1993

1993 Issues Review

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1993 Issues Review

University of Nebraska South Central Research and Extension Center

UNIVERSITY OF NEBRASKA-LINCOLN COOPERATING WITH THE COUNTIES AND THE U.S. DEPARTMENT OF AGRICULTURE

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Introduction & Review Schedule
INTRODUCTION

This self-study document was prepared by the faculty and staff of the South Central Research and Extension Center in preparation for the unit review.

The format for this review differs from past reviews in two primary areas. First, the review focuses on issues; thus the emphasis is on looking forward rather than evaluating the past. Second, the review team is largely composed of IANR staff who are familiar with the organization and programming processes. Because of these differences, this document emphasizes the issues and the processes which occurred to arrive at this point. The limited background data is included to complete the overall picture of the South Central Research and Extension Center unit.

Unfortunately the real value of the review process is only partially reflected in this document. The process of staff reviewing and identifying issues, trying to determine how these interact with our mission and knowledge base has resulted in a better understanding of change and how we must change to serve our clientele. This review is intended to help prepare us for the next five years and beyond.
SOUTH CENTRAL RESEARCH AND EXTENSION CENTER
REVIEW TEAM SCHEDULE

Monday, March 8

PM   Arrive Hastings, check into motel

Tuesday, March 9

7:00 AM Review team meets with Charles Stonecipher for breakfast at the Garden Cafe (next to the Holiday Inn)

Travel to SCREC

8:30  Charge to review team, IANR administrators

9:00  Overview at SCREC - Tour office headquarters

9:30  Staff presentations by issue groupings

   • Environment and Water Quality - Joel Cahoon

   • Resource Efficient and Sustainable Agriculture - Bob Wright

   • Family, Youth and Quality of Life - Keith Martikainen

12:00 Lunch with Great Plains Vet Educational Center and MARC representatives

1:00 PM Meet with support staff

2:00  Tour SCREC farm

3:00  Internal Issues

4:00  • Rural Revitalization and Communities - Carol Thayer

5:00  Travel to Hastings - Evening free unless group wishes to meet with unit administrator
Wednesday, March 10

7:00 AM  Review team meets for breakfast with Charles Stonecipher at the Garden Cafe

8:30  Tour College Park facilities

Meet with Rich Bringelson, Director, College Park

Meet with SCREC specialists and agents officed at College Park

Out-reach issues

12:00  Lunch with Department Heads

1:30 PM  EPU Staff

3:00  Review team work sessions

Return to Hastings

Evening - Review team preparation of exit report

Thursday, March 11

7:00 AM  Review team meets over breakfast at the Garden Cafe

Travel to SCREC

8:30  Exit report with unit administrator

9:15  Exit report with IANR administration

10:30  Exit report with faculty

11:00  Adjourn
REVIEW TEAM MEMBERS

TEAM LEADER

Robert Fritschen  
District Director  
UNL Northeast Research & Extension Center  
Concord, Nebraska

MEMBERS

Linda Boeckner  
Extension Nutrition Specialist and  
Home Economics Program Coordinator  
UNL Panhandle Research and Extension Center  
Scottsbluff, Nebraska

Gary Hergert  
Extension Soils Specialist  
UNL West Central Research and Extension Center  
North Platte, Nebraska

Susan Williams*  
Extension Agent - Saunders County  
Wahoo, Nebraska  
* Presently serving as Assistant to the District Director, SEREC

Dale Byrkit  
Midwest Best - Food Grade Grains Broker and Producer  
Clay Center, Nebraska
Issues
Environment and Water Quality
South Central Research and Extension Center

The issue of agricultural impact on water quality and the environment will continue to be a primary focus of research and extension efforts at the South Central Research & Extension Center and within the University of Nebraska for the foreseeable future. Considerable resources and effort have been expended by faculty at SCREC in this area over the past ten years. Substantial progress has been made towards a clearer understanding of the impacts of various practices on agrichemical contamination of ground and surface waters, as well as towards facilitating adoption of practices by producers which can minimize environmental loss of agrichemicals. However, many questions remain unanswered regarding best management practices for nitrogen, irrigation, and pesticide use, and increased adoption of current and future BMP’s is needed. Also, a clearer understanding is needed of the interrelationships between water quality and quantity, and environmental protection and agricultural sustainability and profitability. Research and extension efforts addressing environmental and water quality issues at SCREC over the next five years and beyond will evaluate and promote strategies to further minimize any negative environmental impact from irrigated crop production while maintaining profitability for the producer.

Major Issues
Four topics have been identified which we believe will be major issues to be addressed regarding water quality and environment over the next five years: micro-management of agrichemicals and water, increasing regulation, changing clientele, and specialized production.

Micro-management of agrichemicals and water
The fate and transport of agricultural chemicals is dependent not only on the physical factors of the systems, but on management practices used by producers. The timing, placement, amount, and application technique influence the effectiveness and ultimate fate of agricultural chemicals. Site-specific management of agrichemicals may involve adjusting rates, formulations, and placement methods field by field and within fields. The micro-management of on-farm water resources affects the distribution of water, a factor that plays a major role in agricultural chemical transport into surface and groundwater supplies.

Responses to pending and active regulatory activities
Research results often play a positive role in the development of responsible regulatory activities by federal, state, and local agencies. In turn, regulations by these agencies often provide direction for farming practices and activities, requiring research and extension activities geared toward coping with regulations. In either case, the University of Nebraska has much to offer in providing unbiased facts on which sound regulations may be based, and in providing the technology transfer activities that help agriculturalists cope with regulatory programs. We expect demands for educational needs associated with regulation will continue to increase over the next five years, especially as influenced by the upcoming revisions to the Clean Water Act, Farm Bill, and possible FIFRA administration by the state, as well as being influenced by possible ICM requirements and demand for CCA training. At the same time, we expect that working relationships between UNL-SCREC and other agencies, such as NRDs, SCS, ASCS, etc., will continue to grow closer as complimentary roles evolve in environmental research and education.
Clientele shifts
Many of the day-to-day decisions that are made in on-farm situations have a direct impact on the rural environment. The process used to make those decisions is changing and agricultural consultants play an increasingly larger role. Agency personnel adopt and implement regulations and policies that affect the decision making process. Sales personnel and those representing emerging technologies often play a role in the decisions that are made at the on-farm level. The University of Nebraska is in a unique position to respond to these changes by targeting this new audience for extension activities. Extension impact, as measured in acres with adopted environment enhancing practices, will be enhanced if programs are tailored to this emerging clientele.

Specialization of production
Production specialization in response to changing economic climates results in new challenges in the environmental arena. Specialized combinations of livestock and cropping practices present new sources of environmental hazards, problems that may be overcome through enhanced management and partnerships. Feedlot wastes, for example, may be a valuable source of crop nutrients if handled correctly, or a serious source of groundwater nitrate if mismanaged. The answer to many of the specialized environmental pitfalls associated with some of the proposed production practices lie in innovative linkages between potential waste sources and effective and environmentally sound disposal systems.

Staffing Needs
The demand for education associated with local, state, and national regulations has grown tremendously. In 1993, at least 22 workshops will be presented to more than 1000 producers within the South Central District in response to needs of NRDs with Groundwater Quality Management Areas. We believe that this need will continue to increase over the next five years. We recommend that resources be identified to support a M.S. faculty level position to coordinate and offer environmentally oriented training, with support from SCREC specialists, within the District.

Current and Future Activities

Demonstration Projects
- Mid-Nebraska Water Quality Demonstration Project
- Platte Valley Nitrogen & Irrigation Management Demonstration Project
- Expanded Irrigation Management Demonstrations in Conjunction with Surface Water Irrigation Districts

Research Efforts
- Spatial variability studies to improve N use efficiency of irrigated corn
- Long-term studies to evaluate the impact of soil application of composted beef feedlot manure
Research Efforts (cont.)

- Studies investigating the fate & dissipation of atrazine, and the associated impact on ground and surface water quality
- Best management practices for reducing pesticide impairment of surface and groundwater
- Observation/response theory to enhance furrow irrigation systems
- Surge irrigation effects on infiltration and water quality
- Management options to increase efficiency in blocked-end furrow irrigation
- Limited irrigation techniques
- MSEA: Best management practices to enhance water quality
STRENGTHENING NEBRASKA COMMUNITIES

Communities in south central Nebraska currently are facing many challenges. For some a declining population base is directly linked to reduced economic opportunities and threatened community vitality. Others are growing at a rapid pace and face challenges related to adequate housing, public policy, and developing a sense of "community" among residents.

Clientele and staff inputs reflect a growing concern about the future of communities in Nebraska. The IANR listening conferences, visionary sessions in two EPU’s and small group discussions with staff have all identified a number of community issues among their top priorities for Cooperative Extension.

Current Program Efforts include:

- Small-scale entrepreneurship workshops including Getting Down to Business, Crafts Marketing, Bed and Breakfast, Cleaning As A Business, Catering As A Business, Sewing As A Business, and Lawn Care As A Business.

- Alternative enterprise efforts with value-added processing, work with groups to survey current business practices, and direct marketing assistance.

- EPU community development work has resulted in formation of multi-community and multi-county organizations and receiving RC and D funds.

- Consultation on resource management and waste management by District Forester.

- Establishment of district-wide community forestry council.

It is our belief that the Cooperative Extension programs for South Central Research and Extension Center in the next three to five years should include the following:

Community/Economic Development Planning

Successful responses to deteriorating local conditions usually are based on community and/or economic development planning that provides educational programs and organizational development support of planning efforts and resulting action group activities. Community capability for progress is enhanced by planning processes in which residents have an open mind and foresight to seek and embrace a problem-solving capacity. This includes an understanding of present conditions, a shared vision of the future, locally identified goals, and a broad-based commitment to achieving goals.

Communities working together to increase their social and economic resources to solve problems will be of major importance over the next five to ten years. Programs which focus on community and organization collaboration will be essential. The movement toward collaboration will also require leadership training and training in conflict management.
Proposed Future Efforts: Community and economic development planning may require training and mentoring opportunities for Cooperative Extension faculty. This would provide options for redirection of program efforts by staff who are willing to move into this high priority program area. Linkages with other entities that work at the community level must be maintained and strengthened to increase community problem-solving capacity. Teamwork and an interdisciplinary approach must be given support and emphasis.

Community and Organization Leadership Development

Leadership development is the key to future success of rural communities. Cooperative Extension has an integral role within communities and is therefore able to assess local needs and strengths. A priority concern is that of supplying suitable leadership development instruction and activities. Family Community Leadership training has been important in the identification, recruitment, and development of leaders in many south central Nebraska counties. A continuation of that effort is needed which would focus on community leadership and allow community revitalization efforts to become self-sustaining.

Youth leadership development and involvement is essential to the survival of communities. Youth should be encouraged and trained to assume leadership roles. Burnout of citizen leaders is occurring and is a problem wherever a major community revitalization effort is underway. Developing new and innovative leaders who can empower people to be involved in their communities is one way to retain human capital. There is a continuing need to make leadership opportunities available and to develop a supportive leadership environment within communities.

Proposed Future Efforts: In addition to identifying local needs and strengths, Cooperative Extension faculty can facilitate the development of issue-oriented community leadership programs, initiate a program to select and train volunteers to work with community groups to facilitate implementation of community action plans to attain community goals, and encourage collaboration within communities to provide support for leadership efforts.

Small-Scale Entrepreneurship/Alternative Enterprise Development

In many communities, businesses and subsequent jobs lost during the recessionary periods of the 1980’s have not been replaced. Thus, retention of jobs and creation of quality employment opportunities are challenges facing communities. Reality for the 1990’s includes awareness that small-scale entrepreneurs and their micro-businesses are the principle source of new employment in many job-deficient rural areas.

Business management, market research, and determining the potential of value-added products will be vital to the economic success of small businesses. Creating employment opportunities through the development of small scale businesses are areas in which Cooperative Extension could have an impact.

Proposed Future Efforts: Educational programs and workshops for entrepreneurs, support of the home based business organizational efforts, direct marketing assistance, and collaboration with existing groups to improve business practices are ways in which Cooperative Extension can have an impact in this area.
YOUTH AND FAMILY CONCERNS

Extensive clientele and staff input have brought out:

Major Youth Issues

- Family relationships
- Dealing with social pressures
- Communication skills

Major Family Issues

- Intergenerational opportunities including shared leadership
- Leadership development for potential civic office holders
- Establishing personal/family values
- Keeping youth in the community
- Building "family" while dealing with outside time pressures
- Understanding and appreciating Nebraska's cultural diversity
- Public policy and community building issues related to school mergers

Current Extension Efforts

- 13,248 youth in the district involved in 4-H programs
- 1,000+ camper days at the South Central 4-H Center (camping facility)
- Camping facility used for Japanese/American program and family camping facilitated for outside groups
- 145 youth representing their county/EPU at 1992 district communications program
- 4,110 individuals involved in Home Extension Club programs within the district
- Family issues and intergenerational programming addressed within the Home Extension Club structure including Literacy Links for 94-95 program year
- Opportunity provided for young people to develop an intergenerational presentation at local and state level
- Intergenerational 4-H clubs being piloted at the EPU level
- Child care provider conferences involving 400+ annually to train and update large numbers of child care business owners and operators
- Parenting education conducted in a six-week series of meetings
- Juvenile diversion program instituted in two EPUs and localized based on emphasis and interest of the court system involved
Proposed Future Efforts

- Broaden methodology to involve more youth in single or short term programs based on special interests or issues
- Expand opportunities for intergenerational involvements
- Increased program efforts for those in older age categories such as sixty-plus years of age
- Youth entrepreneurship program to assist young people in identifying opportunities within the local community.

Staff Related Concerns

- Staff development offered so existing staff may be better equipped to deal with social and family issues
- Extensive training or class work offered for designated staff to be redirected into areas related to the issues raised
- Additional program and material development by campus-based staff within these areas of concern
- Development of a staffing pattern which places staff with related expertise such as: youth at risk, rural sociology, family life, gerontology, and possibly grantsmanship
RESOURCE EFFICIENT AND SUSTAINABLE AGRICULTURE

Many current SCREC programs address agricultural resource efficiency and sustainability, including those in irrigation management, crop fertility, crop pest management (weeds, diseases and insects), and crop production.

A variety of issues will influence the use of resource efficient and sustainable agricultural practices in south central Nebraska over the next 5-10 years. The goal of SCREC faculty is to continue to conduct research and extension programs which contribute to maintaining agricultural sustainability and resource efficiency while minimizing environmental impacts. Our vision of the future in the next five years and our proposed responses are outlined below:

• Water quantity and quality in relation to agriculture will continue to be an important issue.

Current research is focused on limited irrigation-dryland systems for corn production, including hybrid and plant density interactions with water gradients. Crop production systems appropriate for irrigated, dryland and limited irrigation situations will need to be addressed through additional research and extension programs. (See Environment and Water Quality section for additional comments).

• Pesticide and fertilizer use will be increasingly regulated, and there will be increasing pressure to reduce agrichemical use. Applications will be more frequently based on recommendations from crop consultants or agribusiness personnel. Agrichemical application methods will become more sophisticated.

Research and education programs will be needed to provide information to individuals making agrichemical recommendations and developing policy. We will need to continue to develop research-based recommendations for agrichemical use and to develop more information on alternatives to pesticide use. Research and education programs will be needed as new agrichemical application methods are developed (e.g., variable rate application technologies).

• There will be continued interest in crop diversification within farming enterprises, including production of quality and specialty corn, and other alternative crops.

Current research includes white corn and yellow waxy corn hybrid performance testing, food grade corn diseases, and cultural practices for mungbean production. Previously research has been conducted with amaranth, crambe, and canola. Continued research and extension efforts in this area will be necessary to identify crops that may be adapted and useful in irrigated and dryland cropping systems.
• Products of genetic engineering will be used more commonly in agricultural production systems.

Advances in genetic engineering technology will produce new crop and livestock varieties with improved levels of performance (i.e., resistance to drought/heat stress, pest resistance, herbicide tolerance). Research and extension programs to provide information on their application to south central Nebraska crop and livestock production systems will be needed.

• Continued consolidation of livestock production into feedlots will occur producing increased waste disposal problems.

SCREC and MARC faculty are cooperating on long-term studies to evaluate the impact of soil applications of composted beef feedlot manure.

• Increased adoption of conservation tillage systems will occur, although there may be increased use of cultivation for weed control.

Current work involves study of various tillage systems for furrow-irrigated corn and soybean production. Future work will involve continuation of this study.

• Current core programs should continue.

Current SCREC program strengths in resource efficient and sustainable agriculture include crop production systems, crop fertility and irrigation management, crop protection and water quality. Another strength is our linkages with other IANR faculty statewide. Our current faculty represent core programs which need to be continued to allow us to respond to future programming needs in these areas.

• Crop-livestock program integration or linkages are needed.

Programming is needed to address ways to integrate or link livestock and crop production systems. This would provide an alternative to the trend toward consolidation of beef feedlots and its associated problems. Also, it would provide another means of farm diversification. Currently no SCREC faculty are working in this area. The northeast quarter of the SCREC, which is currently not developed for crop production, offers the opportunity to develop new programs to evaluate alternative cropping systems for south central Nebraska. This includes the possibility of evaluating integration or linkage of crop and livestock production systems.
**Resource Needs**

New position in integrated forage/livestock systems

Funding to develop northeast quarter of SCREC farm

Maintain staffing in current core program areas

**Current and Future Activities**

Limited irrigation-dryland cropping systems for corn

White corn and yellow waxy hybrid corn evaluation

Mungbean cultural practices

Conservation tillage systems for furrow-irrigated corn and soybeans

Influence of soybean plant architecture on weed competition

Crop variety and hybrid performance testing for soybean, corn, grain sorghum and winter wheat

Diagnosis and management of diseases on major field crops in south central Nebraska

Biological insect control and insect sampling on corn and grain sorghum

Corn grain quality and mycotoxins
OUTREACH AND COLLEGE PARK ISSUES

Even though the College Park facility is largely complete, the concept and direction of the "Educational Center" is still developing.

College Park is a facility in which a consortium of UNL, IANR, UNK, Central Community College and Hastings College work together to offer credit and non-credit educational offerings to a non-traditional student. The facility is equipped to make maximum use of satellite delivery and computer technology.

At present UNK is the flagship institution with approximately 700 students enrolled in credit classes taught on-site in the evening. Central Community College offers on-site courses in several areas in addition to their nursing program which is housed at College Park. South Central Research and Extension Center and UNL Continuing Education have offices and classroom space available. Corp-Net Engineering degree programs are currently being offered along with several other satellite-delivered courses from UNL and through the Ag Sat program. The Hall County Extension Service is offering a variety of Extension programs. Demand for use of the Extension auditorium is extremely high as well as demand for classroom space.

Initial programming at College Park has concentrated on credit course offerings. Continuing Education programs are starting to develop and likely will become a significant part of the programming in the future.

A variety of issues emerge relative to how South Central Research and Extension Center and UNL operate within the educational center framework. Many of these are internal, operational issues, nevertheless they are issues which need to be resolved.

1. EPU and county-based faculty are asking how they fit in? What is their role?
2. Specialists wonder if they will be called upon to teach credit courses.
3. Continuing Education is a part of UNK, CCC, and UNL programs. It’s unclear how this program will evolve and who has responsibility for these programs in the College Park setting.
4. Funding is an issue. Particularly in a time of budget cuts, outreach functions seem to be the first to go.

The following list of strategic issues have been developed by the faculty management team with input from the academic council and College Park board.

Facilities Management Team - deals with daily operations

Wethers - 4H

Academic Council - Quarterly, established policy by Facilities Mgmt.
TEN YEAR STRATEGIC ISSUES FOR COLLEGE PARK TO BE A SUCCESS

I. Effective Area/Community Relations
   A. Anticipation of Future Educational Needs
   B. Development of New Target Populations
   C. Area Business, Education and Community Cooperation

II. Education Programming
   A. Academic Needs Assessment
   B. Inter-unit Cooperative Programming
   C. External Campus Articulation Agreements and C.P. Courses
   D. Distance Learning Opportunities
   E. Institutes, Conferences and Workshops

III. Political/Market Positioning
   A. Education Center Definition (Not a Four-Year Institution)
   B. C.P. Marketing to Students and Decision Makers
   C. Statewide Political Support

IV. Fiscal Positioning
   A. Current and Future Budget Dollars
   B. C.P. Budget in Time of Redirecting Resources
   C. Scholarships for Non-traditional Students

V. Operations
   A. Operation Procedures and Programs

---

Should College Park Be a Institution to Offer 18 Seminars
   College Park Board — Activists
   Friends of College Park

---

Regional Development
   Creatively Challenge to That Group
   0 - linkages
   0 - common goal
   Network
SOUTH CENTRAL RESEARCH AND EXTENSION CENTER
REVIEW RETREAT

The entire South Central Research and Extension Center staff met in a retreat setting on October 22 and 23 at the Nebraska Leadership Development Center near Aurora. One day was spent identifying and discussing issues pertinent to the south central area and the South Central Research and Extension Center unit.

DISCUSSION GROUPS

Group #1 - Fred Roeth
Tony Anderson
Scott Brady
Bernadine Danczak
Ben Doupnik
Richard Ferguson
Jim Hruskoci
Phyllis Schoenholz
Carol Schwarz
Cel Schweers
Paul Swanson
Carol Thayer

Group #2 - Roger Selley
Rich Bringelson
Rhonda Cameron
Andy Christiansen
Alan Corr
Connie Hancock
Scottie McMillin
Steve Melvin
Nancy Schmerdtkmann
Cindy Strasheim
Gary Troester
Judy Weber
Kelly Wertz

Group #3 - Sue Brown
Ralph Anderson
Doug Anderson
Chuck Burr
Joel Cahoon
Roger Elmore
Marilyn Fox
Sharry Nielsen
Bob Ramsel
Darrel Siekman
Bob Wright

Group #4 - Leslie Crandall
Brenda Aufdenkamp
Linda Crays
Jayne Decker
Scott DeWald
Tom Dorn
Tom Drudik
Jeanette Friesen
Don Levis
Keith Martikainen
Bob Scriven
Cheryl Tickner
ISSUES - DISCUSSION GUIDE

1. What are the issues (concerns) facing us, our clientele, and our communities -- now and over the next five years?

2. What are your suggestions as to how our South Central Research and Extension Center unit (specialists, agents, assistants) can or should address these?

3. Use the following broad categories to list your concerns and issues:
   A. Environmental Concerns (e.g. water, waste management, etc.)
   B. Strengthening Communities (e.g. depopulation of rural areas, lack of job opportunities, reorganization)
   C. Families, Youth and Leadership
   D. Ag Profitability and Sustainability
   E. Budget and Funding, state, county, etc.
   F. Other -- new or emerging issues not covered above

Internal Issues

What are the issues concerning the South Central Research and Extension Center unit operations? (County, EPU, Center, College Park)

SCREC Unit Review Discussions
October 22-23, 1992

1. What are the issues facing us over the next five years?
   • Extension's involvement in priority issues takes us from a-political to political involvement.
   • Consider rural area needs and urban needs.

2. What are your suggestions as to how SCREC can address these?
   • More grant-driven than formula funding.

3. Concerns and Issues

   A. Environmental Concerns
      • Water regulation will increase drastically; nitrate, pesticide bacteria; surface run-off issues will affect ag production. Extension will help regulatory agencies educate producers; proper well-abandonment "potential hazard"; coalitions with wildlife people needed and will need new skills to address these conflicting ideas.
• Misinformation about home water treatment; mortgages for "unsafe" water (rural vs. urban); urban folks mismanage chemicals too; person having to pay to fix problems he may not have caused.
• Air Quality - radon information needed.
• Waste Management - landfills closing, new regulations; will be only 28 licensed landfills in Nebraska; financial burden on communities of enforcing EPU regulations; not dumping in back creek; liability of previous owner on safe practices; pesticide waste disposal; community hazardous waste collection-prohibitive. If we are positioned for this issue, then we will be better positioned to receive money. Changes won’t be made until mandated. Need more information on recycling. Garbage bills reduced by sorting. Education on recycled products, more research on making recycling viable, need to reach youth.
• Environmental issues are a good thing for production agriculture. Renewable resources that are environmentally sound.
• Opportunity - change point of view, attitude
• Ethanol - win technology battle not political battle
• Animal Waste Management - more regulations. Fit into ag production as renewable resource
• Conservation plans need to be implemented with new farm bill; help others become better environmentalists; keep ourselves on cutting edge of technology, increase our credibility; EPA mandates don’t have a solution, maybe we need to become more of the solution. Continue education of concerns, but broaden beyond recycling, precycling, shopping, composting; help change people’s attitude about maxing dollars for recycling; public policy education; water rights--facilitate understanding; municipal water systems--expense of testing--public policy education?

B. Strengthening Communities
• Public policy issues of school mergers
• Is decreasing rural populations inevitable or something that we’ve created?
• Mechanized ag requires a lower work force so value-added production may be a solution. Cheap food has been regulated.
• Technology allows more freedom to choose where to live
• Leadership development needed to encourage folks to run for city council and county board
• Higher prices on ag products would strengthen communities--how can Extension work help?
• Rural Revitalization. Depopulation and aging population is accepted fact. Maintaining economic base to provide public services for those in the area. Growth and decline of small towns. Future Focus emphasis on family issues; environmental issues; keeping youth in community; aging and health care; large communities depend on small communities. Helping small communities meet changes regarding health care, effect on small business.
• Need for rural doctors and hospitals
• Help rural communities get a realistic perspective; set priorities and reorganization; provide goal setting - Paul Gessaman; beautification of community-painting, cleaning up store fronts, helping people see advantage of this, cleaning up parks, etc., expand Managing Main Street to clean-up, simple methods, inexpensive; Can
history be an asset? Can we help? Do we really want to strengthen small communities? What is a small community? Facilitate the discussions of these issues; help them learn how to accept their own limitations or develop their own resources. Don’t always look at cost of programs before we start; need to check our cost effectiveness. Guidelines as to how we make decisions on what we can and can’t do; need backup to help us in eliminating lesson; resistance to change.

C. Families, Youth and Leadership

- Top priority in most EPU Future Focus, how can Extension address? We’ve been doing lots, i.e. child care, parenting.
- More of a rural issue? Need to focus on urban areas?
- Family values plus money will strengthen communities.
- Any process for increasing self-esteem makes the entire system (community, family) improve. Increase self-esteem of ag producers. Is there something we can do?
- Models for leadership development of adults.
- Aging population and helping caregivers respond. Will they have services available?
- Maintain basis of successful programs. Mix of people in our EPU to provide a basis for the programs.
- Family values, structure health care; family problems in teaching values; schools need to improve; parenting skills needs; strong family unit necessary. Agents need more training in working with social and family problems - FCL. Can 4-H help to teach value and leadership skills, family involvement; teach children leadership skills to teach parents and peers.
- Health Issues -- stress, HIV, AIDS, drugs alcohol, substance abuse; lack of coordination of efforts; lots going on but not aware of who’s doing what; cost of health care; lack of MD’s in rural areas.
- Quality Child Care and After-School Care. Strengthen the family unit parenting, how to cope, lack of social circle to help teach basics and skills; pass down from mom to daughter; utilize elderly to help with passing down of skills, provide examples; child abuse; encourage people we work with to bring kids to meetings, promote family, etc.

D. Ag Profitability and Sustainability

- Stay on cutting edge; know facts from fiction; utilize research base that is available; take information from research and put it into technology transfer; tie in with environmental issues; helps agribusiness; increase awareness.
- Limited irrigation
- Availability of water and declining water tables
- How to handle more regulation
- Learning to manage. Change crops grown? Demand for livestock will continue because of growing population. Expect increase of part-time livestock producers.

- Youth (4-H) managing range land. Thirsty for information. Wholistic range management. Bruce Anderson attracts crowds. Tough to develop baseline data.
- More integrated finishing units.
• Environmental pressure/economic pressure for decentralization for sustainability but economic pressures for centralizing.
• Lack of information on alternative crops and value-added, popcorn, waxy corn, mung beans, sunflower seeds. Need research. Do we want to be a leader in alternative crops or five to ten years behind? Alternative crops has a marketing gap. And research and marketing need to be developed congruently. Is there a competitive advantage? Where do we make decisions about which to consider? Where to focus?
• Increase quality of what we raise now. May not be increasing quality because of environmental issues (aflatoxin in corn for export).
• Changes in consumer preferences and eating habits. How do we predict?
• Need forage specialist and more alfalfa production.

E. Budget and Funding
• Budgets determined by mandated programs, need to educate on options.
• State budget reduction passed on to county, schools and cities; tell you to do it, but not how or where to get funds; don’t always look at cost of program before we start, need to check cost effectiveness.

F. Other--New or Emerging Issues
• Working with minorities, teaching youth to work with minorities.
• Cultural diversity, Hispanic, awareness/sensitivity to cultures.
• Leader training lessons—one set for younger homemakers, one for older homemakers.

Internal Issues
• How are we going to get along with fewer people and less money. Expect downsizing. Must target what is important because will have fewer resources. Become more grant-driven? Contract labor will help extend usefulness. Need training or resource person to flag grants that are available. State or district-wide? What is the potential? Staff have the talent, but may not have the time. Local communities probably have local foundations with money available. SCREC needs to maintain research and extension quality programs, than broad-brush approach.
• Training needed in human sciences, social problems including working with minorities, FCL training, internal communication, communication equipment or for EPU run more efficiently, FAX machines.
• College Park - cost effectiveness of faxing vs. e-mail; not knowing where Charlie is - what day at College Park.
• Internal communication a real problem. One office doesn’t have a FAX and needs one.
• Specialists at SCREC -- Do not get answering machines. Why are some staff located at College Park?

• Where are we as staff going to be involved in marketing programs or classes? Policy on classes, who will monitor, who is paying for this? Do we at other sites have to offer these?
• As staff, what are policies on teaching at College Park, who pays mileage, what can be given up?
• Working with community college, credit, cost, sponsorship.
• Role of Extension Assistants - how to replace, advancement potential, are they doing what agents do for less? Promotion potential, classification of role, agent to assistant to aide, etc. B-C line positions are not rewarded, pay scale stinks. State and county paid assistants are not treated equally.
• Implication of volunteers, replacing agent roles, problems, credibility and liability.

Positions, Redirection, Re-allocation

• Specific Issue Person with soft money. Grant writer or person in that subject matter to alert others of grants available. Someone with statistical data or access to statistics. Someone to critique grants written. Initiative teams may want to identify a member to be his hound-dog, or work with Sponsored Programs. Ask Lincoln to secure person to identify grant sources.
• Range Management, agronomist with animal science (Bruce Anderson clone).
• Horticulture specialist in the district.
• Estate planner
• Sociologist, rural sociologist, Youth at Risk
• Livestock/cropping systems - wholistic, integrated.
• Volunteer management training
• Education training
• Make room in system for faculty development leave
• Continue satellite training
• Provide computer, free-lance training
• Reinstate .5 FTE communications specialist
• Remember those who do not have satellites, too
• Hook everyone up to computer network with token ring
• Keep 800 number of E-mail
• Evaluation person to show impact of programs
• Redirect agent responsibilities. Need better definition of roles
• Need district foods and nutrition specialist
• Strengthen communication position
• Grant write and help with reports. Perhaps need to attend a 2-5 day training, one person per EPU, do as a district training--an EPU specialist in this area
• Upgrade radio system so it reaches the whole district
• Combine some of the specialists -- irrigation, weeds, crops, insects -- free up some dollars to use in other areas
• Strengthen computer technician position

Agents have lot to do with Image
Earlier this year a session was held for B- and C-line support staff employed at the South Central Research and Extension Center. Staff were each asked to fill out a questionnaire responding to three questions. The following is a compilation of the responses from those participating. After everyone filled out the questionnaire, group discussions were held on each topic.

DISCUSSION QUESTIONS
(from B- and C-line Personnel)

1. As we look to the future (the next 5 years), what are the issues (concerns) of our clientele that SCREC should be addressing? - Research and/or Extension

1. water quality (irrigation management, nitrogen management and education)
2. sustainable ag
3. economic profitability (increase net farm income)
4. budget cuts in the future
5. What impact the shrinking farm population will have on SCREC.
6. water conservation
7. regulations by the Federal government - Examples
   - EPA on use of chemicals, fertilizer
   - monitoring of runoff and wells
   - numerous environmental policies
   - economics
8. urban issues programming
9. continued support of 4-H, youth and family oriented programs
10. improved financial management for farm and ranch
11. product quality control, marketing, value added products
12. improve off-campus educational opportunities
13. rural revitalization
14. crop testing (resistance to disease, insects, herbicides)
15. tillage and cropping practices
16. medical concerns, health insurance
17. reduction of taxes
18. loss of agents in counties
19. budget cuts and consolidation of units and personnel
20. Increase satellite programming and make it more accessible.
21. Increase 4-H activity in towns (not just rural).
22. Need to also target urban water users (they apply fertilizer to lawns).
2. What are the strengths of the SCREC Unit?

1. good, friendly working atmosphere
2. information transfer is excellent, sharing resources
3. real world problems are dealt with
4. top quality personnel, capable and knowledgeable, diverse staff
5. team effort on projects
6. good research area—(soil type)
7. freedom to achieve work goals without constant supervision
8. excellent research and educational opportunities
9. grass roots involvement
10. we have exceptional facilities
11. flexibility of staff (often go beyond job description)
12. facilities are a lot better than many other districts
13. farm machinery is taken care of well
14. soil type makes the farm a good research area
15. people trust and accept one another

3. What are your suggestions for improving SCREC?

1. better farm equipment
2. specialists need to be more in touch with the hands-on farming
3. less red tape associated with programs
4. more definition of job descriptions
5. continue to improve relations with area producers
6. by publishing reports on SCREC research activity
7. problem response team
8. research farm improvements (shop, restrooms, supply storage)
9. pesticide facility improvement
10. improve worker safety
11. strengthen public and clientele bonds, sharing information
12. increased funding
13. more demonstration project/research projects
14. survey on what clientele need
15. increase public awareness of SCREC, what we do and it's benefits;
   let the public know what we do on certain issues that affect them - water
   quality and management, not just agricultural people
16. need to become more visible to public
17. need to be recognized as separate from MARC
18. more interaction and exchange of ideas between A- Bb & C-line groups
19. new employees need to have benefits explained more thoroughly
20. clientele advisory board could let SCREC know what they want. . . "consider
   looking at this..."
21. sometimes the University is out of touch with research versus economic aspects
22. need better signs on the highways and in front of the building to identify SCREC
EPU FUTURE FOCUS
ISSUE IDENTIFICATION

Each of the four EPUs have completed Future Focus issue identifications involving people from their various communities. Summaries of these group discussions follow.

FT. KEARNY EPU

TOP-PRIORITY ISSUES
RURAL ECONOMIC DEVELOPMENT

Important Issues
Ag Profits/Value Added
Youth Opportunities
Aging Population
Family Issue

Issues Beyond Our Control
Attracting qualified people
Health care costs
Tax system

Youth Issues
-This group was asked to think about:
  -Most important issue facing youth today
  -Most important issue facing youth in 5-10 years
  -Least important issue

MOST IMPORTANT ISSUES
Family Relationships
Social Pressures
Communication Skills

Most Important Issues in 5-10 years
Environmental Concerns
U.S. Economy

Least Important Issues
Taking Responsibility
Cost of Education
Career Choice
CENTRAL IV EPU

SUMMARY OF FUTURE FOCUS VISIONARY GROUP

To provide the most accurate, simple and clear perspective of the Future Focus effort that took place on November 16th, the following description will be used. Those key issues of concern will be identified. Then each one will be further defined to reflect the spirit of the discussion. The issues will not be defined in regards to specific extension programming efforts, but as potential program subjects. The issue areas will be reported to reflect their significance.

I. Economic Development
   A. Job creation and retention
   B. Retention of young people through job creation
   C. Stabilize total population
   D. The high costs of agricultural inputs relative to price received for agricultural commodities
   E. Housing shortages

II. Health Care
   A. Maintaining adequate health care services within the area
   B. Escalating health care and insurance costs

III. Water Quality and the Environment
   A. Maintaining adequate supplies of clean water for both domestic and agricultural uses
   B. Effects of government regulations concerning the environment on local government, citizens and agriculture

IV. Education
   A. Providing quality educational opportunities for youth in the area
   B. Making the necessary financial investments in educational facilities

This outline form reflects those issues indicated by the group and will be utilized in making extension programming decisions.
GRAND CENTRAL TRIAD EPU

PRIORITY CONCERNS IDENTIFIED AT VISIONARY ASSESSMENT SESSIONS
(not in priority order)

A. Access to Health Care - (General)
B. Affordable Quality Housing - (General)
C. Alcohol and Its Affects - (General and Youth)
D. Change in Education Schools - (General)
E. Cost of Government - Fairness - Taxation - (General)
F. Economic and Rural Revitalization - (General)
G. Education - Facilities, Technology, Skills - (General)
   (Continuing Education for Adults)
H. Environment - Water and Landfill Management - (General)
I. Quality Family Life - (General and Youth)
   (High Risk Families, Daycare, Parenting Skills, Values, Morals, Dysfunctional, Role Models)
J. Health (AIDS, Fitness, Prevention of Disease) - (Youth)
K. Kids Without Supervision - (General)
L. Life Goals - (Youth)
M. Low Self-Esteem - (General and Youth)
N. Over-Commitment - (Youth)
O. Stress, Pressure for Success (Youth)
SOUTH CENTRAL SIX EPU

REPORT OF FUTURE FOCUS VISIONARY TEAM
(Preliminary Report)

TOP THREE PRIORITY ISSUES

• Changing Family Values - family relationships and relationship to youth at risk, families at risk.

• Quality Education - school reorganization, taxes, management of resources.

• Profitability of Agriculture and Local Businesses - keeping these industries profitable and sustainable.

OTHER ISSUES IDENTIFIED

• Environmental Issues
  - water quality, waste management

• Employment Opportunities

• Tax Structure

• Health Care
  - cost and availability

• Government Regulations
  - over regulation, costs

• Loss of Social and Economic Fabric of Community

• Drug Abuse
IANR LISTENING CONFERENCE

During early 1992, "Listening Conferences" were held around the state as part of IANR's development of the strategic plan. Twenty-four persons attended the session at Grand Island. The following summarizes the issues and suggestions made by this group:

Discussion Questions Summary
IANR Listening Conference
Grand Island, NE

1. **Problem or Issue**  
   (Numbers represent frequency of this response)

   - Ag Representative on University Regents
   - Agriculture in the State. Production is overdone. Need to work more on value added and processing research. (2)
   - Animal Rights
   - Composting - farmers using compost have very little insect problem, using no irrigation, are organic, get premium prices for crops. Inorganic farming. Composting and recycling research. (4)
   - Chemicals - reduce chemical use
   - Diversification - no help in this state, i.e. ostrich, angora goats, someone to head us in the right direction in loans and/or grants (2)
   - Computer education basics and retraining
   - Education, enrollment, cost, duplication -- may be necessary (2)
   - Economic development (2)
   - Energy sources
   - Family life, quality of life (3)
   - Flexibility needed to change direction, looking more realistically at issues. Going to take time to adapt.
   - Rural health care, stress management, conflict management (5)
   - Regulations - react and regulate urban use of fertilizer, pesticides (2)
   - Low National Average Income
   - Networking, better communications, social accountability (3)
   - Omaha Extension Service image
   - Population Decline (2)
   - Professional retention in rural areas (2)

   - Rural Revitalization - need to maintain programs directed to small communities. Try to promote and build on our work ethic (2)
   - Social economics research
   - Water issues, back flow valve, surface and groundwater relationships and groundwater management. Water rights, quality and declining water levels (7)
   - Waste Management - Plastic products which don't biodegrade -- what to do with these products other than burying. Elimination, disposal waste management. Non-biodegradable plastics, feed lot waste disposal, we are stewards of our environment, impact of actions (5)

   - Urban/Rural understanding and communication
Aware of Related IANR Programs

MSEA Project
Local level control of surface and groundwater relationships
Need to know basics of computer
Continue research in area of energy
Aware of programs in family, stress management, conflict management, economic development, and water management

More Effort Needed

Rural/Urban Communications -- Ag in Classroom
Communications - more effort to communicate results, adoption rates, teaching communications, NRD cooperation, more effort to communicate with special interest groups. More networking needed. (2)
Communications - more effort to make people aware of availability of composting
Conflict Management (3)
Economic development, research dollars to make a difference in recycling and composting
Family
Health, stress management
Managing for Tomorrow, IPM, Sustainable Ag, Leadership, Rural Conservation and Development
More effort to solve local level control of surface and groundwater relationships and water quality
More need to update computer retraining and basics

Less Effort Needed

Less building. Can you afford to do all the building in IANR and make it cost effective?

2. Thoughts and Reactions To Expansion of IANR’s Teaching Program

More focus on non-traditional students
College Park at Grand Island. Private $5.4 mm teaching center. No degree. Lots of this is needing interactive. Five new locations across the state. Good. We want to see this more. TV medium gives advantage, downlink. Continuing education is important.
Environment - we are stewards of our environment so an effort should be made to teach our youth the ways of conserving our resources. Quality of life is involved.
Social accounting in curriculum, business administration courses, philosophy of responsibility. Common sense approach to reality. More research into measurement of social economics, sense of proportion. Quality of life, priorities -- life styles and family living, TV programs.
Concerns about duplication between states. $30$ million biotech campus. When enrollment was down in early 80's, did we cut back locally? Encourage items like Vet Science. Combine UNK and Lincoln efforts. College requirements maybe could be stiffer. Under-qualified college graduates, better counseling in college preparation. Not getting the training, curriculum design should be stressed. Industry help in training -- internships for credit.

We need internships that allow college credits to be received from the university in cooperating with qualified independent ag consulting companies for better training. NICCA (Nebraska Independent Crop Consultant Association).

Regulations need to be set for urban use of pesticides and fertilizers to compare with rural per acre applications. Need more diversification of crops and livestock, small business organizations need to assist people getting started in new ventures. The desire for profit by companies keeps information from getting out. Need cooperation between departments. Do more with state colleges and community college on credit classes.

3. Are IANR Programs Focused On the Needs of Clientele?

Lots of times too many things -- lack of priority, direction and practical application of resources. No need to duplicate of research effort countrywide. Need for vision, redirection to maximize effectiveness of communication.

Continued public relations for public on how to get information (hot lines). Make specialists more accessible to public, develop flow chart, consultants. More time on public relations. Research should be used to check claims. Need to educate plant breeders for private industry, profit motivated private companies.

Rural revitalization program is important -- when no opportunities for young people; value added, add value to our grains, don’t emphasize productivity only (diversified in related areas); create jobs in rural areas. Humanities -- self-esteem by learning techniques to utilize.

Need to educate specialist so he goes directly to farmer than through profit-motivated private companies.

Need to do more in education and leadership and let private industry work as the crop consultant or livestock consultant and work with them more. Research even though taking long time still needs to share this as soon as possible. Can some of this research be done closer to private industry to allow better funding and quicker results?

Work with farmer on environmental prevention such as capping wells, fuel storage facilities, etc., to try to keep these problems from getting out of hand.

4. Other

Emphasize linkage with populace -- interaction, networking.

Problems - farmers are not ready to wait five years for trends. Tendency for slow communication.
Public Relations -- view ag in positive way. Youth -- impact through camps/posters/programs/events to great 4-H program. Revolutionize marketing -- setting farm prices won’t work. Home Economics -- Dean Craig good job. Lifetime skills must continue to be stressed to promote self-satisfaction.

Networking - industry and University, water management.

I support the EPU concept for the extension service. New faces always make for better transfer of information. Areas may need to be redefined. Good example of workable project is the Soybean Profitability Project in Saunders County. Excellent interaction with farmers and technicians.

Four-H has adapted well to urban populations with varied projects outside of crops and livestock. Continue the effort.
Unit Description
## FACULTY & STAFF

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| **COLLEGE PARK FACULTY & STAFF** |                               |                 |                  |                   |               |
| Richard Bringelson    | Director                        |                 | 100              |                   |               |
| Keith Martikainen     | Ext. Youth Specialist            |                 | 100              |                   |               |
| Carol Thayer          | Ext. Clothing Specialist & Home Ec.|                 | 100              |                   |               |
| Ann Podraza           | Staff Secretary II               |                 | 50               | 50                |               |

* Funded from grants or revolving accounts
** Office is in Lincoln
*** Temporary Employee
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South Central Research and Extension Center Fiscal Year Budgets

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REVOLVING
(From farm production)

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### South Central Research and Extension Center Fiscal Year Budgets (continued)

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1. Includes regional research funds, cooperative agreements, and industry grants.

2. Includes federal grants, cooperative agreements and interdepartmental agreements.
FACILITIES AND EQUIPMENT

Headquarters Area

The South Central Research and Extension Center office/laboratory building was constructed in 1977. Located adjacent to the U.S. Meat Animal Research Center office building, the office is 4½ miles west of Clay Center, Nebraska.

The 11,000 square foot building was designed with 18 offices, 3 laboratories, a conference room for 100 and supporting areas. The office building is owned by the University of Nebraska, but located on Federal property under a lease agreement.

The office is well equipped with personal computers linked to the IANR Token Ring Network. SCREC is the only research and extension center directly connected by high speed lines to the IANR network. All specialists have computers in their offices and most have portable units for field use.

A photography dark room and various pieces of photography equipment, along with cooperative use of the MARC photo-lab, allow for local development of slides and photos. The Token Ring Network allows us to generate slides here, send to Lincoln via the network and have the slides back in two days.

The office is equipped with a two-way radio system with units in 17 of our 19 county extension offices along with approximately 15 mobile units. Extension agents and specialists are readily accessible to each other. This equipment has greatly facilitated communications and teamwork.

The conference room is equipped with a small kitchen unit which facilitates catering meals for events and is occasionally used by the Clay County Extension Agent--Home Economics for leader training and demonstrations. A variety of meetings and events are held in the conference room throughout the year. However, most extension meetings for clientele are held out in the counties, as our philosophy has been to support county programs, rather than compete with them.

Three wet-bench laboratories provide laboratory space for specialist research and extension diagnostic work. Primary usage of the labs has been in the area of Entomology, Plant Pathology, Weed Science, Soils and Ag Engineering. In addition, lab facilities at MARC have been used occasionally on a temporary basis.

A room is designated for reference materials, periodicals, etc., but a library is not maintained. The MARC library next door is accessible to our staff, but is inadequate for some subject matter areas. Relatively quick library service is available from C. Y. Thompson Library on East Campus.
The UNL Great Plains Veterinary Educational Center has a classroom equipped with 20 computers. This facility has been used by the SCREC staff for many computer training sessions and by the South Central Six E.P.U. for workshops for clientele.

Auditoriums and conference rooms in several of the MARC buildings are used occasionally to accommodate the needs of various SCREC clientele groups.

Research Farm

The South Central Research and Extension Center research farm consists of 640 acres, of which 480 acres are currently being utilized for research purposes. The farm is located four miles north of the South Central Research and Extension Center office, located on Federal property, and utilized under a cooperative agreement with MARC. The research farm is adjacent to State Highway #6 and serves as a site for numerous tours and field days each year.

There are three irrigation wells on the farm that irrigate 327 acres. Twenty-nine acres are under a solid set sprinkler system, 118 acres under a linear-move sprinkler, approximately 120 acres are irrigated by gravity-gated pipe, and approximately 60 acres are irrigated by tow-line sprinklers. The tow-line sprinklers are being replaced in 1993 with a lateral sprinkler system. Eighty acres are designated for dryland research. Two tailwater-reuse pits are a part of the gravity irrigation system. Forty acres are under an automatic gravity system; the system was installed primarily for demonstration purposes.

The soil is primarily Hastings-Crete silt loam and is relatively uniform over the farm, giving an excellent facility for plot research work. The field headquarters building was constructed in 1972 and serves as a shop, work area, storage area, and office for the farm manager. The building is a 4,000 square foot building of concrete block construction, insulated and heated.

A 7,200 square foot pole-type metal building was constructed in 1983 and is used to store equipment. A pesticide reuse platform and evaporation pit is also located in the field headquarters area. An 800 square foot pesticide storage and handling facility was constructed in 1987.

Five grain bins with a total capacity of approximately 40,000 bushel serve as grain handling bins and research facilities.

An automated weather station is located at the farm site and feeds continuous recordings to a computer in Lincoln. This station is part of a statewide weather monitoring system and has been of great help to our staff in providing up-to-date information.
College Park at Grand Island

Over the past several years, we have worked with the Grand Island Community and the Hall County Board of Supervisors in planning a facility to be used as an educational center. The community-raised funds for construction of a 50,000 square foot facility was completed and dedicated in August of 1992. The Hall County Board of Supervisors contributed funds for the construction of a 10,000 square foot office conference center for the Hall County Extension Office as a part of College Park.

College Park is primarily a facility which allows several institutions of higher education to offer credit classes, continuing education, non-credit seminars and workshops to the place-bound or non-traditional student/learner. Primary institutions are University of Nebraska-Kearney, Central Community College, UNL Division of Continuing Studies and IANR through SCREC’s involvement. SCREC and the UNL Division of Continuing Studies are renting six offices, four classrooms and shared space in the facility. One of the classrooms is equipped as a satellite up-link facility and all classrooms receive satellite down-link transmission. It is anticipated that the UNL/IANR/County Extension portions of the facility will be connected to the IANR Token Ring Network in the future.
COLLEGE PARK
OF GRAND ISLAND
The missions of the South Central Research and Extension Center and the Roman L. Hruska U.S. MARC differ to the extent that a close program relationship is inappropriate for most areas. Currently, Richard Ferguson, Soils Specialist, is cooperating in a research project with MARC scientists involving cattle manure as a fertilizer. In the past, Don Levis, Swine Specialist, worked cooperatively with MARC on a swine research project. MARC provided the facilities and livestock with Levis providing leadership for the project. Several MARC scientists were cooperators on this project. Former SCREC Irrigation Specialist, Dean Eisenhauer, conducted a groundwater recharge research project on a surface reservoir located on MARC property.

There is potential for closer ties with MARC, particularly if additional animal science staff were located at SCREC.

There is excellent cooperation between MARC personnel and SCREC staff on matters of crop and pasture production and utilization. SCREC specialists serve in an advisory role to MARC operational staff, serve on MARC production planning committees, and assist with agronomy problems as they occur.

The working relationship between MARC and SCREC on the farm operations level is excellent. Equipment is shared, corn produced at SCREC is sometimes used by the MARC feed mill, and headquarters grounds maintenance is supplied by MARC.

SCREC and MARC staff cooperate to jointly sponsor tours, meetings, and handling of visitors when appropriate.

The overall working relationship is supportive and harmonious between the two agencies.

The GPVEC and SCREC staff have worked well together on several seminars and workshops for practicing veterinarians with SCREC specialists providing portions of the program. Lack of livestock specialists located at SCREC has limited extensive program involvement, but there is potential for closer programming relationships.
KEY LINKAGES

Successful Extension and Research programs require close linkages to a variety of organizations, groups, and agencies outside the University and within the University system. South Central Research and Extension Center staff have linkages with a large number of other groups. The following is a listing (far from all-inclusive) of some close linkages that we have developed over the years.

- **NRD’s** -- Six NRD’s overlap our Extension District. All are initially involved with us on a variety of programs relating to water, waste management, conservation, community development, and forestry. All have provided grants of varying sizes to help fund cooperative projects. The Central Platte NRD funds two positions for us in the Nitrate Management Demonstration Program.

- **IANR Departments** -- We have a close working relationship with all of the departments who have staff located at South Central Research and Extension Center. Researchers and graduate students from campus departments carry out research at the South Central Research and Extension Center farm and at locations in the counties. Faculty from other research and extension centers are involved in joint research projects and Extension programming.

  The Water Center and Environmental Programs are closely liked with us through grants and various program activity.

- **Industry Groups** -- Many of our staff have a close tie to various industry groups such as seed companies, chemical companies, equipment manufacturers, etc. These groups often provide grant support and programming support. Commodity groups such as Corn Growers, Soybean Association, various livestock associations, and irrigation associations are key groups which we work with in programming and program development. The banking industry has long been a major cooperating group for Extension programming.

- **Other Governmental Agencies** -- SCS, ASCS, FHA, city councils, county governments, Chamber of Commerce and schools all work with us in programming. Since the advent of College Park, closer ties to University of Nebraska-Kearney and the Community Colleges have been developed. We have worked closely with the Central Public Power and Irrigation District over the years--in fact this group provided much of the impetus for the establishment of the South Central Research and Extension Center. We have close working relations with a variety of state agencies such as the Nebraska Department of Economic Development, and the Nebraska Business Development group at Kearney.
SCREC Action Plans & Program Development
SCREC ACTION PLANS

In 1992, SCREC revised unit action plans into four major areas. These action plans represent our current primary program emphasis and fit well with the IANR action plans. The action plans are not all inclusive of the many initiative and core programs which constitutes our overall programs. They merely represent some of the areas of emphasis requiring focus at this point in time.

Selection of the areas for emphasis was based upon issues and needs identified over a period of several years. Some of these areas such as water quality has been a focus of the SCREC unit for sometime. In fact, we’ve recruited staff, redirected staff and resources to make this an area of expertise and program excellence for our unit.
Action Plan -- Resource Efficient Agriculture

**Action Statement:** Develop extension and research programs which will help producers implement sustainable production practices.

**Background:** Over 3.5 million acres are irrigated in the South Central District. Irrigated agriculture is an intensive input system. There is a real need to develop production systems with lower inputs of chemicals, labor, and water. There is some evidence that irrigated agriculture has farther to go to become sustainable than dryland agriculture. With the importance of irrigation to the economy of this region, developing systems to help producers become more sustainable without reverting to dryland agriculture is critical.

**Objectives:**

1. Develop research and demonstrations to identify best management practices which contribute to more sustainable irrigated agricultural systems.
2. Plan and develop the fourth quarter of SCREC farm for sustainable research and demonstrations.
3. Develop a system of on-farm demonstrations in each of the EPUs, with a minimum of one per EPU.

**Anticipated Results:** This program will provide irrigators information which will help them develop more sustainable systems. We expect to reach 500 cooperators over the next three years through extension programs and field demonstrations.

**Leadership and Cooperators:** Roger Elmore will lead the effort in this area with assistance from the entire SCREC staff involved with crop production and EPU staff. Work will be coordinate through the IANR Center for Sustainable Agriculture with involvement of staff from agronomy, agricultural economics, biological systems engineering, entomology, plant pathology, animal science and MARC.

**Time Schedule:** Ongoing through 1995. Limited research work has started. We are seeking grants to enhance research and the development of the research farm.

**Resources Committed:** Few at this time, but some staff time has been redirected to this area. Resources will increase as funding becomes available.

**Resources Needed:** Development of the farm research site, $200,000. Annual need of $60,000-$70,000 to instigate research and demonstration programs, along with additional technical support.
Action Plan -- Water Quality, Water Resources Management

Action Statement: The SCREC and EPU staff will place high priority on research and extension programming which will provide information to producers, agencies, agribusinesses and consumers on groundwater quality protection, enhancement of water resources management and reduction of surface runoff of agricultural chemicals.

Background: Groundwater contamination from agricultural chemicals, irrigation water usage, and water resources management are primary concerns in the south central area. Water quality, with emphasis on nitrate management, has been a priority for both research and extension programming for several years. Current efforts include MSEA, Mid-Nebraska Nitrogen Demonstration Program, Platte Valley Nitrogen Management Demonstration Program and the Elm Creek project. This emphasis will continue; long-term solutions are required in response to growing concerns.

Objectives:

1. Provide information and training on protecting and managing our water resources to 5,000 producers via seminars, workshops, tours, media, and publications.
2. Continue field demonstrations via the Mid-Nebraska and Platte Valley projects with 50 to 75 sites per year.
3. Continue research on chemical movement and best management practices for minimizing groundwater and surface water contamination.

Anticipated Result: Two-thirds of the farmers and producers will become aware of best management practices and water quality concerns, and will implement practices to prevent groundwater contamination. This may be the most intense educational effort in the country on water quality, thus results can serve as a model for similar programs. Documents describing best management practices will be developed along with numerous publications and video productions.

Leadership and Cooperators: Primary leadership for this program will be given by Richard Ferguson with major involvement of Joel Cahoon, Roger Selley, Fred Roeth, Bob Wright and EPU staff. Area Natural Resources Districts will be involved along with SCS, ASCS and other relevant agencies. Faculty from the Water Center, MSEA, biological systems engineering, agronomy, entomology, agricultural economics, other research and extension centers, ARS, CSD, etc. will be involved as partners in this effort.


Resources Committed: There is a considerable amount of current grant support for these projects. SCREC and EPU staff will spend an estimated 10 man-years annually on this effort. This represents a redirection of effort to this priority.

Resources Needed: Continuation of present grant activity (approximately $300,000 annually) and staff time commitments.
South Central Research and Extension Center
April, 1992

Action Plan -- Family Life and Youth Development

Action Statement: SCREC and EPU staff will help families and youth by emphasizing programs which address the challenges they face in the 1990's.

Background: The future of families and youth has become of increasing concern to Nebraskans. Factors contributing to this concern include issues of economic instability, mental and physical health, and personal lifestyle choices. More than half of all mothers with preschool children are in the work force. Statistics reveal poor health and nutrition, as well as increasing numbers of teen pregnancies, substance abuse, depression, and suicide among young people. Successful young adults, regardless of family background, indicate the importance of a significant adult in their lives. Collaboration and cooperation within communities and between EPUs and other agencies is key to providing education and support of families and youth.

Objectives:

1. Initiate collaboration with other agencies to provide programs targeted for clientele over age 60, including "Successful Aging Conference," MMAP, and the Senior Series.
2. Develop new, and adjust present programs to be intergenerational in participation.
3. Caregivers (both for children and older Nebraskans) will receive training which will enable them to provide improved care and manage stress more effectively.

Anticipated Results: During the next three years, 500 older Nebraskans will be reached through special programs. Seventy-five percent of the caregivers who receive training will be aware of improved care procedures and implement practices to reduce stress. Young people will have increased opportunities to develop a positive, and for some, a mentoring relationship with an adult.

Leadership and Cooperators: Leadership for these programs includes SCREC specialists Keith Martikainen and Carol Thayer, and several EPU staff members. Other specialists and agencies will be involved where appropriate.


Resources Committed: Carol Thayer will commit a portion of her time to the programs for old Nebraskans as well as increased time by many EPU staff members. Keith Martikainen will direct a portion of time to the facilitation of intergenerational programming.

Resources Needed: Sixty thousand dollars for a Family Life Specialist or contractual programming and support for specialized promotion and support of programs addressing these objectives in the amount of $5,000 to $10,000. Total estimated cost of $70,000 annually.
Action Plan -- College Park Educational Center

**Action Statement:** SCREC will be an integral part of the development of the College Park Educational Center and will provide leadership for the development of IANR programming in extension and credit course learning opportunities. Emphasis will be upon providing the non-traditional student access to agricultural and other credit courses along with continuing education for the public.

**Background:** The College Park building project is scheduled for completion in August, 1992. The Hall County Extension office, along with staff from SCREC, will have offices in this complex. Central Community College, University of Nebraska-Kearney, Hastings College, and the UNL Division of Continuing Education are the primary participants in this endeavor. This concept will make extensive use of satellite technology in the delivery of programs.

**Objectives:**

1. Provide leadership for the development of a program of extension, continuing education, and credit classes for UNL and IANR.
2. Build linkages with CCC, UNK, Hastings College and other participating institutions.
3. Strengthen presence and linkages to the central Nebraska area.

**Anticipated Results:** Over the next three years, we expect to build a program which will include the following:

- Continuing Education programs - 3,000 people reached through seminars and various program offerings.
- Agricultural Credit Courses - 50 students enrolled.
- Cooperative Extension programs - 6,000 people involved in various workshops, programs, etc.

**Leadership and Cooperators:** Primary leadership rests with the district director with involvement of the Hall County Extension staff, EPU staff, and two members of the SCREC staff who will relocate to College Park. Other SCREC staff will be involved as programs evolve. This program will work closely with CASNR, ICCS and appropriate departments with IANR and UNL, UNK, UN Med Center, and the Division of Continuing Ed.

**Time Schedule:** September 1, 1992 to July 1, 1995.

**Resources Committed:** Two SCREC staff, Keith Martikainen and Carol Thayer and support will relocate to College Park as soon as the building is completed. The district director will spend considerable time at College Park in the early stages of program and facility establishment.

**Resources Needed:** IANR resources are needed to provide continuing funding for a director position and operating support is estimated at $60,000 to $100,000 per year.
**PROGRAM PLANNING AND DEVELOPMENT**

The basic point for extension program development is at the Extension Programming Unit (E.P.U.) level. Each E.P.U. has developed a plan of work which is updated annually. District initiative teams composed of agents and specialists serve as a connecting point with State initiative teams.

**SCREC DISTRICT INITIATIVE TEAMS**

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<thead>
<tr>
<th>Youth and Families at Risk</th>
<th>Strengthen Nebraska Communities</th>
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<tbody>
<tr>
<td>Keith Martikainen, Leader</td>
<td>Carol Thayer, Leader</td>
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<td>Doug Anderson</td>
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<td>Brenda Aufdenkamp</td>
<td>Sue Brown</td>
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<td>Alan Corr</td>
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<td>Leslie Crandall</td>
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<td>Linda Crays</td>
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<td>Jeanette Friesen</td>
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<td>Phyllis Schoenholz</td>
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<td>Cel Schweers</td>
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<td>Cindy Strasheim</td>
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<td>Gary Troester</td>
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<td>Water Resources</td>
<td>Waste Management &amp; the Environment</td>
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<tr>
<td>Richard Ferguson, Leader</td>
<td>Tom Drudik, Co-leader</td>
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<tr>
<td>Tony Anderson</td>
<td>Nancy Schmerdtmann, Co-leader</td>
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<tr>
<td>Chuck Burr</td>
<td>Doug Anderson</td>
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<td>Joel Cahoon</td>
<td>Rhonda Cameron</td>
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<td>Andy Christiansen</td>
<td>Bernadine Danczak</td>
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<td>Fred Roeth</td>
<td>Jim Hruskoci</td>
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<td>Cheryl Tickner</td>
<td>Steve Melvin</td>
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<td>Kelly Wertz</td>
<td>Bob Scriven</td>
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<tr>
<td>Food and Nutrition Safety</td>
<td>Darrel Sickman</td>
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<td>Carol Schwarz, Leader</td>
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<td>Jayne Decker</td>
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<tr>
<td>Marilyn Fox</td>
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<tr>
<td>Cheryl Tickner</td>
<td>Judy Weber</td>
</tr>
</tbody>
</table>

52
Faculty Vitae
DAVE ALTHOUSE

APPOINTMENT DATE: July 1984

PRESENT ASSIGNMENT: 100% Research

RANK: Farm Manager

EDUCATION:

B.S. 1970 Kansas State University Ag. Economics

RESPONSIBILITIES

Coordinate day-to-day operation, supervise employees, maintain equipment and facilities at the SCREC Research Farm.

CURRENT PROGRAM THRUST

Developing large land area that was formerly tow-line irrigated into a viable research site under a new linear irrigation system.

Coordinate all research work and general farm operations.
DOUGLAS L. ANDERSON

APPOINTMENT DATE: February 1989

PRESENT ASSIGNMENT: 100% Extension
Central IV

RANK: Extension Assistant

EDUCATION:
B.S. 1981 University of Nebraska-Lincoln Natural Resources

RESPONSIBILITIES

4-H
Horticulture

CURRENT PROGRAM THRUST

Comprehensive community forestry plan for area towns and villages, including tree planting plan, tree renovation or removal, developing a tree board and seeking financial aid for improvements.

Volunteer leadership development for 4-H events, ie. Loup Valley 4-H Conference Horse shows, shooting sports, speech contest.

Integrated Pest Management lawn care program.

Home Extension club pesticide training.

Expanding grazing by use of alternative forages.
RALPH R. ANDERSON

APPOINTMENT DATE: June 1984

PRESENT ASSIGNMENT: 100% Extension
Buffalo County

RANK: Associate Extension Agriculturist

EDUCATION:

M.S. 1969 University of Nebraska-Lincoln Agronomy
B.S. 1960 University of Nebraska-Lincoln Extension Education

HONORS AND AWARDS (1987 to present):

Dedicated Service Award - Buffalo County Corn Growers Association (1989)

RESPONSIBILITIES

1. Provide leadership in the Agriculture Profitability and Natural Resources Management Initiative within the county and Extension Programming Unit.
2. Assume leadership for the planning, development and implementation of 4-H and adult agricultural programs in crop production, soils and range management, conservation tillage, marketing, fertilizer and pesticide management, natural resources and environment, and engineering.
3. Serve as program leader for pesticide applicator training.
4. Provide program leadership for the 4-H and adult horse program.
5. Provide program leadership for the 4-H and adult dairy program.
6. Provide supporting roles in 4-H and water quality.

CURRENT PROGRAM THRUST

ANIMAL SCIENCE, SUSTAINABLE AGRICULTURE FOR YOUTH
Provide opportunities for youth in Buffalo County to develop life skills in communication, self-esteem and interpersonal relationships that enables them to function confidently in a global society.

PRODUCTION PRACTICES AND PEST MANAGEMENT
Conduct county training demonstrations, newsletters and professional meetings to promote the adoption of scientifically developed agricultural production practices and crop pest management programs and practices.

MARKETING AGRICULTURAL PRODUCTS
Conduct educational activities to teach marketing fundamentals and programs to agricultural producers.
VERNE ANTHONY (TONY) ANDERSON

APPOINTMENT DATE: February 1980

PRESENT ASSIGNMENT: 100% Extension
Harlan County

RANK: Associate Extension Agriculturalist

EDUCATION:

M.S. 1979 University of Nebraska Ag. Education
B.S. 1978 University of Nebraska Animal Science/
A.S. 1976 McCook Community College Ag. Education

HONORS AND AWARDS (1987 to present):

North Central Regional Team Award - presented to the University of Nebraska Extension Domestic Water Quality Team Members by Epsilon Sigma Phi at their National Awards Banquet (1992)


Farm Foundation Scholarship to attend the Ag Ed 5244 "Public Policy & Issues Program" at the Minnesota Extension Summer School (1991)

Ten-Year Length of Service Award from the University of Nebraska and the Federal Government (1990)

Selected by the Harlan County 4-H Council to receive the 1988 Harlan County 4-H Alumni Award (1988)

Selected to attend the Cargill Grain Marketing Seminar in Minneapolis, Minnesota - sponsored by Cargill and NACAA (National Association of County Agricultural Agents Association) (1987)

RESPONSIBILITIES

Extension Programming Unit: Provides leadership for the Extension Programming Unit program for the Water Quality Initiative and specialized programming for Livestock, Natural Resources, and Volunteer Management. It is anticipated that 20 to 50 percent of the staff member's time will be spent on these priority initiative areas.

Within Local Extension Office: Serves as Agent-Chair for Harlan County with responsibilities for extension programming.

CURRENT PROGRAM THRUST

ENHANCING WATER QUALITY
Nitrogen Management
Provide a Safe and Adequate Domestic Water Supply
Public Policy
Water Treatment
Enhance Extension's Role as a Water Information Source
Mid-Nebraska Water Quality Demonstration Project
MSEA (Management Systems Evaluation Area)
Properly Plugging Abandoned Domestic and Irrigation Well Demonstrations
Groundwater Education

AG PROFITABILITY AND CONSERVING AND MANAGING NATURAL RESOURCES
Livestock Management
Marketing and Ag Finance
Crop Production

YOUTH AT RISK
Animal Science and Youth
Career Development and Life Skills
Citizenship Education for Youth
BRENDA AUFDENKAMP

APPOINTMENT DATE: January 1991

PRESENT ASSIGNMENT: 100% Extension
Adams County

RANK: Extension Assistant

EDUCATION:
B.S. 1989 University of Nebraska-Lincoln Home Economics

RESPONSIBILITIES
Responsible for assignments made by the Extension Agent Chair or designated 4-H Youth Agent to provide opportunities for youth to develop leadership skills, citizenship responsibilities and life skills through involvement in 4-H projects and activities. Assists 4-H adult and teen volunteers in developing their leadership and technical skills to better implement the 4-H program.

CURRENT PROGRAM THRUST

PRIORITY INITIATIVES
- Training Child Care Providers
- Youth Advocacy
- Youth Outreach
- Youth Personal Development
- Community, Organizational and Youth Leadership Training
- Residential/Domestic Waste Management

CORE/BASE PROGRAMS
- Career Development and Life Planning Skills
- Youth Science and Technical Programs
- Natural Resource and Environmental Sciences
- Communication Skills for Youth
- Citizenship Education for Youth
- Volunteer Systems and Improvement of Adult and Teen Volunteers
ED BARNES

APPOINTMENT DATE: April 1990

PRESENT ASSIGNMENT: Mid-Nebraska Water Quality Demonstration Project

RANK: Extension Technologist I

EDUCATION:
B.S. 1971 Kearney State Business Administration

RESPONSIBILITIES
Implementing best management practices as well as collection and reporting of data from aforementioned sites.

CURRENT PROGRAM THRUST
Nitrogen Management
Water Management
Pest Management
APPOINTMENT DATE: November 1988

PRESENT ASSIGNMENT: 100% Extension

RANK: Extension Microcomputer Assistant

EDUCATION:
B.S. 1973 University of Nebraska-Lincoln Ag. Engineering

RESPONSIBILITIES
Responsible for computer hardware and software support for South Central District County Staff and College Park Administrative Office; Computer hardware, software and network support at SCREC; Provide technician support for Farm Management Specialist in developing computer programs; Serve as Chairman of SCREC Computer Committee.

CURRENT PROGRAM THRUST
Provide support in all areas of computing within the 19 counties of the SCREC district, as well as at SCREC.
SCOTT BRADY

APPOINTMENT DATE: June 1976

PRESENT ASSIGNMENT: 100% Extension
Central IV

RANK: Extension Agriculturist

EDUCATION:

M.S. 1976 University of Nebraska Animal Science
B.S. 1974 University of Nebraska Animal Science/
Agricultural Economics

RESPONSIBILITIES

Extension Programming Unit: Provides leadership for the Central IV EPU. Provides leadership for Ag Profitability and support for Rural Revitalization Initiatives. Provides specialized programming in the Livestock, Marketing and Volunteer Management areas. It is expected that 20 to 50 percent of the staff member’s time will be spent on these priority initiative areas.

Within Local Extension Office: Serves as Agent-Chair for the Central IV Unit. Provides leadership and responsibilities for overall management of 4-H program and livestock programs. Supports other staff programs as needed.

CURRENT PROGRAM THRUST

Rural Revitalization
Resource Utilization for Livestock Producers
Provide the necessary leadership to develop, manage and conduct an issue and need oriented program in the Central IV area
Expand and improve a quality 4-H and youth program in the Central IV area
SUSAN E. BROWN

APPOINTMENT DATE:       June 1972

PRESENT ASSIGNMENT:      50% Extension
                        Adams County

RANK:                  Extension Home Economist

EDUCATION:

B.S.  1970    University of Nebraska     Home Economics Education
        and Extension

HONORS AND AWARDS (1987 to present):

Continued Excellence Award -- NAEHE (1989)

RESPONSIBILITIES

Extension Programming Unit: Provides leadership in the Extension Programming Unit in the area of
Strengthening Individual and Families Initiatives, Chair. Supporting roles in Communications and
Food and Nutrition. It is anticipated that 20 to 50 percent of the staff member's time will be spent on
these priority initiative areas.

Within Local Extension Office: Responsible for adult programming in Home Economics and priority
areas. Works with Home Extension Club program. Supporting role with 4-H and Home Economics.

CURRENT PROGRAM THRUST

IMPROVING NUTRITION AND HEALTH HAS A MULTI-PURPOSE EMPHASIS WITH THE
FOLLOWING POINTS BEING STRESSED:
  To change the shopping and food habits of clientele
  To decrease sodium, sugar and saturated fats in the diet
  To help clientele evaluate nutritional information in current magazines
  To have clientele learn and adopt the RDA food and nutrition recommendations
CHARLES A. BURR

APPOINTMENT DATE: October 1990

PRESENT ASSIGNMENT: 100% Extension
Clay/Webster Counties

RANK: Assistant Extension Agriculturist

EDUCATION:

M.S. 1986 University of Nebraska-Lincoln Mechanized Ag
B.S. 1987 University of Nebraska-Lincoln Ag Economics
B.S. 1985 University of Nebraska-Lincoln Mechanized Ag

HONORS AND AWARDS (1987 to present):

American Society of Ag Engineers Blue Ribbon Award for Educational Aids Competition for "Elm Creek Project Newsletter" (1992)
National Association of County Agricultural Agents (NACAA) Public Information Awards Program:
   National 1st Place-Slide Set Category (1992) and National 5th Place-Individual Newsletter Category (1992)
NACAA Search for Excellence Program-State Winner in Farm Income Category (1992)
Blue Hill FFA Chapter Appreciation Award for soliciting their involvement with the Elm Creek Project
National Association of Extension Home Economists Water Quality Education Award-Regional 1st place team award to Phyllis Schoenholz, Chuck Burr and Scottie McMillin for the South Central Six EPU Water Festival (1992)

RESPONSIBILITIES

Extension Programming Unit: Provides leadership for the Enhancing Water Quality Initiative and the Conservation, Natural Resources and Environment Core Program. Provides specialized programming in the Livestock, Irrigation Management and Water Quality areas. It is expected that 20 to 50 percent of the staff member's time will be spent on these priority initiative areas.

With Local Extension Offices: Serves as Agent-Chair for Clay and Webster Counties with overall responsibilities for agriculture programs with supporting role in agriculture and 4-H.

CURRENT PROGRAM THRUST

Enhancing Water Quality
Conservation, Natural Resources & Environment Core Program
Livestock
Irrigation Management
JOEL E. CAHOON

APPOINTMENT DATE: March 1990

PRESENT ASSIGNMENT: .50 FTE Research
                     .50 FTE Extension

RANK: Assistant Professor

EDUCATION:

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POSITIONS HELD:

1990-Present  Research/Extension Water Management Engineer and Assistant Professor University of Nebraska SCREC

RESEARCH
(1987 to present)

RESPONSIBILITIES:

On-farm water management, enhancing furrow irrigation systems for water quality and quantity.

PRESENTATIONS:

3 International/National Meetings
3 Regional Meetings
1 Invited Lecture

EXTENSION
(1987 to present)

RESPONSIBILITIES:

On-farm water management, water quality as affected by irrigation practices. N/H₂O demonstration projects.

PRESENTATIONS:

62 Contributed
57 Invited
19 Demonstration Projects

PUBLICATIONS:

4 Refereed Journal Articles
1 Non-refereed Article
5 ASAE Papers

5 News Programs
8 Newspaper Articles
4 NebGuides
3 Symposium/Proceedings
4 Demonstration Project Reports
3 News Releases
2 Slide Sets
TEACHING
(1987 to present)

GRADUATE STUDENT ADVISING:

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HONORS AND AWARDS

Blue Ribbon Award for Educational Aids, ASAE (1992)
Certificate of Appreciation, USDA, SCS (1993)

GRANTS AND CONTRACTS
(1987 to present)

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SIGNIFICANT PROGRAM ACHIEVEMENTS

Research: Principal investigator for a project aimed at enhancing the effectiveness of blocked end furrow irrigation systems. Co-investigator of several projects; a study of nitrogen mineralization rates of soils common to the Central Platte NRD, a project devoted to developing techniques for coping with limited water supplies in furrow irrigated agriculture, a project that will develop and promote feedback and control systems and techniques for furrow irrigation, and a study of management alternatives for surged flow irrigation in blocked end furrows. Had an active role in securing and executing each of these projects, from day-to-day activities to overall planning and management.

Extension: Developed and implemented an aggressive educational program for promoting irrigation system effectiveness to preserve ground and surface water quantity and quality. A key component of this implementation lies in effective resource utilization: many agencies and groups have a stake in water issues and may be used as a vehicle to stage effective educational programs. Examples are the Soil Conservation Service, Natural Resource Districts, irrigation districts and environmental groups. Bringing these groups into the educational loop provides an opportunity to deliver educational programming not only to the ultimate audience--farmers, but also to the individuals that have a major impact on policies and practices in irrigated agriculture.

PROGRAM DIRECTION FOR NEXT FIVE YEARS

Research: Continue to investigate the potential for more effective use of water as an on-farm resource. Target technologies for water-short areas, techniques for under-capacitated systems, and the merger of currently available technology into the difficult to manage arena of public water supplies.

Extension: Continue to use inter-agency involvement and demonstration type activities to enhance my workshop-style educational programs. Shift target areas to those that continue to have high nitrate groundwater problems, shortages of surface water availability, or impending regulations on groundwater withdraws.
RHONDA K. CAMERON

APPOINTMENT DATE: July 1989

PRESENT ASSIGNMENT: 100% Extension
Keamey/Franklin Counties

RANK: Extension Assistant

EDUCATION:

B.S. 1988 University of Nebraska-Lincoln Animal Science/
      Ag Journalism

HONORS AND AWARDS (1987 to present):

NACEB Outstanding Support Staff (1992)

RESPONSIBILITIES

Assist the County Agent Chairman and Extension Agent-Home Economics in the planning,
development and implementation of 4-H and Youth Development programs, and Home Economic
programs, with primary responsibilities for a number of specific projects. Serves as an information
source in all applicable subject matter areas. Maintains liaison with County Extension Board and 4-H
Council in program matters. Cooperates with the County Extension Staff, 4-H Council and Specialists.
Maintains primary responsibility in several 4-H programming areas.

CURRENT PROGRAM THRUST

Continue to build the 4-H program in the EPU

Develop an EPU Youth at Risk Program with the results of the Youth at Risk Survey

Work with EPU Staff to develop educational programs in Water Quality, Waste Management, and
Strengthening Families

Continue working and building the School Enrichment Program

Develop an outlet to provide the area with the program "On Your Own in Rural America"
ANDREW CHRISTIANSEN

APPOINTMENT DATE: August 1986

PRESENT ASSIGNMENT: 100% Extension
-50% Hamilton County
-50% Mid-NE Water Quality Demo. Proj.

RANK: Associate Extension Agriculturist

EDUCATION:

M.S. 1980 Washington State University Animal Science
B.S. 1977 Washington State University Animal Science

HONORS AND AWARDS (1987 to present):

Nominated by SCREC for Outstanding Agent Award (1992)
Received Outstanding Associate Award, Hamilton Co. Pork Producers and Hamilton Co. Livestock Feeder Assoc. (1991)
Team Member Cooperative Extension Excellence in Programming Award, Logan Creek Special Project (1991)
Inducted into Thurston Co. 4-H Leader Hall of Fame (1991)
Distinguished Service Award, NACAA (1990)
Team Member Cooperative Extension Excellence in Programming Award, Conservation Tillage Energy Project (1989)

RESPONSIBILITIES

Extension Programming Unit: Provides leadership for the Extension Programming Unit program in the areas of Ag Profitability and Conserving Natural Resources Initiatives. Provides specialized programming for Natural Resources and Organization Development. It is anticipated that 20 to 50 percent of the staff member’s time will be spent on these priority initiative areas.

Within Local Extension Office: Serves as Agent-Chair for Hamilton County and provides leadership and primary responsibility for agricultural programs and youth development. Serves .5 FTE as coordinator of the Mid-Nebraska Water Quality Demonstration project.

CURRENT PROGRAM THRUST

NITROGEN MANAGEMENT/WATER QUALITY
- Data Collection
- Educational Activity
- Communications
- Impact

AGRICULTURAL PROFITABILITY
- Swine Production
- IPM
- Presentations
- Miscellaneous

CORE PROGRAMS
- Adults
- Youth
ALAN J. CORR

APPOINTMENT DATE: February 1987

PRESENT ASSIGNMENT: 100% Extension
• 60% Kearney/Franklin Counties
• 40% Alternative Enterprise

RANK: Associate Extension Agriculturist

EDUCATION:

M.S. 1986 Oklahoma State University Agronomy
B.S. 1978 University of Nebraska Agriculture

RESPONSIBILITIES

Extension Programming Unit: Serves specialized role in the Crops, Horticulture and Community Development Initiatives with supporting role in the Ag Profitability Initiative. It is anticipated that 20 to 50 percent of the staff member's time will be spent on these priority initiative areas.

Within Local Extension Office: Serves as Agent Chair for Kearney and Franklin counties, has overall responsibilities for agricultural programming and supporting role for 4-H.

CURRENT PROGRAM THRUST

SUSTAINABLE AGRICULTURAL SYSTEMS
Will be working with other members of the “Increasing Agriculture Profitability” team in the Ft. Kearny E.P.U. trying to develop sustainable agriculture practices and to promote methods of groundwater pollution control and soil erosion control. Rather than focusing on yields, we will research and promote farm operations based on net returns per acre through test plots, tours, newsletters and workshops.

ALTERNATIVE AGRICULTURAL ENTERPRISES
Alternative crop production and ag related enterprises will provide economic diversification for rural Nebraska. Production of non-traditional, high value crops and the processing and direct marketing of such products will allow for producers to show a positive economic return while farming on a small scale. Alternative ag related enterprises will provide employment opportunities in rural areas where the lack of such opportunities has resulted in a declining population base.

Statewide, will continue to work with alternate crop production and processing, and develop an information base relating to economics, selection, production and marketing of such crops. Will also work with small scale ag related entrepreneurs concerning business management, pricing, product liability and direct marketing.

MARKETING AND MANAGEMENT PRACTICES
Plan to conduct educational programs to aid producers in improving marketing and management skills. Through workshops, newsletters, and newspaper articles, area producers will learn how to develop a market outlook and establish marketing plans.
LESLIE S. CRANDALL

APPOINTMENT DATE: February 1984

PRESENT ASSIGNMENT: 100% Extension
Phelps and Gosper Counties

RANK: Associate Extension Agent

EDUCATION:

M.S. 1977 Kansas State University
B.S. 1975 Kansas State University

Family and Child Development
Family and Child Development

HONORS AND AWARDS (1987 to present):

Outstanding New Agent Applicant - Home Economics Section, NCEA (1989)

RESPONSIBILITIES

Extension Programming Unit: Provides leadership for the Extension Programming Unit for the Strengthening Individuals and Families Initiative and serves in a specialized role for Volunteer Management and Individual and Family Development program areas. It is anticipated that 20 to 50 percent of the staff member’s time will be spent on these priority initiative areas.

Within Local Extension Office: Responsible for adult programming in Home Economics and responsible for Home Extension Club programs in Phelps and Gosper counties. Supporting role for 4-H.

CURRENT PROGRAM THRUST

Strengthening Individuals and Families
Youth at Risk
APPOINTMENT DATE: May 1992

PRESENT ASSIGNMENT: 100% Extension
Fillmore, Thayer & Nuckolls Counties

RANK: Extension Assistant

EDUCATION:
B.S. 1992 University of Nebraska-Lincoln Animal Science

HONORS AND AWARDS (1987 to present):
National Champion Meat Animal Evaluation Team (1990)

RESPONSIBILITIES

Extension Programming Unit: Work with Extension Programming Unit Agents/Assistants assigned
to 4-H and youth programming on an EPU basis.

Within Local Extension Offices: Responsible for 4-H in Fillmore, Thayer and Nuckolls counties.
Responsible for providing youth the opportunity to develop leadership skills, citizenship
responsibilities, and life skills through involvement in 4-H programs and activities. Assist 4-H adult
and teen volunteers in developing their leadership and technical skills to better implement the 4-H
program. Have main responsibilities for the agricultural portion of the Thayer County Fair and assist
with the agricultural portion of the Fillmore and Nuckolls County Fairs.

CURRENT PROGRAM THRUST

Educational day for 5th and 6th grade students in the EPU to increase knowledge of water and water-
related issues

Weekend lock-in for Jr. High youth, with Teen Leaders as role models and presenters of workshops

To build life-time livestock production skills and knowledge, plus build self-esteem

Increase knowledge about nutrition, genetics, feed form, reproductive physiology, marketing, etc. for
livestock species

Enable teens to gain leadership abilities, build self-esteem, learn communication skills and career
studies
BERNADINE DANCZAK

APPOINTMENT DATE: September 1990

PRESENT ASSIGNMENT: 100% Extension
(50% Horticulture-50% 4-H & Youth Programs)
Buffalo County

RANK: Extension Assistant

EDUCATION:

M.S. In Progress University of Nebraska-Kearney Biology
B.S. 1988 University of Nebraska-Lincoln Horticulture/
         Ornamentals Option

HONORS AND AWARDS (1987 to present):

American Floral Endowment, Mosmiller Scholar (1988)
Kearney Area Business and Professional Women, Young Careerist (alt.) (1991)
Nebraska Jaycees President's Club (1992)

RESPONSIBILITIES

Horticulture: Provide research-based information on horticulture to county residents, as well as to residents of the Fort Kearny EPU. Answer questions via phone calls, office visits, mailings or visitations to the site. Provide management of Master Gardener program including training. Prepare and deliver educational programs relating to horticulture to the community. Write a weekly Yard & Garden column for the Kearney Hub. Organize Farmer's Market committee and promote Farmer's Market in Kearney.

4-H: Promote, maintain and evaluate the 4-H School Enrichment program for grades 3-6. Plan, conduct and evaluate 6th Grade 4-H School Enrichment/Outdoor Education camp each spring. Classic 4-H programs: Summer camps, selected events (including 4-H County Horticulture Judging contest), and Cat, Dog, Rabbit and Horticulture projects.

CURRENT PROGRAM THRUST

Ag Competitiveness & Profitability - Horticulture

4-H & Youth Development - Youth Natural Resources and Environment
JAYNE DECKER

APPOINTMENT DATE: January 1972

PRESENT ASSIGNMENT: 100% Extension
Hall County

RANK: Extension Home Economist

EDUCATION:

M.S. 1986 University of Nebraska-Lincoln
B.S. 1971 University of Nebraska-Lincoln

HONORS AND AWARDS (1987 to present):

Recipient of NEAEHE Creative Programming Grant for Child Care Providers Newsletter (an EPU project) (1990)
Recipient of NCEA Outstanding Service Award (1991)
Distinguished Service Award (1991)
Recipient of Continued Excellence Award - NAEHE and NeAEHE (1992)
Recipient of Mid Career Award - Epsilon Sigma Phi (1992)
Recognition for 20 years Federal and State Service (1992)
KOLN-KGIN TV Sunshine Award (for Chairing the successful CHAD Health Fair) (1992)
Nominated for Distinguished Extension Agent Award by the SCREC Awards Committee (1992)

RESPONSIBILITIES

Extension Programming Unit: Provides leadership in the Extension Programming Unit for the Strengthening Individual and Families and Food and Nutrition Initiatives. Serves a specialized programming role in the Communications, Foods and Nutrition (specifically food safety), Individual and Family Development (specifically aging), and Organizational Development areas. It is anticipated that 20 to 50 percent of the staff member’s time will be spent on these priority initiative areas.

Within Local Extension Office: Provides leadership for Home Extension Club program, Foods and Nutrition, Health and Family Life program areas. Provides supporting role to 4-H.

CURRENT PROGRAM THRUST

FAMILY DEVELOPMENT AND RESOURCE MANAGEMENT
Child Care Provider Conference
Reminiscence
MMAP (Medicare/Medicaid Assistance Program)
District Successful Aging Conference
Literacy Links

FOOD SAFETY AND QUALITY
SCOTT J. DeWALD

APPOINTMENT DATE: July 1978

PRESENT ASSIGNMENT: .25 FTE Extension .75 FTE Forestry

RANK: Associate Professor

EDUCATION:

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<td>Instructor</td>
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EXTENSION/FORESTRY (1987 to present)

RESPONSIBILITIES:

Promotion and implementation of community forestry, rural forestry and environmental education programs.

PRESENTATIONS:

- 6 International/National Meetings
- 5 Regional/State Meetings
- 72 Extension/District Meetings
- 140 Radio/TV Programs
- 3 RFA Tours
- 2 Community Forestry Tour

PUBLICATIONS:

- 13 Community Forestry/Inventory Publications
- 4 Rural Forestry Pub.
- 6 Research/Information Papers
- 5 Brochures/Community Forestry
- 30 Newsletters
- 1 NebGuide
- 2 Fact Sheets
- 112 Landowner Mgmt. Plans
- 11 RFA Workshops
- 10 Community Forestry Workshops
- 12 Project Learning Tree Workshops
- 48 News Releases

HONORS AND AWARDS

"Outstanding Public Service: following the Grand Island Tornado Disaster (1980)
National Award - "Best New Project - Learning Tree Program" (1991)
SIGNIFICANT PROGRAM ACHIEVEMENTS

Program - Nebraska Project Learning Tree - Coordinator Scott DeWald

Project Learning Tree (PLT) is an environmental education program that trains educators to help young people gain an awareness of the world and their place in it. PLT workshops and in-service programs provide instructional activities for youth group leaders, teachers, foresters, and nature center staff. PLT teaches children how to think, not what to think, about our complex natural environment by emphasizing problem solving and critical thinking skills. It is an interdisciplinary program with activities that can be used to teach science, social studies, humanities, math, and other areas. PLT is supplementary, rather than a complete curriculum, so educators can easily fit it into their existing curricula or programs.

Program - Chemical Weed Control in Conservation/Forestry Plantings

Millions of dollars are spent each year establishing tree seedlings for conservation, forestry, and commercial purposes. In recent years, pre-emergence chemical certifications have been changed to meet EPA standards not allowing many weed control chemicals to be used on newly established seedlings. Efforts are needed to obtain data and information to support the state certification of pre-emergence herbicides that meet EPA standards on tree/shrub species in the state conservation program (2.5 million seedlings per year).

Program - Professional Tree Care Workshops - Team Effort

Since 1989 a series of Professional Tree Care Workshops have been held across the state of Nebraska. As part of a team effort, these workshops serve a need for supplemental training to tree care professionals statewide. In the long term, because of this education process, there will exist the improved quality and quantity of Nebraska’s landscape trees.

PROGRAM DIRECTION FOR NEXT FIVE YEARS

**Rural Forestry Assistance (RFA):** Develop and expand the Forest Stewardship Program. This program involves helping private landowners to plant, protect and enhance their woodland and related resources. Through on-site visits with landowners, management options will be discussed and prescriptions outlined in a Forest Stewardship Management Plan that can be implemented on the property. This program helps landowners to address current and future needs in managing the land.

**Community Forestry Assistance (CFA):** Efforts are currently underway to organize a District Community Forestry committee to facilitate communication among the communities within the district. Lack of professional management and an aging tree population have resulted in a need for work in the areas of education, resource planning, tree selection and replacement, care and maintenance, and removal and disposal. Most communities do not have the resources to initiate and maintain a comprehensive tree management program without extensive technical assistance. The District Committee will help to serve as a sounding board and source of local input to district and state levels to meet these needs.

**Environmental Education:** Program emphasis will continue to further develop Project Learning Tree as an environmental education tool. Nebraska Project Learning Tree is truly a team effort, combining the efforts of Extension, 4-H, Nebraska Forest Service, and nearly every agency and group involved in environmental education in the state. Nebraska PLT is one of only a few University programs that involve educators as well as others outside the University.
THOMAS W. DORN

APPOINTMENT DATE: January 1990

PRESENT ASSIGNMENT: 100% Extension
Fillmore/Thayer/Nuckolls Counties

RANK: Associate Extension Agriculturalist

EDUCATION:

M.S. 1976 University of Nebraska-Lincoln Mechanized Ag.
B.S. 1974 University of Nebraska-Lincoln Mechanized Ag.

HONORS AND AWARDS (1987 to present):

Farm and Ranch Financial Management Program, National Association of County Agricultural Agents, State Winner (1991)

RESPONSIBILITIES

Extension Programming Unit: Serves as Coordinator for the Extension Programming Unit. Provides leadership for the Managing Natural Resources Initiative, with a supporting role in the Water Quality Initiative. Serves a specialized role for the Crops, Natural Resources, and Pest Management subject areas. It is anticipated that 20 to 50 percent of the staff member’s time will be spent on these priority initiative areas.

Within Local Extension Office: Serves as Agent-Chair for Fillmore County and provides leadership for all agricultural programs and 4-H agricultural programs.

CURRENT PROGRAM THRUST

AGRICULTURAL PROFITABILITY AND SUSTAINABILITY
Sustainable Agricultural Systems
Marketing and Management Practices
Public Policy Education

ENHANCING WATER QUALITY
Pesticide Applicator Training
Management of Nitrates in Groundwater
Provide a Safe and Adequate Domestic Water Supply
Water Quality Demonstration Project

STRENGTHENING NEBRASKA COMMUNITIES
Community/Economic Development, Planning and Action
BENJAMIN L. DOUPNIK, JR.

APPOINTMENT DATE: March 1972

PRESENT ASSIGNMENT: .50 FTE Research .50 FTE Extension

RANK: Professor

EDUCATION:

Ph.D. 1967 Louisiana State University Plant Pathology
M.S. 1964 University of Nebraska Botany
A.B. 1962 Kansas Wesleyan University Biology

POSITIONS HELD:

1979-Present Professor, Department of Plant Pathology University of Nebraska/Lincoln
1985 (Feb.-June) Acting Director University of Nebraska/SCREC
1980-1981 Faculty Development Leave University of Kentucky
1973-1979 Associate Professor, Department of Plant Pathology University of Nebraska Lincoln
1972-1973 Assistant Professor, Department of Plant Pathology University of Nebraska Lincoln
1967-1972 Assistant Professor University of Georgia

RESEARCH

RESPONSIBILITIES:

Field crop disease control
Stored grain management
Pre- and post-harvest mycotoxin control

PRESENTATIONS:

7 Invited Lectures
10 International and National Meetings
13 Regional Committee Meetings
15 Peer Reviews

EXTENSION

RESPONSIBILITIES:

Provide timely information for the diagnosis and control of diseases (including mycotoxins) affecting field crops in Nebraska

PRESENTATIONS:

45 Proceedings Meetings
25 Radio/TV
25 Field Days

PUBLICATIONS:

4 Refereed Journal Articles
23 Reviewed Journal Article
9 Abstracts
3 Germ Plasm Releases
8 In-House SCREC
13 Regional Committee Rpt.
2 Miscellaneous

PUBLICATIONS:

3 Circulars
5 Peer Reviews
40 Proceedings
4 NebGuides
50 Newsletters
30 Miscellaneous
TEACHING
(1987 to present)

GRADUATE STUDENT ADVISING:

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HONORS AND AWARDS

Excellence in Team Programming Award for Corn Lethal Necrosis Project, Cooperative Ext. (1991)

Team Effort Excellence Award for Wheat Breeding and Genetics Team, IANR (1989)

GRANTS AND CONTRACTS
(1987 to present)

| Regional Research Project | $84,500  |
| NC-IPM                  | 89,800   |
| ARD Competitive Grant   | 35,000   |
| Commodity Boards        | 92,267   |
| Industry                | 112,950  |
| TOTAL                   | $414,517 |

SIGNIFICANT PROGRAM ACHIEVEMENTS

Based on mycotransfer assays and mycotoxin analyses, white corn production in south central Nebraska has very little risk of Aspergillus flavus infection or aflatoxin contamination. Reduced losses from corn lethal necrosis have been brought about by crop rotation and the planting of tolerant hybrids. In addition, a breeding project has released two Cycle 1 populations of elite dent corn synthetics and five S2 lines selected from each population with improved tolerance to corn lethal necrosis. One soybean line with improved resistance to pod and stem blight (pod/seed phase) has been released jointly with the University of Missouri. Reduced losses from foliar wheat diseases through variety selection and/or chemical control are the result of 17 years of evaluations. Rumors of mycotoxin contamination (vomitoxin/wheat; aflatoxin/com) have been reduced through surveys and analyses of samples and reporting of findings by radio, television, and newspaper releases and meetings (Crop Protection Clinics and Crop Pest Management Updates). He processes 225 plant disease diagnostic samples annually in addition to handling several hundred phone calls per year regarding identification of suspected plant disease problems and recommendations for control. If mycotoxins are involved, recommendations are given for disposal or utilization. These extension/research programs are estimated to reduce losses from diseases by more than $3 million annually for the Nebraska agricultural community.

PROGRAM DIRECTION FOR NEXT FIVE YEARS

Current research efforts are concentrated on disease problems affecting the major field crops of south central Nebraska and on grain quality and mycotoxins. The major emphasis of corn is placed on corn lethal necrosis, stalk rot, grain quality and food grade corn diseases. Primary emphasis on sorghum is stalk rot. Wheat emphasis is on foliar disease control. Major efforts on soybeans are seed treatments, pod and stem blight, and anthracnose. Corn grain quality and potential mycotoxin problems related to Aspergillus, Penicillia, and Fusaria species are emphasized. Future emphasis will continue on corn and soybean diseases, corn grain quality, and potential mycotoxin problems. Increased emphasis will be placed on food grade corn.

Current and future extension emphasis has been and will continue to be placed on the diagnosis of field crop disease problems and recommendations for control. Educational materials will be developed as appropriate. Control measure recommendations will center around crop rotation and the planting of resistant/tolerant hybrids or varieties where available. Educational materials will continue to be developed for grain quality/mycotoxins.
THOMAS J. DRUDIK

APPOINTMENT DATE: March 1977

PRESENT ASSIGNMENT: 100% Extension
Hall County

RANK: Extension Agriculturalist

EDUCATION:

M.S. 1970 University of Nebraska-Lincoln Ag. Education/Animal Science
B.S. 1967 University of Nebraska-Lincoln Ag. Education/Animal Science

HONORS AND AWARDS (1987 to present):

Fifteen-Year Service Award, University of Nebraska and USDA
Appreciation Award, Northwest High School
Honorary Chapter Farmer, Northwest FFA Chapter
Loup-Platte Pork Producers' Honorary Pork Producer

RESPONSIBILITIES

Extension Programming Unit: Provides leadership for the Ag Profitability Initiative. Provides specialized programming in Livestock and Pest Management. It is expected that 20 to 50 percent of the staff member's time will be spent on these priority initiative areas.

Within Local Extension Office: Serves as Agent-Chair for Hall County with overall responsibilities for agriculture programs with supporting role in agriculture and 4-H.

CURRENT PROGRAM THRUST

Sheep Production - Nebraska
Beef Systems Management
Pork Production
Pesticide Applicator Training
Animal Science and Youth
Solid and Hazardous Waste Management, Planning and Action
Forage Quality and Use for Livestock
Equine Science
ROGER W. ELMORE

APPOINTMENT DATE: July 1981

PRESENT ASSIGNMENT: .50 FTE Research
                    .50 FTE Extension

RANK: Associate Professor

EDUCATION:

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RESEARCH

(1987 to present)

RESPONSIBILITIES:

Crop Production
Resource-efficient Cropping Systems
Alternative Crops

PRESENTATIONS:

10 Contributed

EXTENSION

(1987 to present)

RESPONSIBILITIES:

Crop Production
Resource-efficient Cropping Systems
Alternative Crops
Variety Testing
Soybean Extension Programs (State-wide)

PRESENTATIONS: (1992 only)

35 Invited
19 Meetings
13 Radio Interviews
3 TV Appearances

PUBLICATIONS:

RESEARCH

11 Refereed Journal Articles
1 Research Bulletin
4 Symposium or Workshop
10 Published Abstracts

EXTENSION

18 News Releases/Interviews
27 Circular/NebGuides
13 Symposium or Workshop
4 Department/District Pub.
10 Newsletters
TEACHING
(1987 to present)

GRADUATE STUDENT ADVISING:
Advisor

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HONORS AND AWARDS

Excellence in Extension Programming, Nebraska Cooperative Extension (1987)
IANR Team Effort Award: Wheat breeding and genetic team (1989)

GRANTS AND CONTRACTS
(1987 to present)

Federal ........................................ $198,915
IANR Competitive ............................ 30,000
NE Soybean Development, Utiliz. & Mktg. Board ... 30,785
Rotary Foundation ............................. 10,000
USDA-CSRS ..................................... 83,005
NE Corn Development, Utiliz. & Mktg. Board ...... 9,462
IANR Competitive ............................ 29,920
NE Soybean Development, Utiliz. & Mktg. Board ... 24,000
NE Soybean Development, Utiliz. & Mktg. Board ... 37,500
NE Soybean Development, Utiliz. & Mktg. Board ... 99,900
TOTAL ........................................ $553,487

SIGNIFICANT PROGRAM ACHIEVEMENTS

Research: Early research on soybean variety interactions with tillage systems is some of the first reported. Other work on soybean variety responses to various cultural practices offers promise of fine-tuning production recommendations in different environments. The release of soybean germplasm with resistance to pod and stem blight has generated interest among soybean breeders.

Extension: The variety testing program in south central Nebraska provides farmers with more complete information on more varieties at more locations than before 1982. The white corn hybrid trial and alternate crops demonstrations have interested clients considerably. Soybean extension publications and programs on farm-strip tests have increased awareness.

PROGRAM DIRECTION FOR NEXT FIVE YEARS

Research: Conduct research on soybean variety competition with weeds, limited irrigation of corn and mung bean cultural practices. Initiate research on resource-efficient crop-livestock production systems.

Extension: Continue to provide clients with accurate and timely data on crop variety performance and crop production techniques.
RICHARD B. FERGUSON

APPOINTMENT DATE: July 1991

PRESENT ASSIGNMENT: .50 FTE Research .50 FTE Extension

RANK: Associate Professor

EDUCATION:

Ph.D. 1985 Kansas State University Soil Fertility
M.S. 1981 Kansas State University Soil Fertility
B.S. 1976 Friends University, Wichita, Kansas Biology (major)/Chemistry (minor)

POSITIONS HELD:

1991-present Associate Professor and Extension Soils Specialist University of Nebraska SCREC
1985-1991 Assistant Professor and Extension Soils Specialist University of Nebraska SCREC
1980-1985 Research Assistant, Department of Agronomy Kansas State University
1980-1980 Graduate Research Assistant, Dept. of Agronomy Kansas State University

RESEARCH
(1987 to present)

RESPONSIBILITIES:

Nitrogen management factors influencing N use
efficiency with conservation tillage
irrigated crop production

PRESENTATIONS:

4 International/National Meetings
2 Regional/State Meetings

EXTENSION
(1987 to present)

RESPONSIBILITIES:

Coordination of nitrogen/irrigation management
education in south central Nebraska.
Project Leader - Mid-Nebraska Water Quality Demonstration Project
Project Leader - Platte Valley Nitrogen/Irrigation Management
Demonstration Project

PRESENTATIONS:

153 Contributed

PUBLICATIONS:

9 Refereed Journal Articles
1 Bulletins
7 Symposium/Proceedings
8 Abstracts
8 Department Publications

5 Media Releases
3 NebGuides
15 Symposium/Proceedings
12 Newsletters
1 Magazine Article
8 District Publications
TEACHING
(1987 to present)

GRADUATE STUDENT ADVISING:
Advisor
M.S. 1
Ph.D. 1

Committees
Current Completed

HONORS AND AWARDS
"Excellence in Programming" Award, Cooperative Extension Service (1986)
"Unit Award for Superior Service" USDA (1987)
American Society of Agricultural Engineers Blue Ribbon Award, Educational Aids Competition, for NebGuide entitled "Ridge Plant Systems: Fertility" (1991)

GRANTS AND CONTRACTS
(1987 to present)

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SIGNIFICANT PROGRAM ACHIEVEMENTS

Research: Nitrogen management practices for minimum-tillage, irrigated corn production have been the primary thrust of the SCREC fertility research program. Research conducted as part of the BN project found that sidedress application of NH₃ with nitrapyrin reduced N uptake and N use efficiency compared to preplant application for silt loam soils. Other research has evaluated the interactions between tillage and irrigation methodology and nitrogen use by corn. Another project has demonstrated the potential for urease inhibitors to increase N use efficiency of broadcast nitrogen fertilizers containing urea for minimum-tillage corn.

Extension: Extension demonstration projects in south central Nebraska and the central Platte river valley have accelerated the adoption of nitrogen and irrigation management practices known to reduce nitrate leaching to groundwater. The Platte Valley Nitrogen/Irrigation Management and Water Quality Demonstration Projects have served as educational models for other projects in Nebraska and in the midwest.

PROGRAM DIRECTION FOR NEXT FIVE YEARS

Research: Nitrogen management according to spatially variable soil and irrigation factors will be a primary research topic in the near future. Research will focus on learning how to vary N rates according to factors such as yield index, soil nitrate, irrigation infiltration, etc. in a manner to improve N use efficiency above uniform application rates. Research is also being initiated which will evaluate the long-term effects of composted beef feedlot manure to soil, and determine application rates and management systems which will minimize environmental degradation as well as minimize the cost of handling and disposing of feedlot wastes.

Extension: Water quality oriented demonstration projects will continue to be a primary educational mode over the next five years. Nitrogen and irrigation management education towards reduced nitrate leaching will address increasing amounts of regulation which producers will face the next five years.
MARILYN FOX

APPOINTMENT DATE: August 1979

PRESENT ASSIGNMENT: 100% Extension
• 50% Merrick County
• 50% EFNEP, Hall and Adams Counties

RANK: Associate Extension Home Economist

EDUCATION:

M.S. 1986 University of Nebraska Human Development & the Family
B.S. 1968 Kansas State University Home Economics & Liberal Arts

HONORS AND AWARDS (1987 to present):

Distinguished Extension Agent Award Applicant (1989)
NAEHE Distinguished Service Award (1990)
Merrick County 4-H Council Pat on the Back Award (1991)

RESPONSIBILITIES

Extension Programming Unit: Provides leadership for Foods and Nutrition Initiative. Provides specialized program role for Foods & Nutrition and Individual & Family Development. It is expected that 20 to 50 percent of the staff member's time will be spent on these priority initiative areas.

Within Local Extension Office: Provides leadership for Home Extension Club program and all Home Economics areas. Provides support to 4-H and Community Development programs. Serves as EFNEP Coordinator .5 FTE on separate position description.

CURRENT PROGRAM THRUST

ENCOURAGE DIETARY CHOICES WHICH REDUCE RISK OF DISEASE
"Healthy Holiday Food", "Weight Wellness", "Fitting Beef Into a Balanced Diet", "Healthy Snacks", "Getting Foods Ready for Fair", "Planning for Healthy Eating", and "Not Just for Pharaohs" as well as foods and nutrition articles in Farming Magazine, Central City Republican-Nonpareil and Child Care Providers newsletter were offered to help clientele learn about and adopt food and nutrition practices that would help to reduce the risks of health problems and be appropriate for their needs.

PROMOTE HEALTHY LIFESTYLE PRACTICES FOR YOUTH
"DARE To Be You" training for volunteers and Extension staff was held. The Juvenile Diversion programs were continued in Merrick and Hamilton Counties with leadership assumed by Jeanette Friesen, Hamilton County Extension Agent.

EXPANDED FOOD AND NUTRITION EDUCATION PROGRAM
Through administration and maintenance of the EFNEP program, the nutrition advisors have continued to teach improved food and nutrition practices to low income families and youth.
JEANETTE FRIESEN

APPOINTMENT DATE: May 1983

PRESENT ASSIGNMENT: 70% Extension
Hamilton County

RANK: Associate Extension Home Economist

EDUCATION:

M.S. 1986 University of Nebraska
      Human Development & the Family
      Home Economics Ed.

B.S. 1971 University of Nebraska

HONORS AND AWARDS (1987 to present):

- 10 year service plaque from UNL (1990)
- Distinguished Service Award from National Association of Extension Home Economists (1992)
- Excellence in Team Programming Award (1992)

RESPONSIBILITIES

Extension Programming Unit: Provides leadership and programming for the Extension Programming Unit in Youth at Risk Initiative and provides specialized programming in the Individual and Family Development area. It is anticipated that 20 to 50 percent of the staff member's time will be spent on these priority initiative areas.

Within Local Extension Office: Provides leadership for Home Extension Club programming and primary responsibility for Home Economics subject matter. Provides support to 4-H program.

CURRENT PROGRAM THRUST

YOUTH AND FAMILIES AT RISK

When children are left home alone, whether it be for a few minutes or few hours, are they really prepared? Have parents and children talked about safety, emergencies, etc.? "On Your Own in Rural America" videos and workbooks create this opportunity. Funding will be sought, educational materials purchased and distributed and advertising done for "On Your Own in Rural America" project. These materials will be available for all grade school students in Hamilton County.

The youth emphasis of Future Focus in the Grand Central Triad identified a number of issues which put youth at risk. Some of these issues are: lack of values and moral teaching, youth in dysfunctional families, lack of positive role models, pressure for success, over-commitment, lack of positive self-esteem, need for physical fitness and disease prevention, and need for life goals. Along with these are even greater needs for suicide prevention, and prevention of sexually transmitted diseases, including AIDS. The educational program will be developed to consist of radio spots made by youth reacting to predesigned scenarios, with a message for youth of information to gain, another idea to consider, a suggestion of where to turn for help, etc.
PROMOTE HEALTHY LIFESTYLE PRACTICES FOR YOUTH

Youth are engaging in a wide variety of self-destructive behaviors which have long-term negative effects on both physical and mental health. They often lack the self-esteem and decision-making skills needed to make right choices. Through the "DARE To Be You" program, youth and adults can both learn skills needed to face today's challenges. The juvenile diversion program, in cooperation with the county attorney's office, is one way to reach specific families at a time of need.

STRENGTHENING INDIVIDUALS AND FAMILIES

A day-long Child Care Provider's Conference will be offered February 20, 1993 in Grand Island. The conference will be coordinated by Jayne Decker, Marilyn Fox, Jeanette Friesen and Nancy Schmerdtmann in cooperation with a number of people involved in child care. A quarterly Child Care Provider's Newsletter will be sent to all licensed providers in Hall, Hamilton and Merrick Counties, to unlicensed providers who have attended the past two Child Care Provider Conferences and to other providers requesting the newsletter.
APPOINTMENT DATE: August 1984

PRESENT ASSIGNMENT: 100% Extension
Phelps-Gosper Counties

RANK: Associate Extension Agriculturist

EDUCATION:

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HONORS AND AWARDS (1987 to present):

- NACAA Public Information Award for Feature Story, State Winner (1992)
- NACAA Public Information Award for Personal Column, State Winner (1992)
- Epsilon Sigma Phi Team Award for No Till Drill Expo (1991)
- NACAA Public Information Award for Direct Mail Piece, State Winner (1991)
- NACAA Public Information Award for Personal Column, State Winner (1991)
- NACAA Crop Production Award, State Winner (1990)
- NACAA 4-H Recognition Program, Alternate State Winner (1990)
- NACAA Crop Production Award, State Winner (1989)
- NACAA Environmental Protection, Award State Winner (1989)
- NACAA Public Information Award for Radio, State and Regional Winner (1989)
- Turfgrass/Horticulture Communications, State and Regional Winner (1989)
- NACAA Public Information Award for Personal Column, State Winner (1988)
- NACAA Public Information Award for Personal Column, State Winner (1987)
- NACAA Public Information Award for Radio Program, State Runner-Up (1987)

RESPONSIBILITIES

Extension Programming Unit: Provides a supporting role in Water Quality, Crops, Natural Resources, and Pest Management subject areas.

Within Local Extension Office: Serves as Agent-Chair for Phelps and Gosper Counties and provides leadership for all agricultural programs with supporting role in 4-H agricultural programs.

CURRENT PROGRAM THRUST

Provide education and awareness on enhancing water quality.
Increase the agricultural profitability of producers.
Strengthen individuals and families through 4-H.
CONNIE K. HANCOCK

APPOINTMENT DATE:    July 1979

PRESENT ASSIGNMENT:  100% Extension
          Central IV

RANK:     Associate Extension Home Economist

EDUCATION:

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RESPONSIBILITIES

Extension Programming Unit: Provides leadership for Rural Revitalization, and Strengthening Individual and Families Initiatives. Provides specialized programming in Organizational Development, Community Development, and Foods and Nutrition. Provides support to 4-H and other program areas as needed. It is anticipated that 20 to 50 percent of the staff member's time will be spent on these priority initiative areas.

CURRENT PROGRAM THRUST

REVITALIZING RURAL COMMUNITIES

Today, Nebraska communities are being challenged as never before. Declines in the number of family farms and income are undermining the traditional economic base of our small rural communities. The absence of job opportunities are forcing more young people to leave their hometowns. Across Nebraska, an approach is needed to focus on these problems and their solutions. Through the united efforts of communities, solutions can be found that will benefit all those concerned.

Through team efforts in the Central IV area, communities are being reached. It is vital that communities know we are here to serve them and help discover their potential from within.

INCREASING AGRICULTURE PROFITABILITY

Farm women of today are taking more of an active role in agri-business. To meet these increased interests, a basis needs to be built upon which women can help make wise decisions in partnership with the producer. Besides record keeping, having more knowledge about production and marketing can be cost saving to the farm business. Women are not as sensitive about the product as the producer is and can help develop a higher profit.

SOLID WASTE MANAGEMENT

Concern and panic is the word when you mention solid waste. The Central Nebraska Great Lakes Association has formed a coalition to develop a regional landfill. Leadership is within the area and education will be the key. Residents and county/city officials are beginning to agree on interlocal agreements and surveying the area for the "best location". Education on all levels needs to take place in order for the less amount of conflict. The more people know the better off we will be.
JAMES D. HRUSKOCI

APPOINTMENT DATE: May 1981

PRESENT ASSIGNMENT: 100% Extension
Hall County

RANK: Associate Extension Agriculturist

EDUCATION:

M.S. 1981 Iowa State University  Plant Breeding & Cytogenetics/
Horticulture
B.S. 1979 Iowa State University  Agronomy-Horticulture

HONORS AND AWARDS (1987 to present):

NACAA Public Information Award sponsored by RJR Nabisco - First Place State Winner for "Don't Bag It" - Direct mail piece (1992)
NACAA Turfgrass/Horticulture Award sponsored by LESCO Inc. - First Place State Winner for "Don't Bag It" - Direct mail piece (1992)
American Soc. Biol. Systems Engineering - Outstanding Educational Aids Blue Ribbon Award for "Don't Bag It" display (1992)

RESPONSIBILITIES

Extension Programming Unit: Provides specialized programming for horticulture and communications. It is anticipated that 20 to 50 percent of the staff member's time will be spent on these priority initiative areas.

Within Local Extension Office: Provides leadership for programming in the horticulture area with supporting roles for 4-H, crops, and water quality.

CURRENT PROGRAM THRUST

RESIDENTIAL AND COMMERCIAL HORTICULTURE
Horticulture is not only a very popular hobby, but a necessity for anyone who has a home. Fifty-three percent of Nebraska's population has some interest in ornamental and home landscaping. Recent national surveys of real estate agencies continue to show that the monetary value of a home is increased by landscaping and by its correct upkeep. Landscaping is a complex activity for not only does it require an understanding of design, but also a knowledge of plant material and its maintenance.

HOME FOOD PRODUCTION
Involvement in home food production, including both fruits and vegetables is increasing although more slowly than in the 60's. Fifty-five percent of Nebraska's population is involved in home food production. While people garden for a variety of reasons, more do so for leisure or relaxation, or simply for the enjoyment of being outside. The number of people who garden to save money depends upon the economic situation at any particular time. More information is available to gardeners in a greater variety of forms than ever before. Much of this information, especially that produced by commercial firms, is beautifully packaged. But it's still true that most of this information is written for climates other than the central plains.
DEAN H. KRULL

APPOINTMENT DATE: February 1980

PRESENT ASSIGNMENT: Platte Valley Nitrogen and Irrigation Management Demonstration Program

RANK: Extension Technologist I

EDUCATION:

B.S. 1972 Kearney State College Business Administration

RESPONSIBILITIES

Coordination and implementation of demonstration plots showing nitrogen and irrigation best management practices.

CURRENT PROGRAM THRUST

Nitrogen and Irrigation Management
DONALD G. LEVIS

APPOINTMENT DATE: November 1978

PRESENT ASSIGNMENT: 75% Extension  
25% Research

EDUCATION:

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POSITIONS HELD:

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RESEARCH
(1987 to present)

Investigating neuroendocrine and environmental influences on sexual behavior in male pigs.

EXTENSION
(1987 to present)

RESPONSIBILITIES:

Provide statewide leadership for extension programs on reproductive management of swine and design and management of swine breeding and gestation facilities. Provide leadership for extension programs concerning pork production in the South Central Research and Extension Center district.

PUBLICATIONS:

5 Refereed Journals  
5 Articles  
6 Abstracts  
2 Book Chapters  
4 Department

TEACHING
(1987 to present)

GRADUATE STUDENT ADVISING:

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90
HONORS AND AWARDS

Distinguished Extension Specialist Award (1988)
Nebraska Pork Industry Dedicated Service Award (1989)
University of Nebraska Livestock Service Award (1989)
Excellence in Team Programming - Extension (1991)

SIGNIFICANT PROGRAM ACHIEVEMENTS

Research: The results of the research on neuroendocrine influences on sexual behavior in castrated male pigs has contributed to a better understanding of how hormones affect sexual behavior. This project has demonstrated that in castrated male pigs: (1) major components of sexual behavior are restored and maintained by testosterone, (2) estradiol cypionate initially restores most aspects of sexual behavior but is unable to sustain this behavior after two weeks, (3) testosterone promotes many aspects of masculine sexual behavior via aromatization to estrogen, and (4) that species do differ in sexual behavior traits when given the same hormone(s).

Without any scientific evidence, numerous veterinarians were recommending the use of therapeutic prostaglandins to stimulate sexual behavior in boars. Since our research has shown that prostaglandin therapy does not stimulate sexual behavior in boars, many veterinarians in Nebraska have not been recommending prostaglandin therapy.

I recently completed a 12-month (May 91 to May 92) sabbatical leave in Australia where we studied: (1) the influence of photoperiod on sexual development and sexual behavior in young growing boars, (2) evaluated the duration of standing estrus in sows, and (3) the influence of housing and mating method on stress level in boars. The results have not been completely analyzed.

Extension: State, regional, national, and international extension program efforts have been directed toward: (1) improving reproductive efficiency in boars, sows and gilts, and (2) the design and management of the "Levis" swine breeding and gestation facility. Presentations were made at 123 meetings which were attended by more that 6,200 people. Since the "Levis" swine breeding facility has gained national and international recognition, I spend about 80% of my time on this program. In 1988 I initiated the concept of having a "home study" course on Breeding Herd Management for Nebraska pork producers. We have since developed four home study courses. The enrollment for the four home study courses has been 1,400 (Breeding Herd Management), 1,200 (Farrowing and Nursery Management), 750 (Managing Growing-Finishing Pigs), and 80 (Topics of Importance to Pork Producers). Based on the returned evaluation forms, all courses have received high ratings. In reference to the "service" mode of extension, I made 77 farm visits, received over 1,800 telephone calls and mailed over 960 letters on how to design swine breeding facilities.

PROGRAM DIRECTION FOR NEXT FIVE YEARS

Research: Conduct experiments on University of Nebraska boars which have been selected for large testes to determine what effect testis size has on the various sexual behavior traits. If growth-promoting agents become available, we will evaluate their effect on sexual behavior, sperm production and sperm output.

Extension: Continue providing statewide leadership for educational programs on swine reproductive efficiency and breeding facility design. Workshops on artificial insemination, production scheduling and building design will be developed for training pork producers. I also want to conduct a pork producer/veterinarian workshop whereby they evaluate live boars for breeding soundness.
KEITH R. MARTIKAINEN

APPOINTMENT DATE: July 1989

PRESENT ASSIGNMENT: 100% FTE Extension  RANK: Assistant Professor

EDUCATION:

M.A. 1981 University of Minnesota-St. Paul  Agricultural Education-Extension Emphasis
B.S. 1974 University of Maine Portland-Gorham  Psychology Child Development Emphasis

POSITIONS HELD:

1988-89 Marketing Consultant, Human Development Department  St. Paul, MN
    Farm Credit Bank
1987-88 Assistant Professor and Extension Agent -- 4-H/Youth  Univ. of Minnesota
    Development
1981-87 Assistant Professor and County Extension Agent -- 4-H/Youth Development  Univ. of Minnesota
1976-81 Instructor and County Extension Agent -- 4-H  Univ. of Minnesota
1976 Social Studies and PE Teacher (Temporary)  Hayti, South Dakota
1975-74 Director, Men’s Dorm  University of Maine Portland-Gorham

EXTENSION
(1987 to present)

RESPONSIBILITIES:

4-H Program Coordination in South Central District
4-H Communications Program and 4-H Incentives and Recognition Program statewide
Programming, staffing and facilities, South Central 4-H Center

PRESENTATIONS:

7 Contributed

HONORS AND AWARDS

Phi Kappa Phi, National College Honor Society (1980)
Selected for Personalities of the West and Midwest, Seventh Edition (1981)
National Association of Extension 4-H Agents Distinguished Service Award (DSA), Portland, Oregon, (1983)

PUBLICATIONS:

2 Bulletins/Circulars
12 Brochures or Fact Sheets
2 Newsletters
GRANTS AND CONTRACTS
(1991 to present)

Nebraska Businesses........ $ 5,000
Federal Extension........... 95,000
TOTAL................. $100,000

SIGNIFICANT PROGRAM ACHIEVEMENTS

Extension: Facilitated the nominal group process for county-wide and multi-county groups to work through conflict management, program visioning, or program focus related to Extension programs. Revamped and expanded District Public Speaking program moving from 20 participants to 140 participants in three years. Piloted intergenerational presentations which provided a support mechanism for first time presenters and the opportunity to strengthen their relationship with a significant adult.

PROGRAM DIRECTION FOR NEXT FIVE YEARS

Extension: Continue development of expanded communications program. Review and support upcoming state decisions on the Incentives and Recognition Program. Where necessary, develop and coordinate staff and volunteer development in both areas. Explore additional ways for youth to be involved in initiative programming. Continue development of the facilities and program offerings at the South Central 4-H Center. Maintain support of Extension staff working with the 4-H program as roles evolve.
CHARLES SCOTTIE McMILLIN

APPOINTMENT DATE: August 1988

PRESENT ASSIGNMENT: 100% Extension
Adams County

RANK: Associate Extension Agriculturist

EDUCATION:

M.S. 1961 Oklahoma State University Agronomy
B.S. 1957 Oklahoma State University Agronomy

RESPONSIBILITIES

Extension Programming Unit: Four-H and Youth programming with supporting role in volunteer management.

Within Local Extension Office: Responsible for 4-H programming in agriculture and related areas and administratively responsible for working with 4-H Council. Have a supporting role in the school enrichment program.

CURRENT PROGRAM THRUST

Revised evaluation form used by teachers to evaluate county school enrichment program. Had school enrichment process evaluated by Kay Rockwell, Extension Program Evaluation Specialist. Area coordinator (nine counties) for Kids' Team; Involved in curriculum development and promotion. Expanded Rural Ranchers 4-H program at Lincoln School. Member of Youth at Risk Extension Task Force. Increase the awareness of teen needs and how Extension can help meet them.
STEVE R. MELVIN

APPOINTMENT DATE: July 1985

PRESENT ASSIGNMENT: 100% Extension
Nuckolls/Thayer/Fillmore Counties

RANK: Assistant Extension Agriculturist

EDUCATION:

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HONORS AND AWARDS (1987 to present):

Cargill Grain Marketing Seminar (1987)
Excellence in Team Programming, UNL (1991)

RESPONSIBILITIES

Extension Programming Unit: Provides leadership for the Extension Programming Unit in the Increasing Agricultural Profitability Initiative and supporting roles for the Revitalizing Rural Communities, Enhancing Water Quality, and Conserving and Managing Natural Resources Initiatives. Serves supporting specialized roles in Crops and Livestock Management. It is anticipated that 20 to 50 percent of the staff member's time will be spent on these priority initiative areas.

Within Local Extension Office: Serves as Agent-Chair for Nuckolls County and has responsibilities for agriculture and horticulture areas. Responsible for supporting 4-H work in Nuckolls County and 4-H activities during the Nuckolls County Fair.

CURRENT PROGRAM THRUST

INCREASING AGRICULTURAL PROFITABILITY

New Tools for Pasture Production Meeting
Livestock Water Development Clinic
Nuts and Bolts of Rotational Grazing
Prescribed Burning Workshop
Introduction to Computers
1992 Farm Program Workshop
Black Cutworm Moth Trapping
Restricted Use Pesticide Applicator Training
Nebraska Property Tax Workshop
Planter and Drill Adjustment Clinic
1992 Crop Protection Clinic
Grain Sorghum Grow Out Project
LIVESTOCK PROGRAMS
- UNL Swine Enterprise Record Keeping Program
- Pork Quality Assurance Program
- Swine Home Study Course
- Problem Pig Clinic
- Pork Producers Association
- Milk Quality Assurance Program
- DHIA
- Livestock Feeders Association
- Cow/Calf Roundup

ENHANCING WATER QUALITY
- Mid-Nebraska Water Quality Demonstration Project

HORTICULTURE
- Area Home Horticulture Club

YOUTH
- 4-H Camp
- State Fair and AK-SAR-BEN
- South Central Six Livestock Judging Clinic-Contest
- 4-H Council
TIM MURPHY

APPOINTMENT DATE: April 1989

PRESENT ASSIGNMENT: Mid-Nebraska Water Quality Demonstration Project

RANK: Extension Technologist I

EDUCATION:

<table>
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<th>Field</th>
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<td>M.S.</td>
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<td>B.S.</td>
<td>1986</td>
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RESPONSIBILITIES

Implementing best management practices on demonstration sites as well as collection and reporting of data from aforementioned sites.

CURRENT PROGRAM THRUST

Nitrogen, Water and Pest Management
TOM M. MUSGRAVE

APPOINTMENT DATE: December 1992

PRESENT ASSIGNMENT: Platte Valley Nitrogen and Irrigation Management Demonstration Program

RANK: Extension Technologist I

EDUCATION:
B.A. 1990 Hastings College Economics/Political Science

RESPONSIBILITIES
Coordination and implementation of demonstration plots, showing nitrogen and irrigation best management practices.

CURRENT PROGRAM THRUST
Nitrogen and Irrigation Management
SHARON R. NIELSEN

APPOINTMENT DATE: November 1978

PRESENT ASSIGNMENT: 60% Extension
Kearney/Franklin Counties

RANK: Associate Extension Home Economist

EDUCATION:

M.S. 1988 Kearney State College Vocational Education
B.S. 1971 University of Nebraska Vocational Home Economics Ed.

HONORS AND AWARDS (1987 to present):

10-Year Service Pin, Cooperative Extension (1988)
10-Year Certificate, Epsilon Sigma Phi (1991)
Excellence in Team Programming, IANR (1991)
Communications Award - NAEHE, Newsletter: 3rd Place Regional (1992)

RESPONSIBILITIES

Extension Programming Unit: Provides leadership for the Extension Programming Unit in Entrepreneurship. Provides specialized program support in the Community Leadership Development, Food and Nutrition, and Volunteer Management areas. It is anticipated that 20 to 50 percent of the staff member’s time will be spent on these priority initiative areas.

Within Local Extension Office: Responsible for Home Extension Club programming and Home Economics adult programming in Kearney and Franklin counties. Supporting role in 4-H programming.

CURRENT PROGRAM THRUST

SUPPORT OF ENTREPRENEURSHIP

Entrepreneurs at all stages of the business unit life cycle face critical decisions about future operations. All need improved planning, financial and business management capability and better marketing approaches if they are to establish or maintain profitability, achieve personal and business goals, provide jobs and effectively respond to rapidly changing conditions.

ENCOURAGE DIETARY CHOICES TO PREVENT RISK OF DISEASE

Overweight, sedentary lifestyles and diet have put Nebraskans at risk for lifestyle diseases, including heart disease, cancer, hypertension, and osteoporosis. While generally aware that there is a connection between the food they eat and their health, many do not understand how to select a diet which will help avoid or delay the onset of health problems.

FOOD SAFETY

The wholesomeness of foods is being questioned. Factors in food handling and preparation which contribute to foodborne illness reflect potential hazards. Inadequate cooling of foods, contamination of raw ingredients, inadequate heating and cross contamination have contributed to specific foodborne illnesses. Education of food handlers at home and in commercial food establishments is needed to continue to provide the public with a safe food supply.
EXPAND COMMUNITY, ORGANIZATIONAL AND YOUTH LEADERSHIP TRAINING
Nebraska’s rural community must begin to retain human capital in communities. A way to do this is by developing new and innovative leaders who can empower others to effect rural revitalization. Volunteer development and maintenance become crucial as nonprofit organizations depend on human resources to further their objectives.

PROMOTING EFFECTIVE PARENTING AND FAMILY RELATIONSHIPS
Today’s families experience a lot of stress as society adjusts to technological advances, economic fluctuations and changing work environments. Children may be at risk of abuse, neglect and care deprivation.

THE ENVIRONMENT: IT’S OURS TO PROTECT
Concerns for the environment, including water quality, waste management and conservation and planting of trees, are priority issues for many Nebraskans. The Home Extension Clubs are an organization that is interested and willing to learn about, disseminate information about, and undertake projects concerning environmental issues in their communities.
KIM PETERSON

APPOINTMENT DATE: February 1992

PRESENT ASSIGNMENT: 35% Extension
15% Research
25% Elm Creek Water Quality Project

RANK: Communications Associate

EDUCATION:

B.S. 1977 University of Nebraska-Lincoln Agriculture

RESPONSIBILITIES

Supports all areas of communications at SCREC, as well as the 19 counties within the district. Provides communication support to the Elm Creek Project.

CURRENT PROGRAM THRUST

Compiles and edits newsletters, writes news releases on Center activities, develops brochures and fliers as requested by specialists and agents in counties, serves as liaison to media, radio and TV personnel. Creates computer graphic slides for specialists as requested. Assists in all aspects of communications to support the extension and research projects of the Center.
Robert E. Ramsel

Appointment Date: February 1985

Present Assignment: 100% Extension
Howard County

Rank: Assistant Extension Agriculturalist

Education:

M.S. 1984 University of Nebraska-Lincoln Agronomy
B.A. 1970 Western St. College Biology
A.A. 1968 Trinidad St. Jr. College Education

Responsibilities

Extension Programming Unit: Provides leadership for the Extension Programming Unit for Ag Profitability and Conserving Natural Resources Initiatives. Provides specialized programming for Crops, Communications, Natural Resources, and Pest Management. Supports 4-H and other programs as needed.

Current Program Thrust

Sustainable Agricultural Systems
Alternative Crop and Livestock Enterprises
Crop Production Efficiency - Soybeans, Corn, Grain Sorghum, Wheat
Reducing Soil Erosion
Fertilizer Use Efficiency
Management of Nitrogen in Groundwater
Weed Management in Field Crops, Pasture, Forage, Range
Insect Management
Crop Pest Control-Diseases
Forage Quality and Use for Livestock
Cow/Calf Integrated Resource Management
Management Practices Which Conserve Water
Provide a Safe and Adequate Domestic Water Supply
Machinery Management and Selection
Beef Systems Management Pesticide Applicator Training
Rangeland and Ranch Management
Pork Production
Farm and Home Safety
Nebraska Wildlife
Horticulture
Forestry and Wood Products
Marketing and Management Practices
Residential/Domestic Waste Management
Miscellaneous Activities
FRED W. ROETH

APPOMNTMENT DATE: March 1975
PRESENT ASSIGNMENT: .50 FTE Research .50 FTE Extension
RANK: Professor

EDUCATION:

Ph.D. 1970 University of Nebraska
M.S. 1967 University of Nebraska
B.S. 1964 Ohio State University

POSITIONS HELD:

1983-present Professor University of Nebraska
1976-1983 Associate Professor University of Nebraska
1975-1976 Assistant Professor Purdue University
1969-1974 Assistant Professor University of Nebraska
1964-1969 Research Assistant DuPont
1964 (Mar-Aug) Sales Assistant
1956-1963 Farming

RESEARCH
(1987 to present)

RESPONSIBILITIES:

Weed control in field crops
Associate Editor of Weed Technology journal

PRESENTATIONS:

4 Invited Presentations at National Conferences
5 Invited Lectures
3 Invited Presentations at State Conferences

EXTENSION
(1987 to present)

RESPONSIBILITIES:

Weed control in field crops
Water quality coordinator for Weed Science Panel
Atrazine Subteam Chair in Water Quality/Pesticides Team

PRESENTATIONS:

118 of various types including Crop Protection Clinics, Crop
Pest Management Update, Conservation Tillage Workshops,
County Ag Days, Pesticide Applicator Training, Water Quality
Workshops, Field Days, etc.

PUBLICATIONS:

11 Journal Articles
14 Journal Abstracts
124 Department Publications

26 Symposia & Proceedings
5 NebGuides
8 Newsletters and Articles
1 Computer Program
15 Radio and TV Programs
GRADUATE STUDENT ADVISING:

**Adviser**

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**Committees**

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**TEACHING**

(1987 to present)

**HONORS AND AWARDS**

Distinguished Specialist Award, Nebraska Cooperative Extension Association (1987)

**GRANTS AND CONTRACTS**

(1987 to present)

- Industry Grants ........................................... $274,500
- Foundation Grants ......................................... 6,000
- Federal Grants ............................................. 111,300
- Commodity Board Grants ................................. 59,000
- TOTAL ................................................. $450,800

**SIGNIFICANT PROGRAM ACHIEVEMENTS**

CRIS project was revised in 1992 with an emphasis on integrated weed management to address water quality and weed resistance issues. Past five-year accomplishments include: improved shattercane control for corn growers by researching new postemergence herbicides, better understanding of enhanced herbicide biodegradation in soil and prevention practices, surveys on shattercane distribution and competition losses, assessing atrazine dissipation in irrigated soils, evaluation of ridge tillage for shattercane control, reducing herbicide and insecticide interaction risk in corn, advantages of crop and herbicide rotations for weed control, weed control in non-irrigated crop production, and velvetleaf dynamics in corn. One of my major efforts has been to help assemble NebraskaHERB, a bioeconomic based computer program for herbicide selection. Initially released in early 1992, the program now contains postemergence modules for corn and soybeans. There is a high degree of buyer interest in this program.

**PROGRAM DIRECTION FOR NEXT FIVE YEARS**

Research and extension activities will center on integration of weed control practices to reduce environmental risks and weed resistance to herbicides while helping growers make decisions which fit their particular management practices. Reduced tillage will continue to be adopted so herbicides will be important; however, they need to be used appropriately for the crop, site, environment, weeds, management system, and regulations. Maximum water and air quality contaminant levels will impact on a site specific basis. Extension programs will have to emphasize herbicides as part of a weed control system but necessarily tailored to the site. Continued development of NebraskaHERB will be an important component of my effort to meet this need. Other activities will be to function as a part of the Water Quality/Pesticides team with active involvement as chair of the atrazine subteam.
NANCY SCHMERDTCMANN

APPOINTMENT DATE: September 1978

PRESENT ASSIGNMENT: 100% Extension
Hall County

RANK: Extension Home Economist

EDUCATION:

M.S. 1978 University of Nebraska-Lincoln
B.S. 1965 University of Nebraska-Lincoln

HONORS AND AWARDS (1987 to present):

Distinguished Service Award, NAEHE (1990)
Excellence in Team Programming Award - "Sewing As A Business" (1991)
NAEHE 3rd Place Newsletter Award, Sewing As A Business Team (1992)

RESPONSIBILITIES

Extension Programming Unit: Provides leadership for Rural Revitalization and Waste Management priority initiatives and Personal Family and Business Resource Management and 4-H Core Programs. It is anticipated that 30 to 50 percent of the staff member’s time will be spent in these areas.

Within Local Extension Office: Provides leadership for 4-H program and works with 4-H Council. Provides leadership for programming in clothing, resource management and household waste management.

CURRENT PROGRAM THRUST

RESIDENTIAL/DOMESTIC WASTE MANAGEMENT
Contribute to team effort to provide consumers with information to help them make purchase decisions and to adopt waste management practices that are environmentally responsible. Work with a team to plan and present a special "experience" for school age youth to supplement the school enrichment project The Waste Stream.

STABILIZING LIMITED RESOURCES
Improved financial and consumer decision-making can have a positive impact on Nebraska families. A series of classes and a quarterly newsletter will be targeted towards families and individuals with limited resources.
PHYLLIS I. SCHOENHOLZ

APPOINTMENT DATE: June 1987

PRESENT ASSIGNMENT: 100% Extension
Fillmore/Thayer/Nuckolls Counties

RANK: Assistant Extension Home Economist

EDUCATION:

M.S. 1990 University of Nebraska Home Economics/
      Human Development
B.S. 1968 University of Nebraska Home Economics Ed.

HONORS AND AWARDS (1987 to present):

First Place Regional Award for Water Quality program focusing on the South Central Six Water
Festival held at Liberty Cove, NAEHE (1992)
Third Place Regional Award for Sewing As A Business Newsletter written by the team of Carol
Thayer, Nancy Schmerdtmann, Cel Schweers, Sharry Nielsen and myself, NAEHE (1992)
"Excellence in Team Programming Award" for work on the program of Sewing As A Business, NCEA
(1991)

RESPONSIBILITIES

Extension Programming Unit: Provides leadership for the Extension Programming Unit in the
Strengthening Individuals and Families Initiative and Rural Revitalization, with supporting specialized
roles for Food, Nutrition, and Health, Water Quality and Youth at Risk. It is anticipated that 20 to 50
percent of the staff member’s time will be spent on these priority initiative areas.

Within Local Extension Office: Serve as Agent Chair for Thayer County. Responsible for
organization work with Home Extension Club programs and other priority areas in Thayer and
Nuckolls counties. Responsible for organizational work in 4-H and youth, related to Home Economics
and Leadership programming and supporting roles in agriculture related areas.

CURRENT PROGRAM THRUST

ENCOURAGE DIETARY CHOICES WHICH REDUCE RISK OF DISEASE
Clientele will increase their knowledge of nutrition and become more skillful at selecting a diet
that serves to reduce the risk of health problems.
Youth clientele will increase their awareness and knowledge of the relationship between
nutrition and fitness, and adopt recommended food and nutrition practices appropriate for their
lifestyle.
Clientele will become more skillful at selecting a diet that reduces the risk of health problems
such as obesity, hypertension, osteoporosis, heart disease and cancer and adopt dietary
behavior changes that promote good health.

REDUCE FOODBORNE ILLNESS THROUGH SAFE FOOD HANDLING
To increase clientele knowledge of the importance of safe food handling and processing,
thereby reducing the incidence of foodborne illness in the South Central Six area.
TRAINING CHILD CARE PROVIDERS
Thirty-five percent of the child care providers in the South Central Six area will participate in training program provided by the extension service. Daycare providers who choose to belong to the newly-formed support group will be able to network with other providers and receive additional information from Cooperative Extension. Clientele will increase their knowledge as to the importance of professional daycare for all children.

PARENT EMPOWERMENT AND POSITIVE CARING
Clientele will increase their knowledge in the area of positive parent empowerment. Clientele will understand the methods of democratic parenting.

HEALTHY LIFESTYLE PRACTICES FOR YOUTH
To educate youth and raise self-esteem through programs and positive interaction.

SMALL SCALE ENTREPRENEURSHIP
Business operators and entrepreneurs will identify goals, and establish and use management techniques that are appropriate to their business. Business operators will change their business practices to increase business profitability. Entrepreneurs and other business operators will increase their abilities to expand business activity if they desire to do so.

PROVIDE A SAFE AND ADEQUATE DOMESTIC WATER SUPPLY
To educate clientele about the need to maintain an adequate supply of high quality water. To provide a base of information concerning water conservation and quality which youth can use as a sound basis throughout their life.
CAROL JEAN SCHWARZ

APPOINTMENT DATE: August 1983

PRESENT ASSIGNMENT: 100% Extension
Buffalo County

RANK: Associate Extension Home Economist

EDUCATION:

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<td>Family and Consumer Sciences in Business</td>
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<td>Westmar College</td>
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HONORS AND AWARDS (1987 to present):

Professional Improvement Scholarship Award - Epsilon Sigma Phi (1987)
Cardiovascular Nutrition Grant Award - American Heart Association-Nebraska Affiliate (1987)
NCEA Outstanding New Agent Award - Nebraska Association of Extension Home Economists (1987)
NCEA Creative Program Grant Award - Nebraska Association of Extension Home Economists (1987)
Five Year Service Award - University of Nebraska Cooperative Extension (1988)
Associate Extension Home Economist Promotion - University of Nebraska Cooperative Extension (1988)
General Foods Media Grant - National Association of Extension Home Economists and General Foods (1988)
Project LEAN Grant - Henry J. Kaiser Family Foundation and Nebraska State Health Department (1990)
Showcase of Excellence Presentation - National Association of Extension Home Economists (1990)
State Team Programming Award - University of Nebraska Cooperative Extension (1991)
Child Care and Early Childhood Education Training Grant Fund - NE Department of Education (1992)
Child Care of the Nineties Grant - Nebraska Department of Education (1992)

RESPONSIBILITIES

Extension Programming Unit: Provides leadership for the Extension Programming Unit in the areas of Improving Nutrition and Health and Food Safety and Quality Initiatives. Provides specialized assistance in the areas of Nutrition, Foods, and Food Safety. It is anticipated that 20 to 50 percent of the staff member's time will be spent on these priority initiative areas.

Within Local Extension Office: Responsible for organizational work with Home Extension Club program. Minor supporting role with 4-H and youth program.

CURRENT PROGRAM THRUST

Food and Nutrition: Dietary Guidelines for Americans
Food Safety and Quality
Coalition Building and Policy Education for Children, Youth and Families
CECELIA A. SCHWEERS

APPOINTMENT DATE: January 1985

PRESENT ASSIGNMENT: 100% Extension
Buffalo County

RANK: Associate Extension Home Economist

EDUCATION:

M.S. 1984 University of Nebraska-Lincoln Textiles, Clothing & Design
B.S. 1978 Iowa State University Home Economics Ed.

HONORS AND AWARDS (1987 to present):

NAEHE TV Spot, 1st State & Regional, 2nd National (1988)
NAE4-HA Achievement in Service (3-7 years) Award (1989)
NAEHE "Outstanding New Agent" (3-7 years) Award, finalist 1987, 1988 (1989)
NCEA Professional Improvement Scholarship Award $200 (1989)
Extension "Excellence in Team Programming" Award for Sewing as a Business (1991)
Epsilon Sigma Phi, Professional Improvement Scholarship Award $200 (1991)
Farm Foundation Scholarship Award $150 (1992)
NAEHE 3rd Place Regional Newsletter Award for Sewing as a Business (1992)
NAE4-HA Distinguished Service Award (1992)

RESPONSIBILITIES

Extension Programming Unit: Provides leadership for the Extension Programming Unit in the Youth at Risk Initiative and specialized roles in the areas of Waste Management, Rural Revitalization, Individual and Family Leadership Development, and Personal, Family and Business Resources. It is anticipated that 20 to 50 percent of the staff member's time will be spent on these priority initiative areas.

Within Local Extension Office: Assumes leadership for textiles, clothing and design programs. Provides professional leadership for 4-H Youth program (classic clubs and school enrichment) in Buffalo County. Provides direct supervision to 4-H Assistant. Provides guidance to 4-H Assistant in setting goals in accordance to the needs of the total 4-H program. Provides leadership in the development of volunteer management program. Provides leadership for the Buffalo County 4-H Council in policy development and programming plans to meet the needs of Buffalo County youth. Prepare, present and evaluate up to two Extension Club leader training lessons yearly.

CURRENT PROGRAM THRUST

Promote Healthy Lifestyle Practices for Youth
Coalition Building and Policy Education for Children, Youth and Families
Youth Leadership and Volunteer Development
Management of Clothing and Textile Resources
Stabilizing Limited Resources
ROBERT M. SCRIVEN

APPOINTMENT DATE: October 1967

PRESENT ASSIGNMENT: 100% Extension
Buffalo County

RANK: Extension Agriculturist

EDUCATION:

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HONORS AND AWARDS (1987 to present):

Distinguished Service Award, National Association of Extension 4-H Agents (1988)

RESPONSIBILITIES

Extension Programming Unit: Provides leadership for the Extension Programming Unit program in the areas of Livestock Management and Computers. It is anticipated that 20 to 50 percent of the staff member's time will be spent on these priority initiative areas.

Within Local Extension Office: Serves as Agent-Chair for Buffalo County and provides leadership and primary responsibility for agricultural subjects with supporting role for horticulture and youth programming.

CURRENT PROGRAM THRUST

INTEGRATED RESOURCE MANAGEMENT PROGRAM

Our monthly meetings included Paul Gessaman talking about planning and setting goals as a part of the total ag operation with emphasis on the beef enterprise. Terry Bockstadter discussed the use of Quicken as a farm accounting package. Rick Stock covered the topic of feeding newly weaned calves.
ROGER A. SELLEY

APPOINTMENT DATE: April 1985

PRESENT ASSIGNMENT: .25 FTE Research  .75 FTE Extension

EDUCATION:

Ph.D. 1971 University of Wisconsin
B.S. 1963 Iowa State University

POSITIONS HELD:

1985-present  Associate Professor
1981-1985  Extension Specialist
1976-1981  Assistant Professor
1973-1976  Visiting Senior Research Fellow and Ford Foundation Project Officer
1971-1972  Member Ministry of Economic Planning Advisory Team to Ghana
1970-1971  Visiting Assistant Professor (Post Doctorate)
1968  Instructor Farm Management
1965-1967  Instructor Farm Management and Agricultural Business Undergraduate Advisor

RESEARCH (1987 to present)

RESPONSIBILITIES:

To provide Center colleagues research support in the economic evaluation of tillage and cropping system practices

PRESENTATIONS:

1 Invited

PUBLICATIONS:

2 Refereed Journal Articles
3 Invited
1 Selected
4 Research Reports

EXTENSION (1987 to present)

RESPONSIBILITIES:

To provide state-wide leadership in economics of wheat and feed grains farm program participation, crop budgeting and irrigation system costing. Provide district leadership in program delivery in farm management including marketing and finance.

PRESENTATIONS:

2 Invited

PUBLICATIONS:

2 NebGuides
4 Bulletin/Circular
1 Symposium/Proceeding
11 Department/District Pub.
1 Trade Journal Article
15 Magazine Articles
21 Newsletters
3 Computer Programs
17 News Releases/Handouts
HONORS AND AWARDS

Award from EPA for outstanding RPAR analyses by University of Arizona Team, as team leader (1980)

GRANTS AND CONTRACTS
(1987 to present)

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SIGNIFICANT PROGRAM ACHIEVEMENTS

Converted budgeting materials to microcomputer programs including farm program participation worksheets and AGNET Crop Budget and Pump programs. Provided leadership in state-wide agent in-service in the use of these computer programs and related materials. Developed procedures for projecting deficiency payments for farmers. Achieved state-wide recognition in these areas through contributed articles to *Nebraska Farmer*. Team leader of five-year Soybean Demonstration Project conducted in the district. Team member in planning and conducting four-state regional workshop on Cover Crops and National Cropping Systems workshop. Assistant editor for Applied Agricultural Research Journal for five years.

PROGRAM DIRECTION FOR NEXT FIVE YEARS

**Research**: Research activities will be focused upon the management of crop production to maintain profitability while minimizing environmental impact. The economics of various nitrogen, water, residue and pest management strategies will be evaluated based upon field experiments conducted by colleagues and through the use of simulation models. Extension recommendations and farmer response will also be studied.

**Extension**: Extension activities will continue to focus upon decision support in farm management including finance and marketing, primarily in relation to crop production, farm program participation and crop marketing.
DARREL D. SIEKMAN

APPOINTMENT DATE: July 1975

PRESENT ASSIGNMENT: 100% Extension
Merrick County

RANK: Extension Agriculturalist

EDUCATION:

M.S. 1968 University of Nebraska Agricultural Ed.
B.S. 1967 University of Nebraska Agricultural Ed.

HONORS AND AWARDS (1987 to present):

Livestock Health Seminar, St. Joseph, Missouri, Anchor, National Association County Agricultural Agents (1988)
Epsilon Sigma Phi Team Award - Nitrogen Management (1988)
Distinguished Service Award - National Association County Agricultural Agents (1989)
Regional Officers Workshop - Cedar Rapids, Iowa, National Association County Agricultural Agents (1990)
Regional Officers Workshop - Peoria, Illinois NACAA (1991)
Certificate Achievement - Increasing Membership Nebraska Association of Agricultural Agents - National Association County Agricultural Agents (1991)
Pat on the Back Award - Merrick County 4-H Council (1991)

RESPONSIBILITIES

Extension Programming Unit: Provides leadership for the Extension Programming Unit in the Profitability and Water Quality Initiatives. Serves a specialized role in the area of Crops. Serves a supporting role for Marketing and Community Development. It is anticipated that 20 to 50 percent of the staff member’s time will be spent on these priority initiative areas.

Within Local Extension Office: Serves as Agent-Chair for Merrick County with primary responsibilities for agricultural programs and provides overall leadership for 4-H program.

CURRENT PROGRAM THRUST

Promote Sustainable Agricultural System
Reduce Nitrates in Groundwater
Increasing Agricultural Profitability
Nebraska Residential Horticulture
CHARLES L. STONECIPHER

APPOINTMENT DATE: February 1958

PRESENT ASSIGNMENT: 78% FTE Extension Administration  RANK: Professor
14% FTE Research Administration
8% FTE IANR Administration

EDUCATION:

Ph.D. 1966 University of Wisconsin Cooperative Extension Admin.
M.S. 1964 University of Wisconsin Extension Education
B.S. 1958 Oklahoma State University Agricultural Education

POSITIONS HELD:

1973-present District Director - Clay Center, NE University of Nebraska
1970-1973 District Extension Director and Station University of Nebraska
Superintendent - Clay Center, NE University of Nebraska
1966-1970 District Extension Supervisor - Lincoln, NE University of Nebraska
1958-1963 County Extension Agent - Sidney, NE and University of Nebraska
Curtis, NE

RESEARCH
(1987 to present)

RESPONSIBILITIES:
Director of South Central Research and Extension Center

EXTENSION
(1987 to present)

RESPONSIBILITIES:
Director of South Central Research and Extension Center and 19-county area within the district.

HONORS AND AWARDS
Gamma Sigma Delta - Service to Agriculture Award - 1993

SIGNIFICANT PROGRAM ACHIEVEMENTS
Development and building of SCREC facilities and program
Provided leadership for planning and development of College Park Educational Center

PROGRAM DIRECTION FOR NEXT FIVE YEARS
Develop College Park/UNL/IANR outreach program
Maintain and refocus extension and research programs to meet emerging needs
APPOINTMENT DATE: April 1984

PRESENT ASSIGNMENT: 70% Extension
Clay County

RANK: Associate Extension Home Economist

EDUCATION:

Post Graduate 1990;1992 University of Nebraska-Kearney
M.S. 1987 University of Nebraska-Lincoln
B.S. 1972 Northwest Missouri State Univ.

HONORS AND AWARDS (1987 to present):

NCEA - Scholarship (1987)
NCHEC - Scholarship (1987)
Finalist Outstanding New Agent Award (1987-1990)
Excellence in Programming Team Award Nominee, 1989; Recipient, 1992
Extra Mile Award Nominee (1989)
Farm Foundation Scholarship (1991)
NAEHE-Regional Award Winner; 3rd place - Package Program (1992)

RESPONSIBILITIES

Extension Programming Unit: Provides leadership for Extension Programming Unit in the Youth at Risk Initiative with a supporting role for the Food, Nutrition, and Health Initiative. Serves a specialized role for Organizational Development and Volunteer Management. It is anticipated that 20 to 50 percent of the staff member's time will be spent on these priority initiative areas.

Within Local Extension Office: Responsible for adult programming in Home Economics and supporting role for 4-H and youth programming.

CURRENT PROGRAM THRUST

Nutrition and Food Safety
Youth at Risk
PAUL L. SWANSON

APPOINTMENT DATE: December 1967

PRESENT ASSIGNMENT: 100% Extension
Adams County

RANK: Extension Agriculturist

EDUCATION:

M.S. 1967 University of Kentucky Animal Science
B.S. 1964 Iowa State University Animal Science

RESPONSIBILITIES

Extension Programming Unit: Provides leadership for the Extension Programming Unit program in the areas of Water Quality Initiative chair and Low Input Sustainable Agriculture. It is anticipated that 20 to 50 percent of the staff member’s time will be spent on these priority initiative areas.

Within Local Extension Office: Serves as Agent-Chair for Adams County and provides leadership and primary responsibility for agricultural subjects with supporting role for horticulture and youth programming.

CURRENT PROGRAM THRUST

Water Quality
Sustainable Agriculture
Improving Agricultural Profitability
CAROL E. THAYER

APPOINTMENT DATE: July 1983

PRESENT ASSIGNMENT: 100% FTE Extension

EDUCATION:

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<th>Institution</th>
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<tbody>
<tr>
<td>M.S.</td>
<td>1983</td>
<td>Adult Education</td>
<td>Kearney State College</td>
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<tr>
<td>B.S.</td>
<td>1968</td>
<td>Vocational Home Economics</td>
<td>Kearney State College</td>
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<td></td>
<td>1971</td>
<td>Extension Summer School</td>
<td>Colorado State University</td>
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<td></td>
<td>1983</td>
<td>Extension Summer School</td>
<td>University of Minnesota</td>
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POSITIONS HELD:

1984-present Coordinator, Small Scale Entrepreneurship/Extension Program Coordinator/Specialist
1974-1984 Extension Agent-Home Economics

EXTENSION
(1987 to present)

RESPONSIBILITIES:

1987-1990 Extension Clothing Specialist (.25) and Program Coordinator (.25)
1990-present Extension Clothing Specialist (.25) Program Coordinator (.25) and Coordinator, Small Scale Entrepreneurship (.5)

PRESENTATIONS:

1 International/National Meeting
3 Regional and State Meetings
64 Invited
36 Contributed
4 Inservice Training

HONORS AND AWARDS

Epsilon Sigma Phi, Alpha Upsilon Chapter, team award (1992)
NAEHE Newsletter I Award, 3rd place regional (1992)
Excellence in Team Programming Award (1991)
Outstanding 4-H Alumni-Buffalo Co. 4-H Council (1988)
Distinguished Service Award of the National Association of Extension Home Economics (1982)
SIGNIFICANT PROGRAM ACHIEVEMENTS

Extension: Coordinator of Small Scale Entrepreneurship programs which are a part of the Strengthening Nebraska Communities priority initiative. Planned and conducted workshops to enhance business management practices related to Crafts Marketing, Catering As A Business, Cleaning As A Business, Sewing As A Business, Bed and Breakfast, and Getting Down to Business. Planned and presented sections of in-service training for field faculty on Household Cleaning and Laundry, Sewing As a Business, Crafts Marketing, and Serger Application And Technology. Chaired a FUTURE FOCUS Task Force to develop guidelines for roles and relationships for Nebraska Cooperative Extension and Extension Homemaker Clubs and Councils. Cooperated with South Central Rural Revitalization team members to develop programs and a newsletter for entrepreneurs. Developed several media packets, news releases, participant packets, visual aids, and educational loan kits. Served as Superintendent of State Fair 4-H Fashion Revue.

PROGRAM DIRECTION FOR NEXT FIVE YEARS

Extension: Develop resource materials for faculty to use when teaching and working with entrepreneurs. Provided additional inservice, as needed, to enable faculty to move into the teaching role with confidence. Anticipate spending an increasing amount of time on marketing issues. Continue efforts to build coalitions with other agencies involved in community economic development to support entrepreneurial efforts. Direct program efforts to micro-business owners who are expected to be the principal source of new employment, especially in job-deficient rural areas.
CHERYL A. TICKNER

APPOINTMENT DATE: March 1987

PRESENT ASSIGNMENT: 50% Extension
Central IV

RANK: Associate Extension Home Economist

EDUCATION:

M.S. 1971 Kearney State College Education
B.S. 1967 Kearney State College Home Economics/Vocational Education

RESPONSIBILITIES

Extension Programming Unit: Provides leadership for the Extension Programming Unit in the Water Quality Initiative and other environmental concerns. Provides specialized programming for Personal, Family and Business Resource Management and Food Safety and Quality. Provides leadership for Home Extension Club program and provides support for 4-H and other program areas as needed. It is anticipated that 20 to 50 percent of the staff member’s time will be spent on these priority initiative areas.

CURRENT PROGRAM THRUST

Food, Nutrition & Health
Strengthen Nebraska Communities
GARY TORDRUP

APPOINTMENT DATE: December 1992

PRESENT ASSIGNMENT: 100% Extension
Clay/Webster Counties

RANK: Extension Assistant

EDUCATION:
B.S. 1974 University of Nebraska-Lincoln
Poultry Science

HONORS AND AWARDS (1987 to present):
Honorary Chapter Farmer Degree, Nelson FFA (1987)
Friend of 4-H Award, Nuckolls County (1989)

RESPONSIBILITIES
4-H Livestock Activities and Agriculture Programs
4-H Newsletter
School Enrichment Program
4-H Leader Training
Support Programs in Clay and Webster County, and South Central Six Extension Programming Unit
Current Program THRUST
Assist County Agent Chairman, Extension Agent-Home Economics and other staff in planning, development and implementation of County Extension Programs in Agriculture and 4-H and Youth Development with primary responsibilities for a number of specific programs
Serve as an information source in all applicable subject matter areas
Develop and utilize effective citizen committees for program guidance
Assist in the development of a written plan of work and other required reports in cooperation with the Agent Chairman, and Extension Programming Unit and the District Director
Cooperates with other staff, County Extension Board, 4-H Council, Fair Boards and other advisory and planning groups to develop the total program

CURRENT PROGRAM THRUST
Maintain Existing 4-H Programs
Develop new strategies and 4-H Programs
Increase the visibility of Extension
GARY TROESTER

APPOINTMENT DATE: May 1990

PRESENT ASSIGNMENT: 100% Extension
                      Hamilton County

RANK: Extension Assistant

EDUCATION:

B.S. 1990 University of Nebraska-Lincoln  General Ag.

HONORS AND AWARDS (1987 to present):

NCEA Membership Committee secretary (1993)
President - Aurora Community Improvement and Development Committee (1993)

RESPONSIBILITIES

4-H
Agriculture
Horticulture

CURRENT PROGRAM THRUST

Citizenship/Washington Focus Trip
Master Gardener Program
4-H Youth Camping Opportunities
4-H Youth Membership Enhancement
4-H Horticulture Special Projects
Teen-age 4-H Club Leader
Expovisions Staff
General Horticulture Information
General Agriculture Information
JUDITH A. WEBER

APPOINTMENT DATE: May 1988

PRESENT ASSIGNMENT: 60% Extension
Fillmore/Thayer/Nuckolls Counties

RANK: Assistant Extension Home Economist

EDUCATION:

M.S. 1988 University of Nebraska-Lincoln
B.S. 1963 University of Nebraska

HONORS AND AWARDS (1987 to present):

Outstanding New Extension Agent Award, NeAEHE (1992)

RESPONSIBILITIES

Extension Programming Unit: Provide leadership in the Extension Programming Unit for the Improving Nutrition and Health Initiative and a supporting role for the Water Quality Initiative. Serves a specialized role for Foods, Nutrition and Health, and Individual and Family Development program areas. It is anticipated that 20 to 50 percent of the staff member’s time will be spent on these priority initiative areas.

Within Local Extension Office: Responsible for Home Extension Club program, adult programming in Home Economics and priority areas, and a leadership role for 4-H activities and Home Economics programs.

CURRENT PROGRAM THRUST

Training Child Care Providers
Parent Empowerment and Positive Caring
Improvement of Lifestyle and Self-Care Practices
Family Financial Stability
School Age Child Care
Volunteer Systems and Empowerment of Adult and Teen Volunteers
Community, Organization and Youth Leadership Training
KELLY J. WERTZ

APPOINTMENT DATE:       June 1991

PRESENT ASSIGNMENT:     100% Extension  
                        Buffalo County

RANK:                    Assistant Extension Agriculturalist

EDUCATION:

M.S.    1988    University of Nebraska-Lincoln    Mechanized Ag.
B.S.    1985    University of Nebraska-Lincoln    Mechanized Ag.

RESPONSIBILITIES

Extension Agent for the MSEA (Management Systems Evaluation Area) Water Quality Project.

CURRENT PROGRAM THRUST

MSEA Water Quality Project
ROBERT J. WRIGHT

APPOINTMENT DATE: March 1988

PRESENT ASSIGNMENT: .50 FTE Research .50 FTE Extension

RANK: Assistant Professor

EDUCATION:

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POSITIONS HELD:

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RESEARCH
(1987 to present)

RESPONSIBILITIES:

Field crops (primarily corn and grain sorghum insect pest management) 1988-present.

PRESENTATIONS:

3 Invited Lectures
5 International/National Meetings
9 Regional and State Meetings

EXTENSION
(1987 to present)

RESPONSIBILITIES:

1988-present: Coordinator Nebraska Field Crops IPM Program.
1992-present: South Central District Coordinator Pesticide Applicator Training Program.

PRESENTATIONS:

41 Contributed
34 Invited

PUBLICATIONS:

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<td>Chapters in Books</td>
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<td>Abstracts</td>
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<td>ARD Tech. Bulletin</td>
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<td>Slide-Tape Set</td>
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<td>Video Tapes</td>
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<td>Computer Program</td>
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TEACHING
(1987 to present)

GRADUATE STUDENT ADVISING:

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HONORS AND AWARDS

Gamma Sigma Delta (1992)
"Excellence in Team Programming" Award Corn Lethal Necrosis Project, Nebraska Cooperative Extension (1991)
Blue Ribbon Award for Educational Aids, American Society Ag Engineers (1991)
Outstanding Young Scientist, Sigma Xi, University of Nebraska-Lincoln (1990)

GRANTS AND CONTRACTS
(1987 to present)

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<th>Source</th>
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<td>IANR Competitive Grants</td>
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<td>Nebraska Wheat &amp; Grain Sorghum Boards</td>
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<td><strong>TOTAL</strong></td>
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SIGNIFICANT PROGRAM ACHIEVEMENTS

Research: Involved in two projects, corn rootworm survival and biology and management of chinch bugs. Additional projects focused on effect of rootworm larval injury on corn physiology and yield, sampling of corn rootworm adults, biological control of corn rootworms with entomopathogenic nematodes, validation of a computer phenology program for European corn borer oviposition, corn yield loss in relation to western bean cutworm density, microclimatic effects on European corn borer egg and neonate survival, and the role of arthropods in corn lethal necrosis.

Extension: Coordinator of Field Crops IPM program. Several educational aids were developed/updated including two insect scouting videotapes, a crop insect pest management slide/tape set, a computer program for European corn borer management, and a Field Scout Manual. Planned and chaired the program committee (since 1990) for the Crop Pest Management Update Conference, a statewide multidisciplinary meeting for professionals. Published several Extension circulars, NebGuides, news releases, radio tapes, and participated in a variety of Extension programs. Active in several statewide priority initiative teams.

PROGRAM DIRECTION FOR NEXT FIVE YEARS

Research: Anticipate focusing on two areas supportive of integrated pest management on Nebraska crops: biological control and sampling. Continue work on biological control of corn rootworm with entomopathogenic nematodes. Involved in an interdisciplinary team working on the effects of tree windbreaks on insect pest and beneficial organisms. Sampling studies will continue, focusing on European corn borer, and corn rootworm in corn and greenbugs in sorghum. Cooperate with Plant Pathology to determine role of arthropods in corn lethal necrosis.

Extension: Continue to promote use of IPM in field crops. Participate in team activities in water quality and sustainable agriculture.
PEDRO ZARA

APPOINTMENT DATE: February 1992

PRESENT ASSIGNMENT: 50% Research
50% Mid-NE Water Quality Demo. Proj.

RANK: Research Technologist

EDUCATION:

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<th>Degree</th>
<th>Year</th>
<th>Institution</th>
<th>Field</th>
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<td>B.S.</td>
<td>1976</td>
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<td>Ag. Engineering</td>
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</table>

RESPONSIBILITIES

Provide technical support to evaluate impact on water quality projects.

CURRENT PROGRAM THRUST

Evaluate the impact and effect of alternative management practices on water quality by using simulation models.
Demographics
## NUMBER OF FARMS & POPULATION

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<th></th>
<th># FARMS</th>
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<td>1991</td>
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<tr>
<td>Adams</td>
<td>760</td>
<td>725</td>
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<tr>
<td>Clay</td>
<td>650</td>
<td>620</td>
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<tr>
<td>Fillmore</td>
<td>780</td>
<td>745</td>
</tr>
<tr>
<td>Nuckolls</td>
<td>610</td>
<td>580</td>
</tr>
<tr>
<td>Thayer</td>
<td>710</td>
<td>680</td>
</tr>
<tr>
<td>Webster</td>
<td>490</td>
<td>460</td>
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<td><strong>CENTRAL IV EPU</strong></td>
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<tr>
<td>Greeley</td>
<td>430</td>
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<td>Howard</td>
<td>700</td>
<td>660</td>
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<tr>
<td>Sherman</td>
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<td>545</td>
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<td>Valley</td>
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<tr>
<td><strong>TOTAL FOR NEBRASKA</strong></td>
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### MIX OF MAJOR CROPS, 1991

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## LIVESTOCK 1992

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1986 Review Update
UPDATE ON 1986 REVIEW RECOMMENDATIONS

The 1986 SCREC Special Review was the first review for this unit. A comprehensive list of recommendations and comments were prepared by the review teams. Most of the recommendations have been implemented or dealt with in an appropriate manner. The following represent highlights of these changes.

Response to Recommendations

I. PERSONNEL

1. A Communications Associate was hired on a full-time basis in 1989. This position has been reduced to part-time .75 FTE through budget cuts.

2. We have not added a Data System Analyst position to the staff. Instead, through training and refilling positions with qualified people, we have addressed this need with our technicians and secretarial support staff.

3. The recommended Hydrologist/Meteorologist position has not materialized. Such a position would add strength to our water quality emphasis.

4. Technical support for the Animal Science position did not materialize. Instead, the Swine Specialist position was transferred to Lincoln. This has left a gap in our programming, particularly as it relates to MARC and to livestock programming needs.

5. Variety testing and field testing of agricultural chemicals have largely been delegated to research technicians. Pesticide testing has been de-emphasized as programs have shifted to higher priority areas.

6. A part-time technician .25 FTE has been assigned to the Farm Management Specialist. This support is supplied by the Computer Specialist as part of his duties. This situation is not ideal as there are competing demands for time.

7. No changes have been made in technician support for the Plant Pathologist. Technician support is provided through regional research funds and grants.

8. An Associate Director for SCREC has not materialized at this point. With budget restrictions and increased pressures for reducing administration within IANR, it's highly unlikely that such a position will become a reality. In fact, this position has not been at the top of our list for additional or redirected positions.

9. Clerical staff positions have been added to support Grant projects. In general, secretarial support per FTE has decreased since the last review. Of particular concern is the reduction of the building maintenance custodian from 1.0 FTE to .32 FTE due to budget costs. This is inadequate to handle maintenance and upkeep of the facility.
II. FACILITIES

A pesticide storage and handling facility was erected in 1987 which corrected many of the concerns delineated in the 1986 review. Computers have been continuously updated and the IANR Network was brought into the office complex. This has greatly improved our communication and data processing capabilities.

III. VISIBILITY AND IDENTITY

Visibility has greatly improved with the addition of the Communications Associate position. Frequent news releases, TV and radio programs have helped a lot. Our location here with the MARC poses some identity problems which other Research and Extension Centers do not have. Road signs have been installed which have helped in directing people to the Center location.

IV. FACULTY APPOINTMENT REALLOCATIONS

1. Since the 1986 review, the Plant Pathologist .25 FTE allocation to the West Central Research and Extension Center was reallocated to SCREC. Currently, we are in the process of changing this position to a .75 Extension/.25 Research appointment.

2. A retirement in the Entomologist position provided an opportunity to re-evaluate and redirect this position. This position remains a 50-50 Extension-Research appointment although the focus is directed to biological control and crops I.P.M.

3. The Animal Science position was transferred to Lincoln to resolve some personal and performance problems. This position still has an Extension commitment to SCREC, however, programming has dropped significantly with this move. At this point, this arrangement is not meeting SCREC needs for programming, and opportunities to capitalize on the MARC program for local clientele are not being met.

V. Graduate student involvement at SCREC has greatly increased. During 1992, seven graduate students were involved with research projects here at SCREC. Most of our faculty have graduate fellow appointments and co-direct graduate student programs. This has provided a very positive link between SCREC and departments on campus.

VI. AREAS OF EXCELLENCE

We have worked hard at making "Water Resource Management" our area of excellence. At this point, we've achieved a certain level of success with several large grants in this area. Our research program is highly oriented to components of water quality issues. The possible area of excellence of Grain Storage and Male Swine Reproduction physiology have not been pursued due to changes in personnel and changing priorities of issues.
SOUTH CENTRAL RESEARCH AND EXTENSION CENTER

University of Nebraska

Clay Center, Nebraska

April 1-4, 1986
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I. INTRODUCTION

A review of the research and extension programs at the South Central Research and Extension Center (SCREC), Clay Center, Nebraska, was made during the period of April 1-4, 1986. The review panel members were selected by the university, with coordination provided by the U.S. Department of Agriculture, Cooperative State Research Service. The review panel members were:

Mr. Donald Brosz
Extension Irrigation Engineer
University of Wyoming
Laramie, Wyoming

Dr. Roger Gold
Head, Department of Entomology
University of Nebraska
Lincoln, Nebraska

Dr. Gary Parker
Professor of Animal Science
University of Kentucky
Princeton, Kentucky

Mr. Robert Johnson
R.R. #2, Box 43
Hastings, Nebraska

Dr. Gyles Randall
Professor of Soil Science
University of Minnesota
Waseca, Minnesota

Mr. Gary Zoubek
Antelope County Chairman
Cooperative Extension Service
Neligh, Nebraska

Dr. Kenneth Dorschner
U.S. Department of Agriculture
Cooperative State Research Service
Washington, D.C.

Preparatory to the review process, the panel was briefed on organizational and administrative matters pertaining to the programs to be reviewed by:

Dr. I. T. Omtvedt
Dean and Director
Agricultural Experiment Station
Institute for Agriculture and Natural Resources

Dr. D. W. Swoboda
Associate Director
Cooperative Extension Service
Institute for Agriculture and Natural Resources

Dr. C. L. Stonecipher
Director
South Central Research and Extension Center

During the discussion, the panel was requested to examine the district administration and ongoing programs relative to:

1. Administrative leadership, procedures and linkages of faculty to their respective departments.
2. Program emphases, focus strengths and weaknesses.

3. Redirection areas for growth and development.

4. Interdisciplinary involvement and internal communications.

5. Adequacy of information base, information delivery systems and expertise to respond.

The administrators advised that a candid appraisal of these matters by the panel was desired. It is in this context that the comments and recommendations set forth in this report are given.

The review panel is very appreciative of the many courtesies extended during the review and for the cooperative attitude of the District Director and faculty.

II. GENERAL COMMENTS AND RECOMMENDATIONS

A. Administration

The panel recognizes the support of the faculty and staff at the Center for Dr. Charles Stonecipher. He is appreciated and is known for his hard work and abilities to work with diverse groups and to handle difficult tasks. He is a good listener and interacts extremely well with others.

Several of those commenting stated that the Director was over-extended to the extent that some program areas may have been slighted. In addition, while most appreciated the "non-interference" style of administrator, there is the definite need for "firm leadership" in a more direct style. This was particularly true when working with new faculty at the Center and in the counties.

It is the opinion of the panel that the overall administrative structure for the Institute of Agriculture and Natural Resources which includes the Centers, is adequate and though complex, appears to work in the best interests of the faculty, staff and clientele groups. There appears to be good liaison between the administration at the Deans and Directors' level with Department Heads and the District Director. It is recommended, however, that the Department Heads take a stronger role in including the Center faculty in campus functions. It is further recommended that Department Heads work more closely with center faculty in reviewing research and extension programs and helping to emphasize those that will provide for professional recognition.

While the panel recognizes that program planning and implementation is the responsibility of individual faculty members, there is clear evidence that more direction and input must come from all administrative levels to protect the faculty from their own over extension and from clientele demands.
B. Personnel

Throughout the program review, a number of individuals and groups presented ideas as to the needs for additional faculty and staff positions to be added to the SCREC. The panel weighed carefully these suggestions and generally concurs that staffing for the present level of operation at SCREC is adequate. If, however, there is a commitment to excellence, as expressed by the administration, then the following positions should be considered in the following groups:

1. Communications and Public Relations

   (a) Justification -- There is an immediate and continuing need to increase the visibility of the SCREC. This need can be met in part by having regular, quality news releases, video tapes and print media presentations. In addition, there is the need for the development of educational materials to be used in support of the research and extension programs.

   (b) Alternatives --

      (1) Arrange with the Department of Agricultural Communications to assign a Communications Specialist to specifically cover the needs at SCREC. This would include regularly scheduled visits to the Center with the specific intent of assisting the faculty and staff with communication and public relations needs.

      (2) Hire a "B-Line" communications person to work with the faculty and staff in responding to their needs. In the event that this position did not require a full-time appointment, other activities to be funded from other sources include recruitment of potential students for the College of Agriculture and the University or promotional work for and to be funded by the University of Nebraska Foundation.

      (3) Hire an Associate Director for SCREC whose responsibilities would specifically include Communications and Public Relations along with other administrative responsibilities.

      (4) Seek out retired or other interested individuals from neighboring communities to act as "Ambassadors" for the Center. There are those individuals who have had experience in communications either as county agents or as contributors to local papers or communications systems that may be interested in these types of challenges.
2. Data and Systems Analyst

(a) Justification -- Numerous comments were made concerning the need for resources in support of data analysis at the Center. There is an apparent need to address these needs in both the short and long term to better facilitate the dissemination of research and extension results.

(b) Alternatives --

(1) Expand the present role of the Computer Assistant to 1.0 FTE to include data entry and analysis. This position should be decentralized and thus serve the needs of the entire faculty of the Center and counties in the South Central District.

(2) Utilize the skills of existing technician positions with data entry experience and capabilities. This individual(s) would need to be replaced through the hiring of additional field workers paid from grant or revolving funds.

(3) Utilize the services of students located on-site or at University of Nebraska-Lincoln (UNL) to assist with data entry and analysis.

3. Hydrologist/Meteorologist

(a) Justification -- The SCREC has the potential as an "area of excellence" in water resources management. To support these efforts, it is recommended that a Hydrologist/Meteorologist be added to the faculty.

(b) Alternatives --

(1) Negotiate the transfer/appointment of the position with Conservation and Survey Division of IANR.

(2) Utilize a visiting scholar approach.

(3) Establish a new position with accompanying support.

4. Technical Support for Animal Science Position

(a) Justification -- This position requires qualified technical assistance due to the specific nature and uniqueness of the research particularly as it relates to animal care and preparation and data collection and analysis.
(b) Alternatives --

(1) As a part of the "Broad Form Agreement" or through a formalized "Letter of Understanding" request that the administration from the Meat Animal Research Center (MARC) provide this technical support with the agreement that professional recognition will be shared with appropriate USDA/ARS scientists.

(2) Utilize State funds to establish this support position based on the national recognition of the importance of the research.

(3) Request regional or special funding from CSRS to support the position.

5. Field Testing Assistants

(a) Justification -- Based on the research and extension presentations made during the site visit, it became clear that large expenditures in time resources go towards variety trials, insecticide testing, herbicide evaluations and activities. There is the need to more efficiently accomplish these tasks while at the same time freeing up the faculty for more creative and rewarding activities.

b) Alternatives --

(1) Utilize grant resources (industry income) to support a B or C line position to take the major responsibility for these efforts either individually (by discipline) or through a resource pool.

(2) Assign the Farm Manager the responsibility for these activities with the understanding that industry income would be utilized to offset "all" costs associated with these efforts.

6. Technical Support for Agricultural Economist Position

(a) Justification -- The Farm Management Specialist position is an important resource made available at the Center. It is obvious to the panel that this specialist will be involved with many other Center faculty. Technical support will be needed particularly in the areas of data collection, entry and analysis.
(b) Alternatives --

(1) A C-line level technician (1.0 FTE) should be added to the staff. This position should be funded through Center appropriations to maintain consistency and expertise. It is further recommended that this position be decentralized at least in part (0.5 FTE) to service other data analysis needs of other faculty.

(2) A 0.5 FTE C-line position be established to service the specialist position.

The panel recommends that funding be provided to support the Agricultural Research Technologist II position presently funded through regional research funds in the event these funds are decreased or lost.

8. Associate Director for SCREC

(a) Justification -- Based on testimony and observation, it is apparent to the panel that additional administrative support should be provided to the Director of the SCREC. This additional support would improve communications, public relations, distribute administrative work load, and improve efficiency.

(b) Alternatives --

(1) Provide resources to establish an Associate Director’s position established by precedent at other Centers in Nebraska.

(2) Share Associate Director positions with those at other Centers or from IANR administration.

(3) Delegate duties and responsibilities to Center faculty on a rotational basis or utilize a faculty development leave approach for faculty from the Center or elsewhere desiring administrative experience.

9. Office Services Personnel

The panel recommends that periodic reviews be made of the need for additional office services personnel. It is our general impression that an immediate problem does not exits, but that reassignments and encouragement be given to existing personnel to improve efficiency. As the need arises, there will be the need to increase this size of clerical staff. First priority in this regard would be the addition of staff that can assist with data entry as well as perform more routine office duties.
C. Facilities and Equipment

One of the great strengths of the SCREC is the location and site itself. To have available an adequate land base of Class I land, good uniformity of well drained soil with gently rolling terrain underlain by an ample aquifer of good water quality is most fortunate and rare.

The planned layout of the Center, the permanent marking of the fields and the land use records appear to be adequate. The panel suggests using computer facilities to store and provide ready access to field records.

The headquarters building is attractive, functional and well maintained. Organized presently in an efficient manner, it appears to be adaptable to changing needs. Laboratory space not presently fully utilized appears to be adequate for expanding requirements. The existing computer capability is not heavily used at this time, nor are the audio visual and communication capabilities. The updating and heavier usage of this equipment as tools for the more efficient and performance of the mission of the SCREC are addressed throughout this report.

The panel toured the farm operations site, the farm machinery storage building, the farm shop/general purpose building and observed the inventory of farm equipment. While the two buildings are of satisfactory quality and condition, they do not meet the needs of the farm operation. The farm/shop building appears to be so general purpose that it does not serve well any one need. It serves as (1) repair facility where welding, painting, working with solvents and other maintenance operations are carried on, (2) seed storage area, (3) pesticide storage and handling area, (4) parts, supply storage area, and (5) employee lunch and assembly area all in one open space, without benefit of dividers, or exhaust fans. This situation is dangerous, unhealthy and inefficient. In addition, the farm manager’s office and public restrooms are located in this building.

The panel strongly recommends that steps be taken to correct these dangerous, inefficient and unacceptable conditions in the shortest possible time—the most important being moving the chemical storage/handling area to a separate facility adequately designed to meet safety, health and environmentally acceptable standards.

The panel is of the opinion that the present inventory of farm machinery is (1) too large, (2) in some critical cases obsolete and inadequate to meet the needs and (3) because of (1) and (2) expensive to maintain. The panel recommends that a responsibility for developing a repair/replacement/updating schedule be developed and made the responsibility of one staff member to the end that the machinery can be modernized and tailored more closely to the requirements of the research and farm operation.
The "share policy" of the field staff for maintenance/operation of equipment and for other support work on an "as needed" basis is commendable.

Relative to other equipment, the panel supports the acquisition of the state-of-the-art computer, video and communication equipment as needed to aid in efficiently carrying out the programs of the Center. This should be done in accordance with a long range plan and compatible with the other units of the University of Nebraska.

The radio band network between nearly all of the county extension offices in the twenty county area, the SCREC headquarters, and some mobile units is seen as positive for prompt and efficient communication among all staff. The use of this capability for a weekly conference call creates good relationships among the staff as well as enhances dissemination of information.

D. Visibility and Identity

The panel recognizes the visibility and identity problems mentioned by faculty, staff, and county extension agents. In addition, results from a survey form sent to 721 prospective clientele in the 19-county area indicated only a "somewhat" familiar rating by the 183 respondents. Greatest familiarity was shown by crop consultants with governmental agencies showing least familiarity.

Suggestions made during the review and supported by the review panel include:

(1) Improve public relations. This will take extra effort on the part of the entire SCREC staff, but can be accomplished more specifically by a program assistant or as a responsibility of a communications resource person. Attempts should be made to work with the media in publicizing SCREC activities. An example would be to publicize field tours in the two to three-week period prior to the field day by stating the nature of the topics to be covered and the relevance of the take-home information. This approach should be coordinated with the county extension agents in the south central district.

(2) Identify specific target groups and develop and/or update a mailing list. This list can be used as a vehicle to promote SCREC activities, i.e., field days, special tours, special meetings, newsletters, news releases, etc. Promotional materials may want to state "Your Research and Extension Center" as a footnote.

(3) Develop timely news releases and send to county extension agents for distribution and incorporation into their local media.
(4) Develop a regularly scheduled radio and TV program with the stations in the south central district. A radio program could be conducted weekly with a rotating involvement by the specialists. Programs with the TV station perhaps could be conducted bi-weekly or monthly. Timely information could be disseminated in a very educational manner while reaping public relations benefits.

(5) Improve signage around the SCREC by locating red and white signs showing UN-SCREC and a logo at prominent and appropriate places around the Center.

The panel recognizes that there is no substitute for a well-focused, timely, forward-looking program that meets the needs of the clientele in establishing and continuing long-lasting visibility and identity.

E. Program Development and Budget

The Center's agricultural research and extension programs in all disciplines address the major problems throughout the south central district very well. The needs have been quite adequately identified and programs developed to meet such needs.

However, the review panel feels that the faculty should realistically focus and prioritize their research and extension programs with appropriate administrators. Most faculty are over extended in the number of programs they are conducting to adequately address each program. It is not always necessary to conduct research at the Center for each extension program. There are instances where existing data are available that can be applied to address problems within the district. Don't let lack of results from within the district get into the way of extension programs.

Caution must be taken that industry does not direct or "drive" the research programs where support grants are involved. We encourage the faculty to continually pursue competitive grants and foundation support funds. The kinds of research opportunities at this Center are such that interest in funding can be generated such as the Burlington Northern Water Quality Project.

The review panel feels that the quality of the Center facility is such that more "in-depth" research studies can be conducted within the existing programs. For instance, variety and chemical testing makes up a large component of their effort and these could be augmented by additional studies as to why certain interactions take place.

The home economics program at the Center, though very limited, is most effective in the south central district. Planning and coordination of extension programs are carried out in an excellent fashion.

The review panel recommends that during all planning processes, methods and techniques of disseminating information be made as part of all planned programs.
The panel feels that the income derived from farming operations on the Center continue to remain as a revolving fund for Center use. The review panel recommends that these revolving funds be used not only for hiring of labor but also for costs of replacing or leasing farm machinery and farm building construction needs.

F. Faculty Appointment Reallocations

The panel was impressed with the flexibility available within IANR to reallocate faculty appointments to reflect changes in emphasis, interest and assignments. It is recommended that positions be reviewed on a regular basis and that when appropriate and within the guidelines of the university system that reallocations be made.

It is the panel's recommendation that the following positions be carefully examined with the intent of FTE reallocation.

(1) Plant Pathology -- It is recommended that the 0.25 FTE be transferred from the West Central Research and Extension Center to the South Central Research and Extension Center thus creating a 1.0 FTE at that site. It is further recommended that the faculty position be designated as a joint appointment with 0.5 FTE in research and p.5 FTE in extension.

(2) Entomologist -- It is recommended that the entomologist appointment be reallocated to 0.75 FTE in extension and 0.25 FTE in research. In making this recommendation, the panel wishes to stress that the research component of this joint appointment will require the development of a sound research program that will result in professional recognition for the scientist involved.

(3) Animal Science -- It is the recommendation of the panel that the joint appointment be changed to reflect a 0.50 FTE in research and 0.50 FTE in extension. It is the opinion of the panel that the extension activities be scaled back proportionally and that both the specialist and the administrator take immediate action to provide quality time and opportunities to develop the research component. It is further recommended that this shift in appointment be coordinated with the Director of the MARC and that formal arrangement be negotiated in support of the research portion of this position, particularly in regard to technical support.

G. Graduate Student Involvement

Increasing the involvement of graduate students in the research and extension programs of the SCREC can be of mutual benefit to both the Center and the campus-based departments. Graduate students necessitate co-advisorship between faculty of both departments but do
enable the collection of detailed measurements in the research effort. The end result should be greater acceptability for publication and added professional recognition of the specialist, with a side benefit of serving as a mechanism to keep up-to-date with the research area. The faculty is to be reminded though that advising of graduate students does take extra time but if done well can be very rewarding.

Opportunities for graduate student involvement at SCREC are greatest with those specialists carrying a 50% research appointment. In developing plans for this involvement, the specialist needs to have administrative support and should develop a joint funding base between the SCREC and the appropriate department. The panel recommends that all faculty with 50% research appointments seek graduate faculty fellow status.

H. Areas of Excellence

The review panel finds that current or past "areas of excellence" have included irrigated crop production and nitrogen management. Results of those efforts have had a great impact on crop production in this district as well as the State of Nebraska. These team efforts are to be commended.

Several opportunities for potential "areas of excellence" exist at the SCREC due to its unique location, resources available and current staffing. Potential areas that the panel wishes to identify are:

(1) Water Resource Management (Quality and Quantity)
   (a) irrigation efficiency and cropping programs
   (b) Nitrate management
   (c) Chemical applications and evaluation

(2) Grain-Storage

(3) Male Swine Reproductive Physiology

The panel feels that efforts should be made at the SCREC to become leaders in research and extension efforts in these areas. Many of these "areas of excellence" will need to be team efforts to solve the "systems" type questions being addressed.

I. Professional Recognition

The panel recognizes and compliments the faculty for the quality of extension publications and programs produced by the SCREC. The faculty is to be commended for their active involvement in the development leave program and continued participation is strongly encouraged.
Faculty members at SCREC are enthusiastic, hard-working individuals with an excellent spirit of cooperation among the various disciplines. However, the panel feels it is important that current faculty and especially new faculty take time and be given the opportunity to develop individual research programs in order to facilitate professional recognition.

The panel feels that current publication in refereed journals is marginal. Faculty members should be encouraged to reevaluate research programs and design projects which are suitable for publication in refereed journals.

J. Relationship with Roman L. Hruska Meat Animal Research Center (MARC)

The review panel appreciated the opportunity to meet with Dr. Robert R. Oltjen, Director of MARC. It seems apparent that the directors of both centers and their superiors are intent on working cooperatively.

While there is room for discussion over the relative merits of the present relationship and proximity of the two institutions, it is the panel's position that this arrangement offers rare opportunities for cooperative ventures as well as some efficiencies in the maintenance of support services. In addition, it might well be that in the area of hosting visiting delegations and other public relation type activities, some joint efforts might prove mutually beneficial.

As the panel carried out its review, it became apparent that good intentions alone will not make the MARC-SCREC relationship successful. Whenever joint ventures or shared appointments are attempted, a memoranda of understanding clearly outlining the responsibilities of each party must be agreed to. In addition, it seems important that communication among all parties involved including the director level be forthright.

Notwithstanding the above, a possible alternate plan was presented to the panel that appears worthy of investigation and is being presented without recommendation. The plan comes about because of the recent enactment by the Nebraska State legislature of the joint veterinary study program including Kansas State University, University of Nebraska and MARC. As presently conceived, this will involve construction of facilities at MARC. If the present SCREC headquarters building could be utilized in this construction project on a cost effective basis, then possibly the SCREC could be relocated at the farm site along U.S. #6 highway where higher visibility and accessibility could be accomplished. Such visibility and accessibility is thought highly desirable.

K. 4-H and Youth Development

Based on observations and concerns expressed during the review, the panel recommends that a fully outside review of the State 4-H program be implemented in the very near future.
III. RESEARCH AND EXTENSION PROGRAMS

A. Crops

This position is occupied by a young specialist with good agronomic skills and specialization in the area of soybean production. His described research interest lie in the area of soybean genotype x environment x management and appears to be on target with the needs of the south central district. He appears to have a good grasp of the current cultural soybean research needs but must project vision of awareness of the impact of current findings on future soybean research needs. He is to be applauded for his efforts in studying reduced tillage effects on soybean production but perhaps should consider the possibility of double cropping (soybeans after wheat) under irrigated conditions in this area.

Much of his time and effort appears to be devoted to variety testing. This "extension" effort reduces his ability to conduct some "in-depth" research which is essential. To minimize his time in the variety testing program, a B-line position could assume the responsibility for planting, seasonal data collection, harvesting, and data assembly. The panel suggests the formation of a variety test program committee composed of various specialists that could assume overall statewide direction of this program and assist the technician in the conduct of the studies. This would allow the specialist to redirect his efforts towards more "in-depth" production research/extension needs in the crops area.

Professional recognition is essential to maintain an effective, long-term research program. To improve the dimension and value of his research, the panel feels it would be to his advantage to link up with departmental (UNL) faculty in a team approach for some of the research projects. Measurements other than yield need to be taken to answer the questions as to why certain results (more likely than yields) turned out as they did. Co-advising graduate students could enable this to occur. An example: To adequately determine the influence of tillage on soybean production, one must look at the soil properties (temperature, water, density, etc.) as affected by tillage and try to relate them to root growth, nodulation, yield, etc. Thus, it seems desirable to involve soil physicists, engineers, and/or microbiologists in tillage related research. The additional measurements would bolster the study, provide a stronger contribution to the science and would aid in developing more complete computer models. A team effort would also aid those looking at the "systems" approach. With that in mind, he should be encouraged to work cooperatively with economists to analyze the economic impact of the findings.

Dissemination of information via extension bulletins, newsletters, and speaking engagements appears to be quite good. However, he is encouraged to develop additional and innovative means of extending the results to the farmers of Nebraska.
B. Soils

This position has been recently filled (April 1985) and is being redirected to an appointment that is 50% extension and 50% research. The major objectives of the program identified by the specialist is to focus on nitrogen (N) and phosphorus (P) management by improving N and P use efficiency while reducing N losses to the groundwater. In addition, he will be continuing several projects which he inherited and will be cooperating in new projects with Lincoln-based co-investigators. He is to be commended for his desire to finish existing studies and to cooperate extensively with colleagues. However, the point should be made that it is necessary for him to focus on a particular aspect of soil fertility (perhaps N use efficiency and groundwater contamination) as he seeks professional recognition and promotion/tenure. Quick termination of existing projects accompanied by careful discretion in cooperative project participation will aid the specialist in this endeavor.

As a priority research area is identified, the panel suggests that he also link with appropriate departmental colleagues to assist in the research approach and the collection of appropriate data. For example, if N management and NO$_3^-$ movement are a high priority, the involvement of hydraulic flow scientists to characterize downward water movement in soils would surely augment the research. This would aid in the modeling/predictive efforts of colleagues.

His research plans to look at smooth brome production with N management, ammonia uptake by corn, and ammonia loss from urea applied to conservation tillage systems are commendable. This research addresses both current concerns as well as being anticipatory of future needs. Adequate funding will need to be garnered, however. The extension-type research plans involving deep soil sampling with NO$_3^-$ analysis in some of the surrounding counties is on target with local needs and should provide "teachable" opportunities to improve N management. Plans to involve not only county agents and farmers but also consultant and the fertilizer industry are endorsed.

Resources which may be somewhat limiting to the anticipated research program are inadequate field equipment for off-station research and a field laboratory to dry, weigh, prepare and handle samples. This must be addressed to ensure quality research applicable to the 1990's and beyond.

Indications are that the previous soils extension program was very effective. The current specialist should be encouraged to develop an effective and innovative technology transfer system. The review panel suggests that he prepare or assist in the preparation of a bulletin on "Systems Approach to N Management in Irrigated Nebraska Soils" which relates to water quality.

C. Weed Science

Weed problems are very important factors in maintaining economical crop production systems. This is especially important from cropping under minimum tillage and also on irrigated lands. The review panel finds that ongoing weed management research is good and could be improved with proper focus. In this regard, the panel is of the opinion that there is need to focus on selected areas important to the discipline of weed science and to the needs...
of the south central district. Among these could be weed control with beneficial organisms (biological control), integrated pest management, weed ecology and population dynamics, and weed competition or economic threshold studies. Basic information from such investigations will provide much needed inputs for further development and refinement of economic crop management systems.

Participation of the weed science component in the chemigation and minimum tillage systems programs is highly important and should remain a high priority effort. In the herbicide testing or "screening" area, careful evaluation should be given to the involvement in product testing.

The weed science program has been in the forefront of automatic data collection and the panel desires to recognize this accomplishment.

The review panel perceives that weed science extension communication skills need to be refined. Little information was provided to the panel on weed control tours, although these may be conducted. Farmers want and need to observe the latest innovations in techniques and best management practices. In our view, separate tours for the chemical industry, consultants and county agents can also be productive. We suggest also that more communication could occur with the clientele.

Publication in refereed journals of information generated in the weed science programs should be given more emphasis.

D. Agricultural Engineering/Irrigation

The goal as identified by the agricultural engineering irrigation researcher is to develop and/or evaluate new technology that will improve water management in south central Nebraska. Efficient and wise management of irrigation water is of basic importance in this district. The panel commends the researcher in conducting a full research program to address these water management problems and effectively reaching the clientele through related extension programs. The researcher/specialist has a broad knowledge in the areas of crop water requirements, irrigation methods, efficient use of irrigation water, irrigation equipment and pumping plants, groundwater recharge and tillage methods applicable to current and future needs. The panel commends the significant contribution made by the researcher to team or systems approach to problem solving. Also, he has published extensively the research and extension information.

In this district, the primary supply of irrigation water comes from groundwater sources. It appears to the panel that with the kinds of SCREC programs now being conducted that more intensive study of groundwater properties as related to irrigation would benefit the district and
state. What are the impacts of increased irrigation efficiencies, changes in cropping programs, variations in annual precipitation, recharge activities, etc. on groundwater levels and supplies? The review panel suggests pursuing this possibility with the UN Conservation and Survey Division encouraging the cooperative undertaking of such a project. Unique opportunities are available to obtain very valuable information for future direction of irrigated agriculture in the south central district and the state.

However, the researcher/specialist, with all of his existing interests and involvements in SCREC projects, with the statewide program coordination responsibilities, and with the addition of the Burlington Northern Foundation Water Quality Project, will need to take a long, hard look with appropriate administrators at the research and education needs and set realistic priorities. It is virtually impossible for one individual to do justice to such a large subject area as irrigated agriculture in the south central district.

E. Entomology

This position is currently 50% research and 50% extension. The specialist has conducted a long-term applied research program in the areas of corn rootworm, sorghum greenbug, and chinch bug control. Since a faculty improvement leave, he has directed a program in spider mite identification and distribution. He has conducted a broad-based extension program involving insect identification, control scouting, educational meetings, and publications. In addition, he has statewide responsibility for stored grain entomology. The panel perceives him as a very good extension entomologist with a quality, well respected extension program, who has good rapport with the public.

Based on the nature of research being conducted in this program, the panel suggests that this appointment be converted to 75% extension and 25% research. In addition, the research component should be more basic and focused resulting in publication in refereed journals. Potential areas identified as needing entomological research include (1) insects and their control in stored grain, (2) insect dynamics associated with conservation tillage systems, (3) the taxonomy and occurrence of spider mites, and (4) chemigation effects on insect populations. Investigations into the genotypic response of corn to spider mites should involve teaming with a UNL corn breeder. Duplication of efforts in areas such as corn rootworm control should be avoided.

The broad-based extension program should be continued but should also include increased emphasis on stored grain. The panel suggests an interdisciplinary team effort consisting of a plant pathologist, agricultural engineer and entomologist be directed toward improving stored grain quality. Considering the large quantity of on-farm stored grain in south central Nebraska, a potential center of excellence could be established at SCREC.
F. **Plant Pathology**

Research priorities in plant pathology and attendant extension programs are viewed as being established on need and likelihood of success. This means, all too often, that only serious problems requiring immediate resolution can be addressed with the resources available. Notwithstanding, the broadly based ongoing program has provided peer recognition for the Center’s plant pathologist and as well clientele appreciation for the general work in pathology to benefit their district as a whole.

The review panel notes with interest the recent evaluation of on-farm stored grain products and encourages that this area continue to be served, but recommends that a systems approach be used which includes the sciences of entomology and agricultural engineering. The panel is also of the opinion that the plant pathologist has a good feeling for crop production systems, and accordingly we recommend that increased focus on soybean diseases be established in a systems approach as well as the disease complexes of other important irrigated crops.

As means to assure that the major needs in protection of crops from pathogens can be addressed, the panel discourages an increased emphasis on ornamental plantings and horticultural crops at this time. The panel supports the reallocation of his research appointment to the SCREC.

G. **Forestry**

The panel recognizes the uniqueness of this program and its position in the system. The present programs appears to be very well organized and directed in accomplishing the dual effort job description.

However, the panel feels there needs to be more focus on programs of greatest impact and need for the extension portion of the appointment. The 1983 survey from the general public for forestry concerns in Nebraska could help point to some of these more specific focal points for the extension effort. Extension publications in these more defined impact areas should be encouraged.

The panel encourages cooperative efforts with other faculty, especially in the areas of disease, insect and weed problems to help unify the total extension program at the Center.

H. **Agricultural Economics**

The agricultural economist became a faculty member in April 1985 and holds the rank of associate professor with a 25% research, 75% extension appointment. The panel concurs with the decision that this discipline is of great important to this Center’s clientele and during the period of this review the panel received, in a variety of ways, strong support for the thrust of this program in agricultural economics/farm management, and its importance. The expressed interest of developing economic implications for the various research efforts of other faculty at SCREC is supported.
The panel urges that a clearly identified research program be developed as expeditiously as possible to the end that it will (1) serve an unfilled need of the service area of SCREC and (2) further the professional standing of the researcher with his peers.

Through this position, the Center is currently attempting to meet the extension requirements with public presentations, the development of computer programs, crop budget worksheets, and membership on the IANR Soybean Task Force. In recent months the statewide Managing for Tomorrow programs called for a heavy time commitment. Efforts have also been directed toward establishment of market clubs led by county faculty.

Because of the strong extension component of this appointment, the panel suggests intentional efforts be made toward the strengthening of the methods through which the information is communicated. The present communicative style is somewhat hesitant and unexciting. Extreme care should be taken in making the data used in educational programs accurate and current.

As the research and extension load increases, additional support, both staff and equipment, will be required and the panel urges that these be provided as completely as possible.

It was noted in the panel’s discussions with the home economics personnel that some help has been given and more would be appreciated in the family money management/economics area. When possible, the panel recommends that this type of assistance be given.

I. Animal Science

There is no formal emphasis on an animal science research program at SCREC. With this Center being located next to MARC, there appears to be an ambiguous agreement with MARC for joint cooperation in research for the scientist at SCREC. The animal science extension program is a statewide program with specialists located at Centers serving the needs of clientele in those specific districts while maintaining statewide leadership in a specific subject matter area for their discipline.

The specialist position at the SCREC currently has a 75% extension, 25% research appointment with statewide extension responsibility in reproductive swine physiology. The specialist is also serving as swine coordinator for the State extension program. The panel recognizes the outstanding extension efforts for program quality and service to the pork producer clientele. The specialist is well known nationally for his extension and applied research efforts in the area of reproductive physiology.

The panel feels that the administration needs to deal with the frustration of this specialist concerning his association in the MARC complex. Since the present appointment is 25% research, the administration should be obligated to assist in developing a more defined working relationship in the MARC system.
The research efforts of dealing with hormonal influences on sexual behavior of boars and methods of evaluating boar sexual behavior are needed nationally for swine production. With the number of boars available in the MARC complex of various breeds, this program has the resources for answering swine production problems that would not be available at any other research station nationally.

The panel feels that the research publication area is marginal. There is an indication that time for data assimilation and analysis is minimal and that technical support in the area of data preparation would be helpful. The panel recommends additional support for this area in technical assistance whether it comes through SCREC or MARC. Considering the significance of the research program to the swine industry, the panel supports an appointment change to 50% extension and 50% research. However, with this change, a well defined association with MARC and technical support is imperative. Also, the administration is encouraged to re-evaluate the responsibilities of this faculty member as swine coordinator for State extension programs with the above suggested appointment change. Although doing an excellent job in coordination, if qualified faculty at UNL could assume this responsibility, more efficient implementation of coordinating the program might be accomplished. The specialist is also encouraged to do a better job of establishing priorities for time and publishing this much needed data for the swine industry.

J. 4-H and Youth Programs

The panel feels that the youth specialist is committed to the 4-H and youth program. The specialist also recognizes the problems associated with reduced resources and staffing, the need to promote and create awareness of 4-H (and extension), the need for more school enrichment programs, and the need for less involvement with the day-to-day conduct of the district 4-H camp.

The panel suggests that the total district camping program be evaluated. The panel feels that if the camping program continues, camping dates need to be consolidated in efforts to reduce costs.

The district 4-H youth program needs to be solidified by working with the extension agents to develop programs and materials to meet the needs of youth involved. Some possible programs or areas of need expressed include:

1. More help with summer youth educational programming for counties
2. New school enrichment programs and materials
3. Prepackages or mini educational programs for counties to utilize.

The district specialist, extension agents, and aids should work as a team in the development of planned programs and materials. Programming emphasis must focus on educating youth.
K. Home Economics

The panel recognizes the excellence in programming on the part of the extension clothing specialist and home economics coordinator. It is our opinion that her role, particularly in light of her part-time status (0.5 FTE) is exemplary both in terms of extent and breadth of programming.

The specialist has identified relevant areas for programming that will have impact on her clientele groups. As coordinator for home economics at SCREC, she and her colleagues appear to be "pro-active" in program development and implementation.

It is the recommendation of the panel that continuing emphasis be given to programs in:

1. Financial management
2. Efficient resource allocations
3. Nutrition
4. Wellness
5. Textiles and clothing and
6. Youth development (interest and skills)

It is further recommended that consideration be given by the home economist to strengthening extension volunteer programs (clubs, etc.) and increasing visibility for all extension programs.

The panel further recognizes the need for an expanded home economics program within the south central district. We recommend that as reallocations and county consolidations are finalized, that appropriate and proportionate resources and positions be provided in support of home economics programs.

L. Computer Implementation

The panel believes that this position is filled by an enthusiastic individual who can provide a valuable service to agents, specialists, and office staff in increasing the utilization of microcomputers. In this support position, emphasis needs to be made to strive for efficient and increased utilization of computer resources whenever possible. Efforts should continue to aid staff in training, software selection and support as needed.

The panel suggests that efforts be made to evaluate commercial statistical analysis software and make appropriate recommendations rather than to develop new programs. The Prairie Link Computer network needs to be utilized if economically feasible.

As computer utilization improves, both software and hardware improvements will need to be made. These upgrades should be based upon need and increased productivity at the SCREC and county offices.
This 0.50 FTE position should be combined with a 0.50 data entry and analysis position to best utilize talents and improve overall program effectiveness. The panel also suggests that specific program goals and lines of program accountability and evaluation need to be defined in the near future.

M. Burlington Northern Foundation water Quality Project

The review panel is most complimentary to the center faculty for taking on the water quality project. This is without question a "forward-looking" kind of research project that will lead the way for the nation. This project will do much for answering the concerns of the public related to irrigated agricultural practices and the environment.

Bringing a project coordinator aboard should prove to be most beneficial.

The design of the application equipment and plot layout of the field studies appear to be such that the desired data can be obtained.

IV. SUMMARY OF GROUP SESSIONS

A. Office Personnel

The review panel had the opportunity to meet with the office personnel who provided the following:

1. The Center is an excellent place to work. It has an environment of people, including faculty, staff and county agents, with cooperative and understanding attitudes.

2. There is concern that, with partial loss of the services of the building service technician, that the appearance and ultimately the smooth functioning of the Center will diminish.

3. Appreciation was expressed for the computer training provided. To take full advantage of this, the computer capabilities should be expanded.

4. Steps should be undertaken to resolve the discrepancy of salary levels between support staff and office personnel.

5. The office staff is under a heavy workload, but cooperation is needed to address the overload.

6. A more private space is needed for the Office Manager. The panel recommends that this situation be reviewed, particularly when working on confidential matters.
7. Down times experienced with the photocopy equipment is wasteful.

8. The Center has a real identity problem. As but one indicator of this is the University Personnel Department that often fails to provide required forms and regulations.

B. Field Staff

Certain review panel members had the pleasant opportunity to meet and visit with the Center field staff as a group. Members of the review panel were very much impressed with the dedication of the field staff to the Center. Several of the staff have been at the Center for a relatively long period of time. The field staff is highly trained and have excellent backgrounds to carry out their duties and responsibilities at the Center. The review panel members compliment the staff for making the shared responsibilities as technicians to the faculty work very successfully.

In general, the field staff expressed that the Center was a good place to work and members are happy with working conditions including job reviews, designation and coordination of their work responsibilities and schedules and job satisfaction. The staff indicated that they were pleased to have the opportunity to meet regularly with the faculty and administration. They felt it may be beneficial, however, for them to select a person or two amongst themselves to be a spokesperson for their group at certain times.

The concerns expressed by the members of the field staff were as follows:

1. They are not happy with the present agriculture labor law which limits overtime pay beginning after 50 hours of work/week while overtime for other jobs in the area begins after 40 hours of work/week. There is an inconsistency in the overtime pay policy that affects the morale of the group.

2. With the addition of the Burlington Northern Foundation Water Quality Project, the availability of timely labor may not be sufficient to accomplish the necessary general farming that needs to be done. This may be a particular problem during land preparation and planting in the spring and again in the fall during harvest time.

3. There is a need for a large tractor to do some of the heavy work. Also, there is a need for a larger combine to adequately handle the corn harvest.

4. The Center is not keeping up with modern equipment. This is important because of the image this gives of the Center to the visitors.

5. A pesticide storage and handling facility is badly needed and the panel recommends that immediate attention be given to this by the UNL and SCREC administration.
6. The image of the Center throughout the community is not very good. When field staff members say they work at the South Central Research and Extension Center, not many people know where it is or what the Center is for.

7. Need to attract more people to attend field days and tours of the Center.

C. Department Heads

The review panel had occasion to meet with eleven cooperating department heads who provided the following information:

1. They are very supportive of the center faculty and positive relations prevail among the faculty and their corresponding departments.

2. There is concern about the focus and quality of ongoing research and reservations on the adequacy of professional recognition.

4. Upon request, additional campus resources are available, such as workshops on statistical design and data analyses.

4. Appreciation was expressed for the "systems" approaches program development and emphasized that this should be pursued on grain storage management utilizing the sciences of entomology, plant pathology and agricultural engineering.

5. An open invitation was given to the faculty to participate in campus-based programs, including seminars, guest lectures and graduate committees, among others.

6. The view was expressed that under the present resource allocation there will be a greater need for Center faculty to coordinate statewide programs.

7. The concept of faculty development leaves for Center faculty is supported.

8. Greater focus and priority-setting must occur at the Center so as to alleviate the danger of faculty becoming "spread too thin".
D. **Extension Agents**

The panel has allocated these comments into four sections: administration, agriculture, home economics, and 4-H/Youth development with specific comments listed below each section.

**Administration:**

1. Strong support for the current Director and they would not be in favor of a leadership change. The Director exhibits good people skills in that he is fair and a good listener.

2. The Director is overextended and an Associate Director could be beneficial to the overall program.

3. An identity problem for SCREC exists and is primarily related to the physical location to MARC.

4. The director could provide firmer guidance in procedures involved in implementing programs, particularly to new faculty.

5. The director needs to anticipate problems and expedite information to county boards more effectively.

6. In the county consolidation program, the director needs to obtain parity for work load between personnel.

**Agriculture:**

1. An excellent working relationship with specialists exists and very supportive of practical research trials.

2. Specialists need to remain available and accessible to agents for problem solving situations. They realize it is important for specialists to keep current in subject matter field by attending out-of-state meetings. But would suggest when specialists are out town a reserve information source be on stand-by.

3. There needs to be a higher priority placed on selling the UNL agricultural program including the SCREC and other centers.

4. The SCREC could be a leader in grain storage and water quality management for the state.

5. There is not enough emphasis on dryland farming.

6. Specialists need to provide information to agents for use in mass media (newspapers, TV, ratio).
7. Priority needs for SCREC are:

--- communications specialist
--- horticultural specialist
--- forage specialist
--- more applied animal science research with MARC

Home Economics:

1. Expanded programs in the nutrition and family life economics areas would be beneficial.

2. Excellent working relationship with current specialist who is only part time and over extended at present time allocation.

3. Specialists could relate more to home economic needs with pertinent information, i.e., have insect identification and control.

4. There is a need for more home economic specialists.

4-H and Youth Development:

1. Program change may be in order on a statewide basis, with redevelopment to a youth program, not just 4-H.

2. The role of the camp should be evaluated relative to facilities, program and need.

V. CONCLUSION

The review panel appreciates receiving the summary of the SCREC faculty retreat held on November 25-26, 1985, and recognizes the value that such an exercise can have on program planning, focus and priority setting. Given the extent and nature of the comments and recommendations set forth in this report, it is suggested that another faculty session be organized so as to evaluate our findings and develop action plans, priorities and schedules to respond where needed.