. The deadline for receipt of proposals will be about May 31. The technical committee will meet during the week of June 13th to review proposals and develop an outline of a

plan of work. The Administrative Committee will meet immediately following and develop the final version of the plan of work.

The time pressure to get this program up and running has been enormous. There may have been better ways to have done this, but they were not evident. Your input into the more permanent structure required for subsequent years is solicited.

LOW INPUT AGRICULTURE MEETING  
MARCH 17, 1988  
SAN FRANCISCO, CALIFORNIA

D. F. Bezdicek  
Dept. Agron. & Soils  
Washington State University  
Pullman, WA 99164-6420  
509-335-3644

Interests: Soil microbiology, nutrient cycling, cropping systems

Allen Bjergo  
Community Development Specialist  
Montana State University  
Extension Service  
1018 Burlington - #200  
Missoula, MT 59806  
406-329-3251

Interests: Evaluating farm-based alternatives, business and farm/ranch planning, rural revitalization, ag. econ and rural sociology - adoption theory; alternative crops & livestock.

A. J. Dye  
ES/USDA  
Room 3851 - South  
Washington, DC 20250  
202-447-6283

Interests: to see that we facilitate the implementation of the low-input program in accordance with intent of Congress and benefit of U.S. farmers and ranchers.

Bill Liebhardt  
Agronomy Extension  
UC-Davis, CA 95616  
916-752-2379

Interests: Soil fertility and farming systems comparisons and analysis

Patrick Madden  
Office of Special Programs and Systems  
CSRS - USDA  
14th and Independence Ave., SW  
Washington, DC 20250-2200  
202-535-0962 (DC)  
818-242-2082 (CA)

Interests: Manager of low-input farming systems research and education program - CSRS representative

Edgar L. Michalson  
Dept. of Ag Econ & Rural Soc.  
University of Idaho  
Moscow, ID 83843

Interests: Agricultural Economist; co-chairman STEEP Coordinating Commit

Merritt Nelson  
Dept. of Plant Pathology  
University of Arizona  
Tucson, AZ 85721  
602-621-1828

Interests: Plant Pathology (Virology); Rep. ESCOP Biological Control Subcommittee

David Oien  
R. R. 3 Box 461  
Conrad, MT 59425  
406-278-3384

Interests: Organic farmer/beef/lamb producer; Member AERO Ag. Task Force; Chair of AERO-MT State U. Sustainable Ag. Committee  
Special interests: green manure/cropping systems; chemical-free livestock production

Dennis Pendleton  
University Extension  
University of California  
Davis, CA 95616  
916-752-6021

Interests: Agriculture/resource policy



Robert Peyton  
 Office of the Vice President  
 Division of Agriculture and Natural Resources  
 University of California  
 300 Lakeside Drive - 6th Floor  
 Oakland, CA 94612-3560  
 415-987-0032

Interests: Facilitator

V. Philip Rasmussen  
 Soils Extension  
 Utah State University  
 UMC 4840  
 Logan, UT 84322-4840  
 801-750-2257

Interests: State Ext. Soil Conserv. Spec., State Ext. Computer Specialist, AES Conservation Tillage Research

Jan Van Schilfgaarde  
 Northern Plains Area  
 Agri. Research Service  
 2625 Redwing Road, Ste. 550  
 Ft. Collins, CO 80526  
 303-229-5560

Interests: Water management (irrigation, drainage, salinity, soil physics) - now: generalist

David E. Schlegel  
 Office of Program Information and Analysis  
 Division of Agriculture and Natural Resources  
 University of California  
 300 Lakeside Drive - 6th Floor  
 Oakland, CA 94612-3560  
 415-987-0029

Interests: Administrative Advisor to Western Region Program

Van Volk  
 Oregon Agricultural Experiment Station  
 Oregon State University  
 Corvallis, OR 97331  
 503-754-4251

Interests: Currently administration; discipline area is soil environment chemistry.

Warren T. Weber  
President, California Certified Organic Farmers  
P. O. Box 8136  
Santa Cruz, CA  
408-423-0008

Interests: Vegetable Grower, Star Route Farms, Bolinas, CA 94924  
415-868-1658

1. E. PARETTA, CALIFORNIA  
D. GUICHARD, KANSAS  
CHARLES W. STENHOLM, TEXAS  
CHARLES HATCHER, GEORGIA  
MARLEY D. STAGGERS, JR., WEST VIRGINIA  
MIKE ESPT, MISSISSIPPI  
CHARLES ROSE, NORTH CAROLINA  
P. KICA DE LA GARZA, TEXAS,  
X OFFICE MEMBER  
WILLIAM A. STILES, JR.,  
STAFF DIRECTOR

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**U.S. House of Representatives  
Committee on Agriculture**

**Subcommittee on Department Operations,  
Research, and Foreign Agriculture**

**Room 1301, Longworth House Office Building  
Washington, DC 20515**

**March 1, 1988**

E. THOMAS COLEMAN, MISSOURI  
BUD MORRISON, WASHINGTON  
STEVE GUNDERSON, WISCONSIN  
FRED BRANDY, IOWA

EDWARD R. MADIGAN, ILLINOIS,  
EX OFFICIO MEMBER

JOHN J. AGUIRRE,  
MINORITY CONSULTANT

Honorable Richard Lyng  
Secretary of Agriculture  
U.S. Department of Agriculture  
Washington, D.C. 20250

Dear Mr. Secretary:

I am writing to compliment you and the Department for the initiation of the low-input farming research program. This program is the start of a long-overdue research and extension emphasis to join farm profitability needs and environmental and natural resource concerns. It also is a significant signal to the critics of agriculture research and extension that this system can change and adapt to new demands and is serious about the health and environmental consequences of modern farming practices.

As a participant in the debate about the need for this type of research since the late 1970's, I have seen this idea evolve into its present form as enacted in the 1985 Farm Bill. During that same period I have watched the change in attitude toward some of these ideas from within the agriculture sector. At first sustainable agriculture or low-input agriculture was seen as a plot to end modern agriculture. This attitude softened to a view that this research was a "kooky" idea being foisted upon agriculture by a group of environmentalists who held outdated ideas of agriculture production. More recently, in hearings in Washington and in the field, I have seen this view change as farm profitability needs and water quality concerns have moved many in the farm sector to actively support this research and extension work. Some have even criticized the research and extension system for not having initiated this work years ago.

I am reminded of the debate during the 1970's about the need for integrated pest management (IPM) research. Just as with low-input agriculture, IPM was seen by some as a plot by the environmental movement to end modern agriculture. We saw absurd public spectacles of agricultural researchers drinking glasses of pesticides to prove their safety. But as insect resistance to pesticides rose, and as the scientific basis for IPM was proven, the farm sector embraced IPM and came to demand increased research and extension work on it.

American agriculture is facing a number of new challenges, from a number of new sectors. Environmental concerns, driven by our belated discovery of contaminants in ground water, are bringing a new research and extension agenda to agriculture. These concerns are also bringing a new level of regulatory interest, from state and federal governments, in the activities of agricultural production. This regulatory interest will increase. On the federal level we have seen activities under a number of statutes: The Clean Water Act, the Safe Drinking Water Act, and the Federal Insecticide, Fungicide, and Rodenticide Act. Many states have enacted comprehensive ground water protection legislation: California, Wisconsin, Iowa, and Nebraska are some recent examples. And, at some point in the next two to four years, we will undoubtedly see comprehensive ground water regulatory legislation passed at the national level.

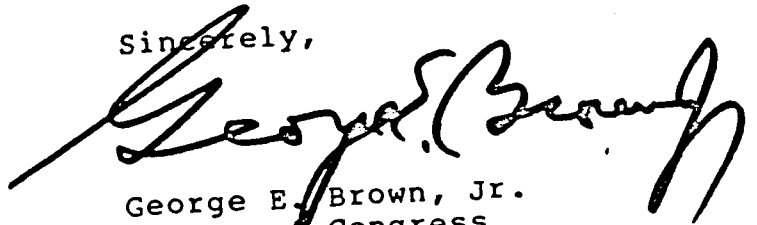
We need to acknowledge this trend and prepare the American farmer for it. If a regulator appears at the farm gate with findings of unacceptable levels of drinking water contamination that can be traced to farm operations, we need to have a range of alternatives ready to allow that producer to continue profitable operations. Rather than a regulator presenting a farmer with an ultimatum, we need to develop production alternatives and public confidence in agriculture's ability to solve environmental problems. We need to create the situation wherein a regulatory agency's conversation with a producer is, "Here's the bad news, but I know that there are alternatives available. Work out a farm plan with extension and the Soil Conservation Service and get back to us."

But getting to that level of confidence requires that we start today, in advance of the regulatory actions. The Department of Agriculture has taken the first steps with the low-input agriculture research program. This program will not answer all of the questions nor will it be all that is needed. But it sends a message to the public that the Department recognizes the needs in this area and is serious about them. Some in our constituency will object to even this modest effort. Change is difficult. But denial leads only to greater problems.

I know that I speak for the entire House Agriculture Committee in congratulating you, Deputy Secretary Myers, and Assistant Secretary Bentley for the progress which the Department is making in addressing the difficult problems of balancing farm profitability and environmental concerns. There is much more to be done and we remain willing to assist the Department in this work.

Again, thank you for taking this significant step.

Sincerely,

A handwritten signature in black ink, appearing to read "George E. Brown, Jr.", written in a cursive style.

George E. Brown, Jr.  
Member of Congress

GEB:ss

AGRICULTURAL EXPERIMENT STATION  
COOPERATIVE EXTENSION SERVICE  
RESIDENT INSTRUCTION  
OFFICE OF THE DEAN

 **University of Idaho**  
College of Agriculture  
Moscow, Idaho 83843  
208-885-6681

MEMORANDUM

TO: Neville Clark, AES Director, Texas  
C. B. Browning, AES Director, Oklahoma  
Walter R. Woods, AES, Director, Kansas  
Irwin Omtvedt, AES Director, Nebraska  
Ray A. Moore, AES Director, South Dakota  
Robert Heil, AES Director, Colorado  
David Smith, AES Director, New Mexico  
Eugene Sander, AES Director, Arizona  
Colin Kaltenbach, AES Director, Wyoming  
James R. Welsh, AES Director, Montana  
James J. Zuiches, AES Director, Washington  
Thayne Dutson, AES Director, Oregon  
Doyle Matthews, AES Director, Utah

FROM: Gary A. Lee



SUBJECT: Update on Russian Wheat Aphid Activities

I wish to inform you of the status of several items related to the Russian Wheat Aphid (RWA) activities. First, thank you for your unified support for providing funding from the Agricultural Experiment Stations to finance Dr. Victor Eastop's collection trip. Thirteen of the 14 states with known infestations of RWA have responded positively to underwrite this activity.

I have not received a formal proposal from Dr. Eastop because his plans are yet to be finalized. He has indicated, however, that both southern Russia and Turkey are prime potential areas for collecting natural enemies of the pest. Last week, Dale E. Meyerdirk, APHIS, PPQ, contacted me regarding USDA's interest in participating in the program. APHIS would like to contribute \$15,000 to support Dr. Eastop. Dr. J. K. Waage, Commonwealth Institute of Biological Control (CIBC), England, is a close collaborator with Dr. Eastop and the USDA, ARS European Parasite Laboratory (EPL). He will participate at some level in the program without external funding. It is my understanding that APHIS plans to provide EPL an additional \$15,000 to conduct collection activities throughout Europe. The proposed trip for Dr. Eastop, as I presently am aware, will cost a total of \$24,700. The Agricultural Experiment Station's share will be \$9,700 or approximately \$750 per state. I will keep you informed of the time contributions should be provided. Funds will be handled through the Western Directors Association which is managed by Dr. Jim Welsh, Montana State University.

Each state reporting infestations of RWA has initiated some level of research and extension activities. It seems appropriate to develop a means for scientists and educators to coordinate their programs and benefit from each others information. Thus, Dr. Bob Heil and I have co-sponsored a



petition to the Western Association, Agricultural Experiment Station Directors to initiate a Western Regional Coordinating Committee (WRCC) for the 'Biology and Control of the Russian Wheat Aphid'. Upon approval by the Western Directors, invitations to participate will be extended to state experiment stations and state and federal agencies. States outside the Western Region can officially participate in WRCC activities. Organizations such as the Great Plains Council will be most welcome to participate in the coordinating committee.

I will provide additional information as it becomes available. Again, thank you for your support in addressing this important problem.

ja:1026E

Petition for a  
Western Regional Coordinating Committee  
on the  
Biology and Control of the Russian Wheat Aphid

**NUMBER:** WRCC-(to be assigned)

**TITLE:** Biology and Control of the Russian Wheat Aphid (RWA)

**DURATION:** July 1, 1988 - June 30, 1991

**DESCRIPTION:** The Russian wheat aphid is a devastating new pest of small grain. Since its recent introduction into the United States, infestations are known to occur in 14 western states, and severe cereal damage has been reported in most regions. Officials in Colorado estimate that this pest cost Colorado growers \$13.2 million in the 1986 season (Anon. 1986). Preliminary estimates for this year range from \$20.5 to 27.1 million in Colorado (Peairs, 1987b). Estimates for other states are not yet available.

The Russian wheat aphid is native to southern USSR, where it is a sporadic pest. The only outbreak that has been reported occurred early this century. Currently, worldwide distribution includes Central Asia, the Middle East, Southern Europe, North Africa, South Africa, Argentina and North America (Blackman & Eastop, 1984). The aphid has become a serious pest in South Africa since its introduction into that country in the late 1970's.

Russian wheat aphids are difficult to control with contact insecticides. Cygon and Di-Syston do provide effective control. They secrete a toxin which causes leaves to roll tightly around the colonies. Potentially effective contact insecticides may never reach the aphids. In South Africa, removal of volunteer grain prior to fall planting has become an important aspect of the pest management program (Hewitt et al., 1984). In the United States, however, it has been shown that many of the grasses commonly used in soil conservation programs are alternate hosts for Russian wheat aphids (Peairs, 1987a) which may make elimination of aphid reservoirs difficult in this country. Efforts to develop grain varieties resistant to Russian wheat aphids are underway, but agronomically acceptable varieties will probably not be available for quite some time (duToit and van Nieberk, 1985; Webster and Burton, 1987).

Russian wheat aphid populations are suppressed in their native range by specific natural enemies, but parasite and predators with cosmopolitan distribution have been ineffective in limiting populations (Aalbersberg, et al. 1984). If an effective biological control program is to be implemented, it will likely be necessary to collect natural enemies in the Soviet Union, Turkey or China.

**OBJECTIVES:** The objectives of this Western Regional Coordinating Committee will be to:

- 1) Identify personnel and expertise, mobilize resources, coordinate pest surveys and involve state and federal regulatory agencies that can contribute to the development of an integrated management program for the Russian wheat aphid.
- 2) Develop effective control tactics for management of the Russian wheat aphid in cereal crops including consideration of chemicals and timing, cultural practices and host plant resistance..



- 3) Provide a network for the study of introduced natural enemies for the purpose of assessing effectiveness of potential biocontrol agents.
- 4) Provide scientists from various states the opportunity to exchange information, coordinate activities and develop multidisciplinary approaches to control RWA and minimize economic impact to the cereal industry.

The potential economic loss to individual state's cereal industry resulting from the Russian wheat aphid has resulted in initiation of a multitude of research and education activities. The rapid spread of the aphid through 14 states and the ability of the insect to inflict severe crop damage is justifiable grounds for state legislation to appropriate special funding and Agricultural Experiment Stations to redirect resources to address an eminent problem. Nearly every state reporting the presence of the Russian wheat aphid has, in fact, initiated some level of activity including surveys, evaluation of resistant germplasm, pesticide trials, screening potential biocontrol agents, and biological studies. Most activities are being initiated within states independent of and without knowledge of the scope and intensity of the programs planned in other states.

The newly introduced pest has spread over a large geographic region which constitutes a major portion of the wheat and barley production area of the western United States. Patterns of distribution suggest that the aphid is adapted to a wide range of climatic conditions which exist in the Western States. It is important to develop a knowledge base on the adaptability of the Russian wheat aphid, study the economic potential under various production practices, and understand the potential consequences of the pest under the numerous existing cultural and environmental conditions.

As potential biological control agents are identified, intensive studies will be necessary to determine host range, environmental adaptability, biology and efficacy as a control measure. Timely studies will require significant expertise, resources, facilities and coordination.

The initiation of a Western Regional Coordinating Committee will provide a forum for faculty (researchers) to advise, plan, and coordinate individual programs and to share the results of studies. The WRCC can be a means of avoiding unnecessary duplication of effort and establish a network for possible collaborative projects. It is an especially appropriate vehicle for scientists outside the region and in multidisciplinary areas to meet and formulate strategies and tactics to control the Russian wheat aphid. In addition, state and federal regulatory or research agencies will have the opportunity to interact with research scientists. The opportunity exists for generated technology to be packaged and transferred as a result of the WRCC.

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