

Approved: \_\_\_\_\_  
Date

## MINUTES OF THE HOUSE COMMITTEE ON AGRICULTURE.

The meeting was called to order by Chairperson Eugene Shore at 9:00 a.m. on February 23, 1994 in Room 423-S of the Capitol.

All members were present except: Representative Gatlin - Excused  
Representative Neufeld - Excused  
Representative Reinhardt - Excused  
Representative Rutledge - Excused

Committee staff present: Raney Gilliland, Legislative Research Department  
Jill Wolters, Revisor of Statutes  
Kay Johnson, Committee Secretary

Conferees appearing before the committee:

Chairman Shore called the meeting to order and informed committee members that K-State has provided two reports on the Conservation Reserve Program, attachments #1 and #2.

Chairman Shore opened discussion on **HB 3023**: weights and measures division shall also enforce standards for point-of-sale systems.

Jill Wolters, Revisor of Statutes, explained an amendment that changes the language on what national standards are used, attachment #3, and said the Department of Agriculture agrees with this change. Representative Flower made a motion to adopt this amendment. Representative Swall seconded the motion. The motion carried.

Referring to amendments that were explained in the Department of Agriculture's testimony on February 22, 1994, Ms. Wolters said these amendments would update the state sealer statutes. Representative Rezac made a motion to adopt these amendments. Representative Alldritt seconded the motion. The motion carried.

Representative Correll made a motion to pass **HB 3023** favorably as amended. Representative Goodwin seconded the motion. The motion carried.

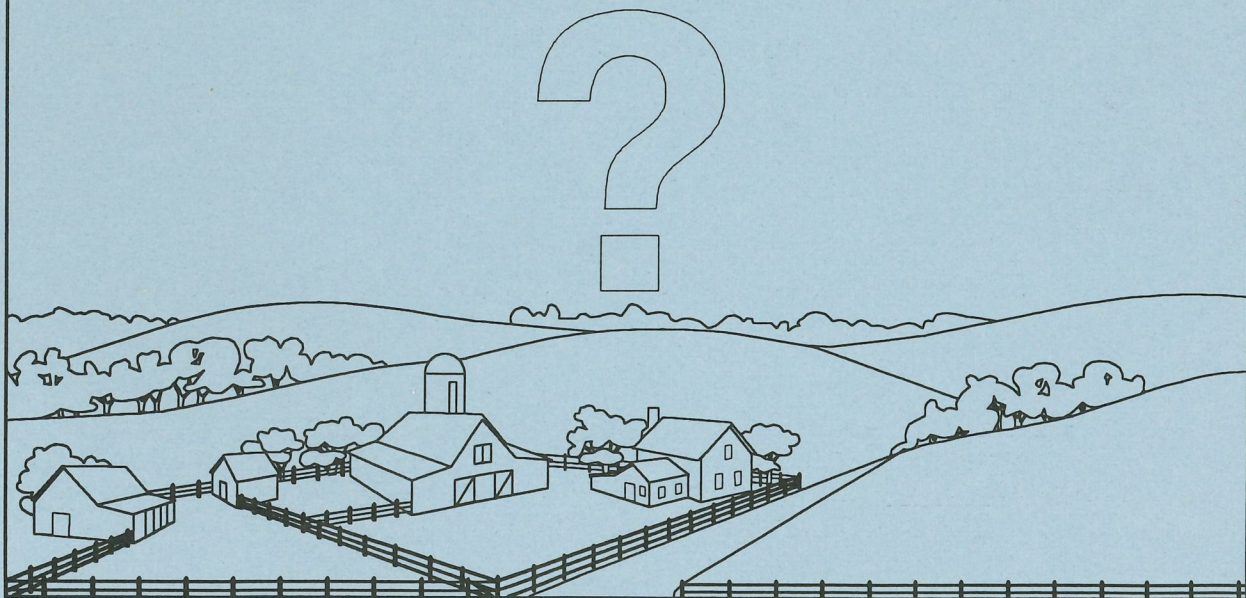
The meeting adjourned at 9:20am. The next meeting is scheduled for February 24, 1994.

# ***CRP - What are The Options?***

***The Proceedings of a Workshop for  
People Interested in the  
Future of Conservation Reserve Program Land***

***Presented by***

***Kansas State University  
USDA Agricultural Stabilization and Conservation Service  
USDA Soil Conservation Service  
Kansas Department of Wildlife and Parks  
Kansas State Board of Agriculture  
State Conservation Commission  
Kansas Department of Health and Environment***



*HOUSE AGRICULTURE  
2-23-94  
Attachment #1*



## ACKNOWLEDGEMENTS

The CRP Workshop Co-Chairs wish to thank the following for their cooperation and work in setting up the facilities and meals at each location:

Lawrence	Garry L. Keeler	County Extension Agent, Agriculture
Salina	Tom M. Maxwell	County Extension Agent, Agriculture
Chanute	Gary L. Kilgore	Area Specialist, Crops and Soils, SE
El Dorado	Virgil H. Biby	County Extension Agent, Agriculture
Hays	Joseph P. Wary	County Extension Agent, Agriculture
Garden City	Dean A. Whitehill	County Extension Agent, Agriculture
Colby	Robert E. Standage	County Extension Agent, Agriculture
Dodge City	Jerry Dreher	County Extension Agent, Agriculture
Hutchinson	Don L. Kueck	County Extension Agent, Agriculture

Our thanks to the member agencies of the Kansas Interagency Agricultural Coordinating Committee for helping in the organization and promoting of workshops.

Our thanks to the following Cooperating Sponsor organizations for helping promote the workshops.

Kansas Association of Conservation Districts  
Kansas Cooperative Council  
Kansas Farm Bureau  
Kansas Fertilizer & Chemical Association  
Kansas Forage and Grassland Council  
Kansas Council, Soil and Water Conservation  
Kansas Ground Water Association  
Kansas Land Improvement Contractors Association  
Kansas Livestock Association  
Kansas Rural Center  
Kansas Section, Society for Range Management  
Kansas Sheep Association  
Kansas State Council, Quail Unlimited  
Kansas Grain and Feed Association  
Kansas Wildlife Federation  
Pheasants Forever

To the authors of the proceeding authors, our thanks for your hard work and timeliness.

### Co-Chairs

Paul D. Ohlenbusch	Michael R. Langemeier
Extension Specialist	Extension Agricultural Economist
Range and Pasture Management	Livestock
Kansas State University	

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## ASCS POSITION ON CRP, PRESENT AND FUTURE

Roger Lemmons  
Program Specialist  
USDA Agricultural Stabilization and Conservation Service

The primary goal of CRP is to remove highly erodible land from production. Signups 10 through 12, considered the "new" CRP, incorporated the element of water quality as well as erosion in determining eligibility for program participation. The CRP bid process began in March 1986 and has resulted in a total of 12 signups. At this time, it is unknown if further signups will be held.

Kansas ranks second only to Iowa in the number of contracts with about 31,650 involving nearly 2.9 million acres. About \$153 million is paid annually to Kansas CRP participants. That's a big boost to the Kansas economy. Nationally, there are 375,000 contracts covering 36 million acres, resulting in \$1.8 billion in annual rental payments.

Kansas contracts approved in 1986 amount to about 103,000 acres. Expiration of these will occur September 30, 1995. Each subsequent September 30 date will result in the expiration of another year's CRP contract. For example, in 1996, contracts covering about 863,000 acres will expire. In 1997, contracts covering more than 1 million acres are scheduled to expire. Each year thereafter the acres dwindle down, totaling 414,000 in 1998 and about 398,000 in 1999.

### CRP: RESTRICTIONS AND OBLIGATIONS

What are the restrictions on and obligations of the CRP participant during the life of the contract?

1. The participant agrees to establish and maintain a permanent cover. During establishment, the cover is under the technical guidance of SCS. The ASCS deals with failure to comply cases when reported to it through SCS's annual Status Review. When SCS determines the cover is "established," it presents ASCS with a "final" Status Review and the contract is then fully under the control of ASCS, which includes cover spot-check and compliance determinations. A payment reduction or contract termination will result if, anytime during the contract term, a failure to comply determination is made.
2. Producers signatory to the CRP contract have joint and several liability. Otherwise, no matter how the violation is caused or who causes it, any or all persons signatory to the contract are liable to repay amounts due in full. This includes both owners and operators. Each has equal liability. For example, if the land under CRP contract is sold and the purchaser does not succeed to the CRP contract, both the owner and operator are liable for full repayment of all annual rental payments, cost-share payments, interest on each, and liquidated damages received from day one of the contract.
3. CRP cannot be hayed or grazed during the contract term unless permitted through Secretarial declaration due to a disaster condition, and then the

participants would have to forego a percentage, usually 50%, of their annual rental payment for the privilege of haying or grazing their CRP. CRP cover cannot be harvested for grain or seed. It cannot be used for any activity that would adversely impact the control of erosion or water quality. Ineligible uses include, but are not limited to, camping, fairgrounds, landing strips, and even nudist colonies.

#### **CRP: ALLOWABLE PRACTICES**

1. CRP may be used for hunting, including lease hunting. Vehicular traffic is prohibited except in normal maintenance. Hunting lanes can be mowed in the CRP if called for in the Conservation Plan of Operation. "Spiking" the contract with wildlife is permitted, but the wildlife cannot be confined in any manner, such as by fence or wing clipping.
2. Water can be pooled and dams built, with the area of the dam and impounded water remaining under contract. No cost-share can be offered for installation of conservation measures after permanent cover establishment, but are permissible from some environmental and wildlife groups, or even state agencies. In all cases, the measures would have to be called for in the Conservation Plan of Operation and have prior approval from the SCD, SCS, and ASC County Committee.
3. Conservation measures such as dams, fences, wells, and spring developments can be installed on CRP at the producer's own expense if he/she modifies the Conservation Plan of Operation and receives SCD, SCS, and ASC County Committee approval prior to initiation of the modified plan. County ASC Committees are not encouraged to approve such practices as terracing. First of all, terracing would encourage breaking out the grass upon contract expiration. Secondly, it would destroy considerable cover in the construction process. Destroyed areas would have to be reseeded at the producer's own expense. It's possible that permanent cover may not have enough time to reestablish prior to contract termination in the construction areas. This type of situation may not be in the best interest of the program intent or the public dollar invested.
4. Destruction of cover in the last 90 days of the contract to prepare for a fall-seeded crop is permitted.

#### **CROP ACREAGE BASE**

During the contract period, Crop Acreage Base is protected in proportion to the CRP acres to the total cropland on the farm. There is a provision in the law, but it is not in ASCS procedure manuals, that states additional base protection can be offered during the year before the contract expires, for up to five years, if CCC is agreeable to do so. At this time, there is not confirmation that this will be offered. This provision would offer an additional five years of base protection after contract expiration, but no further annual rental payments would be made. The cover would have to be maintained and limited haying or grazing may be allowed.



Normally base must be planted to be protected. Other options, such as 0/85, CU for pay, and nonparticipating zero-planted base might offer base protection without having to destroy the CRP grass cover after contract expiration. All of these are options under the current farm program that is scheduled to expire in 1995.

## **CONVERSION**

Another alternative now available to prolong a CRP contract is Conversion. Conversion is eligible to anyone enrolled in any of the first nine bid periods who has an established cover of grass under either practice CP1, CP2, or CP10. These represent tame, native, and previously established grass. Under Conversion, participants may extend all or a portion of their CRP contract for up to five years and continue to receive annual rental payments on the Conversion acres.

In turn, the acres converted must be planted to trees, wildlife corridors, windbreaks, or shelterbelts. This would provide continued base protection on Conversion acres. Cost-shares can be paid to install Conversion practices, but the payment cannot exceed the cost of the Conversion practice less the cost-shares previously received for establishment of the original cover on the Conversion acres.

## **AFTER THE CONTRACT EXPIRES**

When the CRP contract expires, what can be done with the CRP acres? First of all, CCC and/or ASCS and the participant are released from contract obligations and restrictions. But, anyone who wishes to participate in other USDA programs must meet Conservation Compliance provisions. These provisions state that an agricultural commodity cannot be produced on highly erodible land (HEL) unless soil erosion prevention measures are initiated or installed that maintains soil loss to USDA acceptable standards. Maintaining CRP cover most likely would meet the Conservation Compliance demands. Breaking out the CRP cover would necessitate, in most cases, installation of terraces, waterways, or other measures such as residue management. These measures would probably have to be initiated prior to the actual planting of an agricultural commodity.

Another consideration of contract expiration is the owner/operator relationship. Through CRP, the operator can not be removed from the contract without his/her explicit permission. Upon contract termination, that relationship can be continued or severed.

In summation, many factors must be considered during the waning years of the CRP contract. What can be done to enhance the CRP during the contract term? Can or should I install conservation measures prior to contract expiration? What do I really want to do with my CRP cover when it expires? Do I want to continue to protect my Crop Acreage Base and what will be the best method for me to do so? Do I wish to continue with my current operator, find someone new, or take the operation over myself? Is Conversion something for me to consider as it may involve practices that are foreign to my normal operation? Should I consider additional years of base protection without payment in return for limited activity on the CRP acres? Do I want to destroy my cover in the final 90 days in anticipation of planting a fall-seeded crop and return to a rotation cropping situation?

There is no set answer. Each participant must match the available options with the needs of his or her own operation.

## **CURRENT GUIDELINES FOR MAKING IMPROVEMENTS ON CRP ACRES**

Stephen O. Myers  
Range Conservationist  
USDA Soil Conservation Service

Many CRP participants are considering what options they have for managing their CRP acres after the contract expires. The following are the current SCS guidelines for making improvements for livestock grazing or cropland uses following contract expiration.

For those participants who want to make some improvements the following steps must be used:

1. Obtain the approval of the ASCS county committee for all changes to a CRP contract. The SCS District Conservationist will consult with the participants to decide on the proposed improvements and then with the ASCS county committee before preparing a contract revision. Once prepared, these revisions will be signed by all participants, the District Conservationist, and the ASCS county committee. Approval for the improvements must be given before the participant begins work.
2. Revise the CRP contracts to add, modify or delete contract items. ASCS will review and sign the revised contract after participant does.
3. Determine the availability of cost-sharing. Although fencing and water developments are not currently cost-shared by the federal government or the State Conservation Commission, there may be some soil conservation districts and private organizations which do have cost-share programs. Producers may use this type of cost-share assistance after a contract has been revised.
4. Make sure that all practices will meet SCS standards and specifications.

What conservation practices should producers consider applying prior to the date their contract expires?

**Management of the grass stand.** Using certain management practices now will keep the grass stand healthy and productive until that time when livestock are put out to graze. The use of prescribed burning or mowing are the two recommended practices.

**Prescribed Burning** The least expensive, and most beneficial management practice is prescribed burning. The benefits from a properly done prescribed burn are:

- a. Reduced mulch, which allows more sunlight to get down to the growing points of the plant to stimulate growth
- b. Reduce wildfire hazard
- c. Cycle nutrients back to the soil faster to promote plant growth



- d. Control annual grasses and weeds
- e. Improve forage quality.

Many contracts allow for prescribed burning, but some may need modification to allow burning. Check with the SCS about what your contract allows, and to get a prescribed burning plan. A prescribed burn is recommended for native grass whether you plan to graze it or cut it for hay following contract expiration.

**Mowing** is an alternative management technique. When properly done, mowing will provide benefits to the grass stand and minimum disturbances to wildlife. When mowing native grass stands participants should remember the following:

- a. Mowing should be done in the late winter before April 10th or between July 1-15th
- b. The maximum mowing height should be 6 inches
- c. Mowing should be done once every 2 to 4 years in eastern Kansas, and every 3 to 5 years in western Kansas
- d. In large fields, mow only a portion of the field, and begin by mowing in the center of the field and working out toward the edges of the field.

**Fencing** Fences provide a way to distribute grazing pressure and get uniform utilization. Properly constructed fences can influence where livestock go, divide fields into grazing units of equal production, facilitate handling and feeding livestock, and get maximum use from water developments. Uniform use of the vegetation on a timely basis can improve animal performance while improving the vegetation. A fence must be adequate to control the kind and class of livestock present. Consult with SCS for other material requirements.

Two alternatives to a standard barbed wire fence are suspension and permanent electric fences. These provide effective livestock control with lower costs when properly installed.

**Water developments** Water developments that provide contaminant-free water will reduce health risks to animals, meet a livestock and wildlife nutrient requirement, and provide an important tool for manipulating livestock grazing pressure on grazinglands.

Sources of water include rural water districts, wells, ponds, pit tanks and springs. Wells can be pumped with windmills, submersible pumps, and solar-powered pumps. Each of these have their advantages and disadvantages depending on economics and location. When ponds are constructed, a pipe should be placed through the dam to provide water to a trough. The area around the pond should be fenced to prevent livestock from trampling down the sides and increasing the turbidity of the water. The best means of moving water within a pasture is with pipelines.

When planning water developments:

- a. Select the source and type of delivery system.
- b. Determine the daily water requirements for the kind and class of livestock that will be grazing the pasture. Beef cattle require 10-15 gallons, and sheep 1 ½ gallons of water per day.

- c. Plan a supply to meet these needs and to provide additional back-up storage for periods when mechanical failure occurs.
- d. Space drinking facilities  $\frac{1}{4}$  -  $\frac{1}{2}$  of a mile apart on rough terrain,  $\frac{1}{2}$  -  $\frac{3}{4}$  of a mile apart on rolling terrain, and  $\frac{3}{4}$  - 1 mile apart on flat terrain.

**Windbreaks** Another practice to consider is the establishment of a windbreak. Windbreaks provide shelter during the winter months, which reduces supplemental feed requirements. They also provide a place for calving, control snow deposition, and protect soil resources.

Planning considerations include:

- a. Locate plantings so that livestock have access to protection on all sides of the planting.
- b. Plant on the north and west sides of wintering/calving areas.
- c. Avoid planting near utilities such as electric transmission lines and water lines.
- d. Avoid planting near road intersections and creating blind corners.
- e. Plant a minimum of four rows unless a high density planting is needed, then plant two rows.
- f. Use weed barrier, fertilizer tablets, drip irrigation to improve survival and growth rates, and water-absorbing polymers to conserve water.

For more information obtain the following publications from the USDA Soil Conservation Service.

### Hay and Pasture Management Series

Prescribed Burning  
 Livestock Water Development  
 Rangeland Alternatives  
 Planned Grazing Systems  
 Water Cycle  
 Plant Succession  
 Livestock Distribution  
 Causing and Controlling Erosion  
 How Plants Grow  
 Proper Grazing  
 Brush Management

Wildlife on Rangeland  
 Big Bluestem  
 Indian Grass  
 Reed Canarygrass  
 Switchgrass  
 Eastern Gamagrass  
 Tall Fescue  
 Little Bluestem  
 Sideoats Grama  
 Alfalfa.



## **Can Kansas cost-share on CRP Lands?**

Tracy Streeter  
Resource Administrator  
Kansas Conservation Commission

### **The Answer Is No!**

Can Kansas cost-share on CRP lands? The answer is currently No! The State Conservation Commission (SCC) administers the \$5.6 million Water Resources Cost-Share Program (WRCSP) to help landowners meet the conservation compliance provisions of the 1985 Food Security Act. The reason the Kansas Legislature increased SCC appropriations for the WRCSP was to treat highly erodible lands subject to the '85 Farm Bill provisions. Plans are to continue placing emphasis on meeting the January 1 deadline.

### **The Answer Could Be Yes!**

Beginning in state fiscal year 1996 (July 1, 1995), WRCSP funding emphasis will shift away from the treatment of highly erodible land. Looking in the crystal ball, one can see funding needs for non-point source pollution control practices, irrigation efficiency practices, and CRP initiatives. CRP initiatives could include cost-sharing for fencing, water development, and wildlife habitat enhancements. Cost-sharing focus will not be toward preparing lands for crop production, but rather to encourage leaving the acreage in permanent vegetation. SCC has drafted a proposal dealing with this type of initiative.

### **The Proposal**

In 1991, the State Conservation Commission began looking at possible cost-share initiatives to induce landowners to maintain permanent vegetation on CRP lands after the 10-year contracts expire. Cost-sharing on specific practices designed to utilize or enhance the permanent vegetation was proposed.

The proposal addressed two land use issues, livestock grazing and wildlife habitat enhancement. The following practices were included:

1. Perimeter Fencing
2. Livestock Water Supply (Ponds, Wells, Spring Developments, Pipeline & Tank)
3. Wildlife Upland Habitat Management
4. Wildlife Food Plots
5. Tree & Shrub Planting
6. Wetland Restoration, Enhancement & Creation

The proposal also called for additional conditions to be met by the landowner in order to receive cost-share assistance. The conditions include the following:

1. Installed practices must be maintained according to specification for a minimum period of 10 years.
2. A specified acreage of the permanent vegetation must be maintained and properly managed for a minimum of 10 years. In most cases, the specified

acreage would include the permanent vegetation surrounded by the perimeter fencing receiving cost-share assistance.

Under provisions of a contract, the landowner would be required to return the cost-share funds received if either of the conditions are not met.

The proposal was to be implemented through the WRCSP. It has been deferred for further study and consideration.

### **Why Was The Proposal Not Implemented?**

Various reasons to defer the proposal exist, including:

1. Through state fiscal year 1995 (June 30, 1995), cost-share appropriations are dedicated to implementing the conservation compliance provisions of the 1985 Food Security Act.
2. Uncertain future of CRP. What will the 1995 Farm Bill entail regarding an extension of the Program? A public investment on CRP land may be premature until the details of the '95 Farm Bill are known.
3. Possible negative impacts on the livestock industry through the promotion of additional grazing acres.
4. Possible inequity as a result of providing cost-share funds for perimeter fencing on CRP lands while prohibiting its use on existing pasture and range lands.

Although the proposal has been deferred, it remains in future plans of the WRCSP. It is uncertain as to when this proposal, or one similar, will be adopted and made available to CRP contract holders. The details of the 1995 Farm Bill could hold the key.

### **Other Cost-Share Issues Pertaining to CRP**

It is a foregone conclusion not all CRP acres will remain in permanent vegetation.

Targeting cost-share funds to priority CRP lands has been discussed. In particular, incentives directed to marginal cropland (Class IV, V & VI) might be effective in keeping the most erosive lands out of crop production.

Other discussions have been held regarding the availability of cost-share funds for terraces, waterways, etc. to assist landowners converting CRP acres back to crop production. As previously mentioned, SCC currently prohibits the use of WRCSP funds on lands enrolled in or terminated from the CRP. Political and economic pressures may exist, as CRP contracts expire, to encourage cost-sharing for terraces, etc. on CRP land. If this occurs, the cost-share incentives should be made available to CRP lands suitable for crop production.

### **Conclusion**

The State Conservation Commission would appreciate and welcome any input in regard to cost-share policies for lands enrolled in the Conservation Reserve Program. The ultimate solution for the use of CRP lands after contracts expire must include input of producers as well as elected officials and government program managers.



## **CRP and Wildlife**

Charles D. Lee,  
Agriculture Liaison  
Department of Wildlife & Parks

The objectives of the Conservation Reserve Program (CRP) were to: 1) reduce water and wind erosion, 2) improve water quality, 3) reduce surplus commodities, 4) create better habitat for fish and wildlife through improved food and cover, and 5) provide needed income support for farmers. Although objectives were not prioritized, anticipated wildlife benefits were used to sell the program to skeptic legislators and the environmental community.

There is a wide range of habitat quality on CRP land due to differences in seed mixtures, planting success, and vegetative conditions. Wildlife professionals may disagree on how beneficial the CRP program has been for wildlife populations, but in much of the country CRP has provided substantial gains in the quality, abundance, and distribution of wildlife habitat. Grassland-associated wildlife species have benefitted most because more than 87% of the land enrolled in the CRP was planted to grass-dominated cover. Improvement in habitat quality and distribution resulted in increased reproductive success, numbers, and distribution of numerous grassland-dependent species. Pheasants, bobwhite quail, prairie chickens, and dabbling ducks are known to have benefited from the CRP program. Decreased rates of soil erosion and reductions in the amount of agro-chemicals applied to idled lands enhanced water quality and habitat for aquatic and wetland dependent species.

No single unit of CRP land can provide all resources for all wildlife species. Each species of wildlife has certain specific environmental requirements. The required environment or home is called a specie's habitat. The habitat for any wildlife species must provide 1) cover from weather and predators 2) food and water for nourishment and 3) space to gather food and water and attract a mate. Habitat requirements of one group of species benefitting from CRP land may conflict with the needs of other species.

How well CRP influences wildlife populations depends upon how well CRP land provides these factors.

A primary factor is type of vegetation established. Native grasses and legumes are desirable. Trees also provide valuable cover for many species and can enhance wildlife diversity. The quality of the cover established, in terms of height and density, also is important. The geographic distribution of CRP lands and the juxtaposition of CRP lands with other land use types such as cropland used for food can influence the impact of CRP on wildlife populations. And perhaps most importantly, management practices such as mowing, burning, haying, or grazing both during and after the 10-year contract period will affect its wildlife potential.

### **IMPACT OF CRP ON WILDLIFE**

What impact has CRP had on wildlife populations in the United States? After eight years of the CRP program, can impacts on wildlife populations be quantified?

Wildlife agencies had high hopes when the program began. With few exceptions, the CRP provided significant improvement in the abundance and

distribution of wildlife habitat within Western, Plains, and Midwestern agricultural ecosystems. However in the Southeast, biologists are disappointed in CRP and report more negative than positive benefits for wildlife. Some of the program's benefits and shortcomings are.

**Northeast:**

Only 0.6% of all CRP acres through the 11th signup are in the Northeast. Introduced grasses (CP1), tree planting (CP3), and permanent wildlife habitat were the major conservation practices. Because grasslands and old-field habitats appear to be a rare and declining resource within the eastern states, the CRP substantially improved habitat distribution. Both game and non-game wildlife dependent on grassland have benefitted.

**Southeast:**

The use of introduced grasses (CP1) and establishment of pine plantations (CP3) was excessive on CRP. This contributed to limited or negative wildlife benefits. Monoculture pine plantations provide habitat for edge species such as bobwhite quail only during the first few years of establishment. As trees mature, they shade out understory vegetation, reducing the habitat values for most species of wildlife. Thus food areas, high-quality nesting, and brood-rearing cover are lost in mature stands.

**Midwest and Great Plains:**

Response to CRP within this region has generally been positive. About the only criticisms have focused on problems with mandatory weed control during establishment, and the need for management to maintain habitat quality. Iowa, Illinois, North Dakota and Minnesota have had increases in ringnecked pheasant. In North Dakota, ring-necked pheasant harvest is now the highest since the early 1960's, and waterfowl nesting success has increased up to 56%. In Wisconsin, CRP immensely benefitted 12 non-game bird species restricted to rare or threatened habitat. Kansas has not seen the dramatic increases in game birds that some other states have experienced, due partially to untimely weather events. However, about half of the respondents to a Kansas survey (Diebel, et al., 1993) reported increases in deer, pheasant, quail, and coyotes.

**West:**

Benefits to white-tailed deer, mule deer, pronghorn, and elk were provided by CRP. In some states, response for avian species was positive but in Colorado, research showed no increases in passerine birds or upland game birds. In Colorado it is believed extensive spraying for Russian wheat aphids has offset any benefits of CRP for birds.

## **SUCCESS OF WILDLIFE HABITAT**

Factors influencing the success of CRP in providing wildlife habitat can generally be broken into two broad categories: biological and administrative.

## **Biological**

Biological considerations involve the type of vegetation planted, primarily either native or introduced grasses. About 85% of the CRP land in Kansas was planted to native grass mixtures. Nationally, only 23.1% was planted to native grass and 58.5% was planted to introduced grasses. Most biologists agree that native grasses provide better habitat than introduced grasses, particularly for grassland-nesting songbirds, game birds, and small mammals.

Native grass mixtures provide structural and species diversity within a CRP field and thus improve habitat quality. Legumes or even broadleaf annuals provide the food sources for insects that are critical for chicks. These "weeds" are relatively open at ground level, yet provide overhead cover from the weather and avian predators.

Cool-season grasses develop early in the growing season, attracting grassland-nesting birds whose nests and broods are subsequently destroyed when mowing is conducted for weed control. Fescue is particularly a poor choice for wildlife habitat because it becomes too dense 1 to 3 years after planting for species such as bobwhite quail.

Weed control on CRP lands is a national issue. Mowing during the prime reproductive period for ground-nesting birds results in nest destruction and mortality of both hens and broods. Also the elimination of annual species of vegetation "weeds" greatly reduces the value of CRP fields to wildlife. Control of "weedy" vegetation should be limited to noxious weeds. Spot treatments should be used rather than entire field mowing or spraying.

Haying and grazing has been allowed seven out of eight years. This has resulted in diminished wildlife values in some areas. However, controlled grazing can be beneficial in cases where vegetation becomes too dense. Haying should be prevented during peak nesting seasons. On established stands wildlife agencies recommend that fields be mowed in late winter or early spring, before April 10th or after July 15th. Mow vegetation no shorter than 6 inches.

Management of CRP grasslands is necessary to maintain value of wildlife habitat. Accumulation of vegetation litter and dense vegetation decrease the quality of CRP for upland-nesting birds. Controlled burning, grazing, or light disking can be used to maintain or enhance CRP for most wildlife species. Annual removal of vegetation is not recommended.

## **Administrative**

Administrative conditions such as interagency coordination can also impact the value of CRP to wildlife. In states where agencies worked together, benefits to wildlife have been much greater. However, in some states county ASCS committees were too restrictive in which conservation practices could be implemented and how CRP lands should be managed. Some ASCS committees resisted endorsement of management techniques intended to improve or maintain wildlife habitat quality.

There could have been better training of resource professionals on various options concerning wildlife. Information on habitat and wildlife management concepts would have helped.

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## COSTS AND BENEFITS

A General Accounting Office (GAO) report in March of 1993 said that the CRP program was too costly (GAO, 1993). USDA will spend about \$19.2 billion from 1987 to 2003 to remove 36.5 million acres of cropland from production. The report said that although the program was achieving substantial reductions in soil erosion, it could be less expensive and more effective. Why should I be concerned? Since it is almost universally agreed among wildlife managers that CRP has benefitted wildlife, it is in our best interests to see some type of a land retirement program continued. The \$2 billion annual cost of the CRP program is substantial, but to put this into perspective, this is the price of just 1 B-2 bomber.

Many believe the GAO report was incomplete. GAO is in the process of completing a more detailed cost/benefit analysis of CRP. However some information for the state of North Dakota may be applicable to Kansas and shows a positive impact for CRP without including natural resource benefits (Table 1).

One can get into trouble extrapolating other states information to Kansas conditions, but the data is similar for Kansas. GAO did not look at all possible costs and benefits and ignored those benefits that are difficult to quantify. Overall the numbers are not important. What is important is the savings of \$42,319,450 incurred with CRP.

Wildlife is important to our society. Wildlife adds recreation value to our society (Table 2). The National Survey of Fishing, Hunting, and Wildlife Associated Recreation is designed to gather information about participation in these activities. This survey is conducted every five years by the U. S. Fish and Wildlife Service. It gathers information on the number of fishermen and hunters as well as how often

**Table 1. A summary of the CRP benefits for North Dakota.**

	<b>WITHOUT CRP</b>	<b>WITH CRP</b>
Wheat deficiency payment	\$389,305,711	\$310,586,969
Barley deficiency payment	83,724,818	61,493,015
Corn deficiency payment	28,221,043	19,831,081
Oats deficiency payment	12,600,712	7,586,876
Reserve storage payments	2,517,139	2,302,000
Disaster payments	9,730,388	8,714,447
Wheat export enhancement	145,111,688	134,624,256
Feed grain export enhancement	22,476,662	19,160,941
Loan deficiency payment	24,609,600	22,786,661
ACP	3,641,811	3,372,047
CRP	N/A	113,121,829
<b>TOTALS</b>	<b>\$721,899,572</b>	<b>\$703,580,122</b>
Natural resource benefits of CRP in North Dakota		<b>(\$24,000,000)</b>
Total Cost of CRP with Natural resource benefits subtracted		<b>\$679,580,122</b>



**Table 2.** Estimates of the value of wildlife and recreation.

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fishing.....	\$ 17.8 billion
hunters.....	10.1
nonconsumptive..	14.3 (feeding, photos and observing)
Total	\$ 42.2

---

they participate and how much they spend. People who observe, photograph, or feed wildlife are also included.

### **SUGGESTIONS FOR FUTURE**

Now that some contracts are about to expire, what does the wildlife community recommend for the future of CRP?

Discussions about CRP must include the broader picture of the impact that all federal policy has on natural systems. Some general suggestions for the 1995 Farm Bill which will impact the future of CRP land are appropriate.

There is far more land being farmed than is necessary. Currently there are almost 100 million acres of cropland not needed for crop production in the United States. In general, a shift in land retirement programs from short-term easements (annual set-asides) to long-term easements (CRP) could improve the farmland environment, including its wildlife populations. Annual set-asides (20 million acres) cost the taxpayer \$17 billion in FY 1993; the CRP (36.5 million acres) cost less than \$2 billion. Annual set-aside lands are untargeted, and provide few environmental benefits. CRP could be targeted to high-priority environmentally sensitive areas. (McKenzie, 1993)

Use a multi-year (3-5 year) set-aside with mandatory cover requirements for emergency forage reserve.

Expand the use of easements for protecting wetlands, native grasslands, riparian areas, highly erodible areas, and other critical habitats. Easements should not eliminate income base from eased land.

Strengthen regulatory mechanisms in conservation compliance, Sodbuster and Swampbuster. Encourage general environmental responsibility to curb soil erosion, and improve water and air quality, improve plant and animal conditions. Financial incentives can be used but must reinforced with penalties.

Activate the State Technical Committees as specified in the last farm bill. These state committees are capable of developing and implementing more comprehensive natural resource programs. Also, organize and implement

County Technical Committees to develop local programs within the state program.

CRP should be continued but it should have some important changes. The program should be broadened to include all environmentally sensitive areas, not just highly erodible land. Target the acreage to offer extended contracts to environmentally sensitive lands. Lands such as wetlands, riparian areas, and old growth forests could be considered. Improve vegetative diversity in order to increase wildlife benefits on new plantings. Reduce reliance on CRP to provide forage during emergencies. Encourage controlled management of CRP tracts to achieve stated wildlife habitat objectives. Future enrollments should include an additional incentive to allow voluntary participation in a recreational access program. Allow partial field enrollments. Enrollment of small portions of a field in CRP for uses such as grass waterways, contour strips, or field windbreaks extends benefits and is cost effective.

Last, if CRP land is farmed again:

Do not allow cost-share funds for conservation practices.

Encourage the use of contour grass buffer strips in lieu of terraces.

Allow turn row strips left in grass to be utilized for set-aside.

Hold conversion of highly erodible CRP acres to the level of conservation compliance originally intended to achieve "T", not the current standard of "significant level of erosion reduction."

For lands left in grass for grazing, strongly encourage "proper grazing use."

## FINAL ASSESSMENT

Has CRP been all it could have been? From the wildlife standpoint the answer is clearly NO! Has CRP been beneficial to wildlife? The answer is clearly YES! Over 50% of the turkey nests found in a study in southwest Kansas occurred in CRP fields. CRP in Kansas has been a buffer against what would have probably been major declines in some wildlife species due to weather. Instead of declining pheasant numbers, CRP has helped pheasants remain fairly stable during drought-ridden years. Additional research is ongoing to identify which seasonal requirements of pheasant are provided by CRP land in Kansas, Nebraska, and South Dakota. CRP does provide a better nesting habitat for many songbirds such as eastern meadowlarks, savannah sparrows, bobolinks, and dickcissels. Waterfowl nest success increases up to 23% in CRP fields. Although the highest priority of CRP was not to improve wildlife habitat, positive environmental benefits including increased wildlife populations have occurred.

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## **CRP AND WATER QUALITY CONSIDERATIONS:STATEWIDE**

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### **BACKGROUND**

In 1985, Congress passed the Food Security Act (FSA) to be overseen by the USDA-SCS. This act provided that all producers or landowners receiving federal subsidies have a "conservation or soil erosion control" plan in place by 1995. A part of this act was the establishment of the Conservation Reserve Program (CRP). This program was developed to allow farmlands to regain their productivity by reducing their erosion and increasing organic matter and fertility (temporarily taking them out of production). Eligibility was determined by the erosive tendencies of the land according to guidelines set by USDA-SCS. Contracts were signed which allowed a producer or landowner to be paid for planting eligible acreage to grass (brome, fescue or native depending on region) protected by a cover crop. These agreements also incorporated grass use restrictions (except for emergency conditions), weed control, and other maintenance measures.

### **WATER QUALITY CONSIDERATIONS OF CRP FIELDS**

Water quality (and quantity) has become a key issue in the stewardship of our natural resources and human health. Chronic illnesses and diseases affecting humans and animals, increased costs in water treatment, costs of new water supply development, and an overall negative effect on production and recreational uses are all associated with a lowering of our water quality. There are several environmental and natural resource benefits from CRP, including soil conservation, water quality and wildlife habitat improvement. The discussion below attempts to describe water quality benefits by identifying contaminants associated with CRP fields and ways they can be prevented from leaving the field or entering the water resource.

Unfortunately, there appears to be little research or demonstration to show the water quality benefits of CRP in Kansas. Apparently, most CRP fields are located on uplands and away from larger rivers and streams making them less likely to have a monitoring station nearby. Special studies requiring designed monitoring are lacking. However, it is not unreasonable to assume some CRP fields are near tributaries or smaller intermittent creeks that flow seasonally during wet times or runoff events. Utilizing KDHE water quality data to show specific trends might be difficult because of the little time acreages have been in full grass cover. Also, monitoring stations will probably have more contributions from non-CRP than CRP fields because of ineligibility of bottomlands.

#### **Assumed Water Quality Benefits From Present CRP Fields**

Presently, CRP fields are still unused but maintained (except for emergency conditions). In this state of idleness, grassed fields are recognized as sufficiently



protected from erosion because of their ground cover and extensive root systems. There are also studies showing the filtering capabilities of grassed filters and buffer strips. Generally, watersheds with a grassland drainage will yield better water quality to the receiving lake than cropland drainage. Reduced runoff and increased infiltration will be significant factors as well. Leaching ("the loss of water-carried substances to groundwater") is not usually a problem because roots take up the nutrients before they reach groundwater. The size of the field will play a role in how much a CRP field can benefit water quality.

The reduction of crop-applied chemicals such as atrazine and metolachlor should be recognized. Usually, weed control is limited to Banvel and Ally for post-emergence weeds and Tordon 22K and/or 2,4D formulations for spot spraying. All of these are subject to leaching and runoff (Ney, 1990). They can be broken down by natural processes. Proper application and handling can help protect water quality. Mowing and burning are commonly used for weed control as well.

Nitrogen, phosphorus and soil sediments are substances found in nature. Erosion itself naturally occurs over time. However, accelerated erosion can impair waters if it results in a concentration of substances that reduces the usability of the water resources (drinking water supply lakes for example). There are some parts of the state where the soil is naturally high in nutrients before soil treatment. Therefore, controlling or preventing soil erosion helps natural soil nutrients stay in place through soil loss reduction. Also phosphorus and nitrogen are not applied to native grasses in most of the state and therefore not lost through runoff. Properly applied nutrients (generally tame grass stands) are used by plants before it is lost through leaching and/or runoff. The majority of native CRP grassland requires no nutrient application.

### **Potential CRP Uses and Water Quality**

Several future uses of CRP have been recognized including, haying, grazing or small grain or row crop. Any of these may include the use of fertilizer and pesticides. Field size may or may not be a deciding factor in pollution potential. With all potential pollutant sources, runoff from many small fields may have the same impact on an aquatic system as runoff from a single larger field. Proximity to the water resource also plays a role because of the ability or inability of adjacent land uses to remove pollutants. For example, depending on slope, if the CRP land is upland its runoff may have more chances to be filtered, diluted or neutralized before making its way to larger streams.

### **Haying**

Haying is probably the least likely CRP use to contribute to water quality impairments depending on the type of grasses planted. Native grasses should be hayed at the time of year which allows for production without diminishing its sustainability. Proper fertilizer application to brome or fescue (and some native in southeast Kansas) should be done according to soil test results. Weed control may be necessary. If chemicals are used, they should be properly applied according to the label. Areas where equipment traffic is heavy should be limited in order to reduce the possibility for ground cover reduction and increased erosion potential, especially on long or steep slopes. Prescribed burning is a tool which can be used to stimulate grass production and reduce weed competition and the need for herbicides. If

possible, areas adjacent to stream banks should be hayed or mowed to maintain their filtering capacity. Tame grasses can more efficiently filter nutrients if they are periodically harvested. This will result in increased vegetative production, which utilizes more nutrients.

### **Grazing**

Where grazing occurs, suspended solids and sediments, nitrogen, phosphorus, bacteria, and pesticides may be found. Using proper grazing management systems and strategies for maintaining good ground cover, root strength and diverse desirable forage is important. Manure management, using water sources other than streams, and controlling the amount time livestock spend in congregating areas can help reduce water pollution problems. Applying pesticides properly, using effective biological controls, and prescribed burning may be keys to environmentally sound weed control depending on circumstances.

### **Crop Production**

Conversion to cropland is the most likely use to have the potential to impair water quality. KDHE is not against this conversion. KDHE does encourage the "no net pollutant gain" aspect for converted fields. This would require the field to limit discharge to the amount of pollutant discharged from CRP grassland. For example, if soil loss was calculated at .5 tons/acre/year for a native grass CRP field, that should be the ultimate goal of the planner or operator when the conversion takes place. Although the determination of "T" was established for eligibility of fields into CRP, a need for more soil loss reduction measures may be indicated. This is especially significant in areas selected for water quality protection and nonpoint source pollution control plans or programs (multiple use public water supply water resources for example).

To effectively maintain pollutant discharge at the CRP level, producers can use one or more of the following:

- residue management (reduced or modified tillage practices).
- waterways
- terraces
- sediment detention ponds
- wetland re-establishment
- filter areas
- natural buffering systems

Designed native grass strips appear a good option because a good vigorous stand of grass is already established. The operator plans where he will plow and where he will leave the strips on contours and in draws. Even in areas where prescribed burning is locally undesirable, the relatively narrow strip and lack of continuous fuel may make prescribed burning of native grass strips a more viable option. They could also be hayed. All of these best management practice system options need to be maintained regularly and occasionally evaluated for their performance.

In areas with shallow groundwater sources, practices which allow for rapid infiltration should be combined with non chemical or least toxic alternatives in order to prevent groundwater contamination.

Currently, research is beginning to look at many of the practices above for their effectiveness in water quality protection.

Another consideration is the overall effect of runoff reduction and infiltration in CRP fields. This can lead to increased river and creek baseflow (without runoff) and reduce the "peak flow" conditions during runoff according the field's proximity to a water course.

## **CONSIDERATIONS FOR WIND EROSION**

Wind erosion in the western third of the state is recognized in the erosion control and conservation plan formula. Wind can also increase the erosiveness from precipitation by loosening particles and changing soil structure. Now there is evidence that dust particles and associated pollutants (fugitive dust) can be found in precipitation (atmospheric deposition). For example, atrazine has been found in streams miles away from treated cropland. Atrazine breaks down through natural processes involving algae and sunlight suggesting the atrazine was not from upstream sources. Therefore, CRP fields maintained in grass can prevent pollutants from becoming air borne. Also, water conservation is improved by supplying adequate ground cover and reducing the possible need for irrigation.

## **THE IMPORTANCE OF CRP IN WATER QUALITY PROTECTION**

As illustrated earlier, there is a need for CRP to be evaluated in terms of being a pollution control measure. Studies should be designed utilizing a paired watershed approach. Each field being in its own watershed and the sampling design would be applicable to the site by collecting no other runoff contributions then CRP. It is difficult to document statistically the improvement of water quality through CRP implementation, it appears reasonable that properly managed CRP fields left in grass are water quality protection measures. In counties or areas where a Nonpoint Source Pollution Management Plan is developed to protect a water supply or water resources, pollutant levels from converted croplands need to be maintained at the level of the CRP state. If not, the water quality of the state and all the efforts that provide for the protection and restoration of water for its life sustaining and diverse uses could be in jeopardy.

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## USING CRP LAND FOR GRAZING, HAY, OR BIOMASS

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What should be done with CRP land? The two basic choices are to leave CRP acres in permanent cover or return them to cropland. The relative demands and prices for wheat, feed grains, and cattle will be important factors making this choice.

If the land is left in permanent cover, there is another question to answer. Will the land be used for grazing, haying, or biomass production?

To answer these fundamental questions, two factors must be considered: 1) the existing land uses within the operation, and 2) the capital and labor resources available for any future option. Specifically, for each option being considered landowners must ask:

What investments are needed?

How much debt will be incurred?

What are the expected annual cash outflows per acre?

What are the expected annual cash inflows per acre?

### Survey Results

A recent survey by Diebel, *et. al.* (1993) of contract holders in Kansas reveals how important it is to develop a system for answering these questions. A large percentage of Kansas contract holders (36.6 percent) have either no plans or are uncertain as to what to do with the CRP land after the contracts expire. About 54 percent of the survey respondents indicated that they will keep at least some of the CRP acres in grass for either livestock grazing or hay production. About 23 percent of the respondents indicated that they plan to keep at least some of the CRP acres in grass for erosion control. Other respondents indicated that they plan to keep the CRP acres in grass and/or trees for wildlife habitat (10.2 percent), sell the land (2.6 percent), or keep in trees (2.3 percent).

### Beginning the Planning Process

Contract holders should begin the planning process by deciding on a goal. An example of a goal might be "to assess the production role of CRP land within current production enterprises." This is a subjective decision. The remaining steps in the decision-making process require objective information, including hard data (such as a current equipment inventory) and projections (such as the future price of hay). By analyzing this objective information, an unbiased, rational decision can be made.



## **Inventory and Evaluate the Resources**

After deciding on the goal, the next step is to inventory the available resources. Land (both CRP and that being farmed or grazed), capital, and labor resources need to be included.

Each unit (field or part of a field) should be evaluated by considering the factors in Table 1 in the paper entitled 'The CRP Decision Process' later in this publication. If haying, grazing, and a cropping system are each being considered, a separate evaluation would be needed for each potential use. Different conditions will exist under each use.

The capital resource evaluation must include future income, investment needs, and credit availability to meet the costs anticipated for each option. The labor resource must be evaluated based on the anticipated availability of labor, both family and hired.

## **Developing a Management Plan**

Once the resources are inventoried and evaluated, the next consideration is the operational and economic feasibility of each potential use. The following is a brief discussion of the suggested procedure.

### **What to Include**

A reasonably detailed management plan should be developed for each potential use. This plan should include what is going to be done, the conservation practices needed, costs of investments to implement the practices, and a timetable for putting the land into its intended use. Once these plans are developed, the economic feasibility of each option can be analyzed.

## **The Permanent Cover Option**

CRP land left in permanent cover can be used for grazing, haying, or biomass production. The estimated hay production potential and carrying capacities will be needed in order to evaluate the haying and grazing options. These estimates should be available by late 1994 for many areas of the state. The criteria needed to evaluate the biomass option are discussed later in this paper.

If land is left in permanent cover, contract holders may face a decline in the market value of the CRP tract. This decrease in land value may affect the contract holder's net worth, credit worthiness, and, ultimately, the amount of money available for new investments.

Investments may be needed to make the land suitable for haying or grazing. Some contract holders already have the necessary equipment and improvements on their CRP land. According to Diebel, *et. al.* (1993), 31.7 percent of the respondents currently had fences on their CRP land. Another 15.5 percent of the respondents indicated that they had at least one livestock watering source on their CRP land. But only 5 percent of the respondents currently had livestock handling facilities on their CRP land.

**Haying Considerations** Hay has traditionally been used either directly in a livestock enterprise or sold as a cash crop. In considering the haying option, the following questions should be asked:

What is the long-term average production and quality of the hay that can be produced?

What is the market potential for the hay produced, the average price currently being paid, and the range of prices that have been paid?

What equipment will have to be purchased (or leased) to produce, harvest, and handle the hay?

What will be the production costs to produce, harvest, and handle the hay?

Long-term production averages are not available in many areas, although current research efforts are underway to develop reasonable estimates. Forage productivity can be increased on CRP land by mowing or burning the area once every 2-3 years while the contract is in force. This will improve and/or maintain the highest productivity levels possible. Mowing and burning can also improve the quality of the forage.

In determining the market potential, consider current market conditions, local uses and needs, and transportation costs. In many cases, the local market may be small because of ample production. In those instances, transportation costs may become a factor. In other areas, certain kinds of hay may be unavailable, but have a high potential demand. In those instances, market development costs (such as advertising and promotion) may become a factor.

Hay equipment must be able to package the hay in a way that is acceptable to its market. New or used equipment may have to be purchased.

Once the investment costs are known, they should be annualized and added to hay production budget projections. Cash income for this option would come from the sale of hay or livestock, depending on whether the hay will be sold or used on-site. Cash outflows would include annualized investment costs and annual production costs.

**Biomass considerations** The term biomass refers to a broad range of biological materials that can be used to generate energy. Renewable sources of energy through biomass have recently become a reality through the development of biomass conversion techniques; high-yielding biomass crops; and livestock breeds with more efficient feed conversion qualities. Public utilities, private power companies, and the paper industry are interested in applying new biomass conversion technologies. Using biomass alone or together with traditional fuels in existing facilities can reduce emissions of gasses that are damaging to the atmosphere or human health.

Biomass production can also benefit agriculture. Land, such as CRP acres, is available for biomass production. The production of biomass crops is an alternative to commodity crops and may be able to stabilize agricultural income. Biomass production may also help reduce soil erosion and water pollution. It can provide habitat areas for wildlife, increase income and job opportunities in rural areas, and provide a more sustainable agricultural resource base.

Biomass can be used for energy in the solid form or converted to liquid forms, such as biocrude or ethanol. The introduction of efficient boilers and the possibility of gasification of biomass has brought new opportunities for energy crops.

Various herbaceous and woody species have been identified as possible biomass crops. Herbaceous energy crops are perennials, with the exception of a few

annual crops. In Kansas, during 1994, a team of private businesses, utilities, and state and federal agencies will pursue market possibilities for biomass. The primary plant species to be studied are sorghum, switchgrass, and short-rotation woody crops such as black locust, silver maple, and eastern cottonwood. Other types of possible biomass to be studied include smooth brome grass, little bluestem, Indiangrass, eastern gamagrass, tall fescue, prairie hay, urban wood wastes, and wood waste from primary and secondary wood industries.

Currently there are no commercial plantings of herbaceous or woody crops strictly for the production of electricity in the U.S. Supply and demand issues, bulkiness, and transportation costs all affect the market potential for these energy crops.

**Grazing considerations** In considering the grazing option, the following questions should be asked:

- What is the long-term carrying capacity and forage quality on the CRP land?
- What investments and equipment will have to be purchased (or leased) to produce and graze the forage?
- What kind and class of livestock will be grazed on the land?
- What will be the production costs to produce and graze the forage?

**Carrying Capacity** Long-term data for carrying capacity and forage quality are not generally available. However, estimates can be made by using information available for similar land that is grazed. The following are examples:

For introduced grasses (CP1), Pasture and Hayland Management guidelines are available from SCS. In addition to carrying capacity information, management and other information is included. Research data from similar soils and fertility rates can be used as estimates.

For native grass mixtures (CP2), Range Site Descriptions are available from SCS. The descriptions include complete information on the production and management of range sites. The carrying capacity information given can be modified to obtain beginning stocking rates.

**Investments and Equipment** The major concern will be the need to invest in equipment and improvements to make the land usable for grazing. Potential major investments include livestock water and perimeter fencing.

Contract holders surveyed by Diebel, *et. al.* (1993) were asked to indicate whether certain improvements were needed before the CRP land could be grazed. Only 14 percent of the respondents indicated that no improvements were needed. About 57 percent of the respondents who plan to use at least some of their CRP acres for grazing needed to construct fences. About 12 percent needed livestock handling facilities and 22 percent needed to develop a livestock water source. Almost 34 percent of the respondents indicated that they were not sure whether improvements would be needed to graze the land.

The livestock water source is the major consideration. Without water, grazing is not feasible. When planning a water development, consider the following:

- Reliability of the water supply during drought
- Cost of developing the source of water
- Placement of the water supply in the grazing unit
- Amount and cost of routine maintenance
- Life span of the development

Select the source that will have the longest life span with the lowest maintenance costs in relation to the development cost.

Perimeter fencing should at least conform to state and local minimum requirements. All fencing should be adequate to reduce the risk and liability that escaped animals represent. A fence that keeps livestock off public roadways has a higher risk exposure than one that is a boundary with a neighbor's crop field. A four-wire barbed wire fence with posts spaced twenty feet apart should be considered a minimum for fences along public roadways.

Investment costs should be annualized over the expected life of the improvements and added to the appropriate budget projections. Cash income for this option would include livestock gains or rental payments. Cash outflows would include annualized investment costs and annual costs of production.

Kind of Livestock Beef cattle and sheep are the traditional animals for grazing. In determining stocking rates (based on the potential carrying capacity), the age, size (weight and body condition), and physiological growth stage must be considered. A cow/calf pair has different forage requirements than stockers or replacement heifers. A 1,000-pound cow weaning a 600-pound calf has a lower forage requirement than a 1,200-pound cow weaning a 500-pound calf. For sheep, four ewes with lambs are generally considered to be equivalent to a cow/calf pair.

**Recreation and Wildlife Income** The haying, biomass, and grazing options all have the potential to generate costs and income from recreational and wildlife enterprises. If these options are considered, the associated cash income and costs of these activities will need to be included in budget projections.

Recreation and wildlife uses often require modification of normal production facilities and practices. Modifications will often require costs, such as special fencing, water developments (or modifications), improvements needed to make the area useable, and liability insurance premiums.

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## USING CRP LAND FOR CROPPING

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In 1995, thousands of Conservation Reserve Program (CRP) acres will no longer be required to be in permanent vegetative cover. Many people would like to see a continuation of the present program, or some variation. But in reality, we will probably see a very large percentage of this land returning to crop production.

Crop bases were retained, so this land can again be included back in to farm programs. Land does not have to be returned to cropland to protect crop bases. For example, the 0/85 program and zero certification program can be used to protect base acres. Contact your local Agricultural Stabilization and Conservation Service (ASCS) office for more specific information.

### Conservation Compliance Requirements

For the land to qualify for CRP much of it had to be classified as highly erodible. Highly erodible land (HEL) has to have a conservation compliance plan implemented by January 1, 1995. CRP land will be no exception. ASCS will require that the plan be implemented before a commodity crop is planted and program benefits are received. The producer needs to work with the local Soil Conservation Service (SCS) representative to develop a plan that not only fits the farming operation, but helps improve the long-term productivity of the fields.

Most CRP fields in Kansas will require substantial amounts of crop residue to control erosion by wind and water. Conservation plans typically require 1200 to 2000 pounds of residue on the soil surface after planting (for water erosion) or, in the case of wind erosion, the same residue requirements will be on the soil surface November through May.

Before making a decision to produce crops and implement a conservation plan on CRP acres, a producer needs to evaluate whether the costs are justified. Many acres were enrolled in the CRP program because the land was not profitable for crop production. Considering the low productivity of the land and the potential cost of installing conservation practices, the producer must determine if cropping all the CRP acres is the best choice.

Cost-share funds may not be available for conservation practices on CRP land. Decisions by state, local, and federal agencies will determine whether or not cost-sharing funds will be provided. A terrace system will average around \$150/acre to install, or an average annual cost of about \$22/acre, which includes depreciation of the system, annual maintenance, fertilization of waterways, inefficiencies of turn rows, etc.

Farming with more crop residue may require changes in the farming system. Older equipment is usually not designed to handle large amounts of residue and might need extensive conversions or replacement. Weed control with tillage will be limited and the producer may have to use chemical weed control. Crop rotations should be implemented to maintain high residue levels and control weeds and diseases.

Existing CRP grass stands can be used to reduce costs. By maintaining small areas in grass the farmer can save some money in the construction of terraces, waterways, and filter strips for water quality. Fields can be better aligned to eliminate point rows and odd areas that are difficult and expensive to farm. Keeping steeper slopes in grass could minimize erosion, reducing maintenance costs and wear and tear of equipment.

Grass buffer strips can be used in place of terraces, but are not recommended on slopes greater than four percent. Stripcropping is an effective way to maintain the organic matter built up through the CRP contract period. Maintaining established grass strips from CRP fields not only reduces erosion, but also maintains more organic matter. It helps retain soil moisture, increase infiltration and productivity.

The soils rested under the CRP program will have better tilth, infiltration rate and overall health than soils that have been continuously tilled for several years. The grass cover probably has increased organic matter content in the topsoil. This might result in favorable cropping conditions right after breaking the sod. However tillage breaks organic matter down rapidly and yields will decline. Only high crop residue management systems, such as no-till and ridge-till will be able to maintain high organic matter and higher yields.

### **Crop Production Systems**

Depending on the producer and operation, establishing a no-till system could be the most cost-effective method to return the land back to crop production. There will be less disturbance to the biological communities that were established under CRP, than if tillage is re-introduced to the soil. With no-till, weed seed that may be waiting to sprout will not be exposed to the necessary elements to begin growth. This is a long-term goal of many no-tillers. The native grasses that were seeded have progressively reduced the annual weed populations and it may be possible to keep them from resurfacing as long as the soil is not disturbed by tillage.

Wheat-fallow systems on poorer soils often are difficult to make profitable without government program payments. Wheat uses water inefficiently and the transition to no-till systems for moisture conservation through the fallow period may add chemical costs. Considering the conservation requirements and potential farm program budget cuts, farmers should consider other cropping opportunities. Years of research and on-farm experience indicate that rotations of wheat with a summer crop are more profitable, use water more efficiently and reduce erosion more effectively. Examples of successful rotations are, wheat-sorghum-fallow, wheat-corn-fallow, wheat-sunflower-fallow. Longer rotations, where more crops are planted between fallow years are even more profitable and very viable. No-till systems work best with rotations. No-till is also more efficient at managing soil moisture than tillage other systems.

## THE CRP DECISION PROCESS

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Congress established the Conservation Reserve Program (CRP) in Title XII of the Food Security Act of 1985. The CRP program was established as a voluntary, long-term cropland retirement program to be administered by the United States Department of Agriculture (USDA). The primary goal of the CRP program from 1986 to 1989 was to reduce soil erosion on highly erodible land (Osborn et al., 1992). Other objectives included protecting the long-run productivity of the land, improving water quality, enhancing wildlife, reducing sedimentation, reducing the production of surplus commodities, and providing income support for farmers.

Contract holders enrolled land in CRP for several reasons. According to a survey of Kansas CRP contract holders conducted by Diebel et al. (1993) in the fall of 1992, the two most important reasons for enrolling land in the CRP program were "concern for soil erosion" and "most profitable use of land." Other reasons given for enrolling land included "low risk associated with payments," "provide wildlife habitat," and "easiest way to meet conservation compliance."

The survey also asked contract holders to rank reasons for not enrolling eligible acres in CRP. The two most important reasons given were "crop production was more profitable than receiving CRP payments" and "potential for increased crop prices."

CRP contracts require landowners to establish permanent vegetative cover on the land. In return, USDA has paid annual rental payments and provided cost-share on the establishment of vegetative cover.

The initial enrollment target was set at 40 to 45 million acres. Approximately 35.9 million acres, representing over 356 thousand contracts, were enrolled through the first 11 signups (Osborn et al., 1992). These 11 signups took place from March, 1986 through July, 1991. Much of this acreage was located in the Northern Plains and Southern Plains regions of the country. About 9.6 million CRP acres are enrolled in the Northern Plains and 5.2 million CRP acres are enrolled in the Southern Plains (Osborn et al., 1992). The Northern Plains region includes North Dakota, South Dakota, Nebraska, and Kansas. The Southern Plains region includes Texas and Oklahoma. Kansas ranks third in the number of acres enrolled (2.9 million acres) and second in the number of contracts (30,536 contracts).

Kansas CRP acres are concentrated in the western part of the state. However, the distribution of CRP contracts is relatively uniform across the state. The contracts tend to be large in the western part of the state and smaller in the east.

As September 30, 1995 approaches (the date for the expiration of the first contracts), many people are trying to decide what to do with their CRP land. The bulk of CRP acres in Kansas will be released in 1996 and 1997. Across the U.S. contract release will peak in 1996 while in Kansas it will peak in 1997.

The purpose of this workshop is to provide contract holders with a conceptual framework that can be used to determine how to use their CRP land after the

contracts have expired. The conceptual framework includes a planning procedure to determine the alternative uses of the land and an economic evaluation of the options available to contract holders.

### The Planning Process<sup>1</sup>

When deciding what to do with CRP land, contract holders should consider existing land uses within an operation as well as the capital and labor resources available to support the alternative uses. The planning process (Figure 1) has been used for assessing the potential for management changes for many years. In the case of CRP land, the goal would probably be to assess the role of CRP land for future production. Each step of the process will require the development of information that allows the decision-making process to proceed. When all the information from one step is complete, the next step is begun.

### Resource Inventory

The first step to planning for the future uses of the land under a CRP contract is to inventory the resources that are available to the owner. Land (both CRP and that being farmed or grazed), capital, and labor resources need to be included.

The land evaluation should begin with the CRP land. Each unit (field or part of a field) should be evaluated by considering the factors in Table 1. Each potential use being considered must be evaluated separately, anticipating the conditions that would exist under that use. As an example, if haying, grazing, and a cropping system are being considered, three separate evaluations would be needed.

The capital resource evaluation must take into consideration future income, and the availability of credit to meet the costs anticipated for each option. The labor resource must be evaluated based on the anticipated availability of operator, family, and hired labor.

### Evaluating the Options

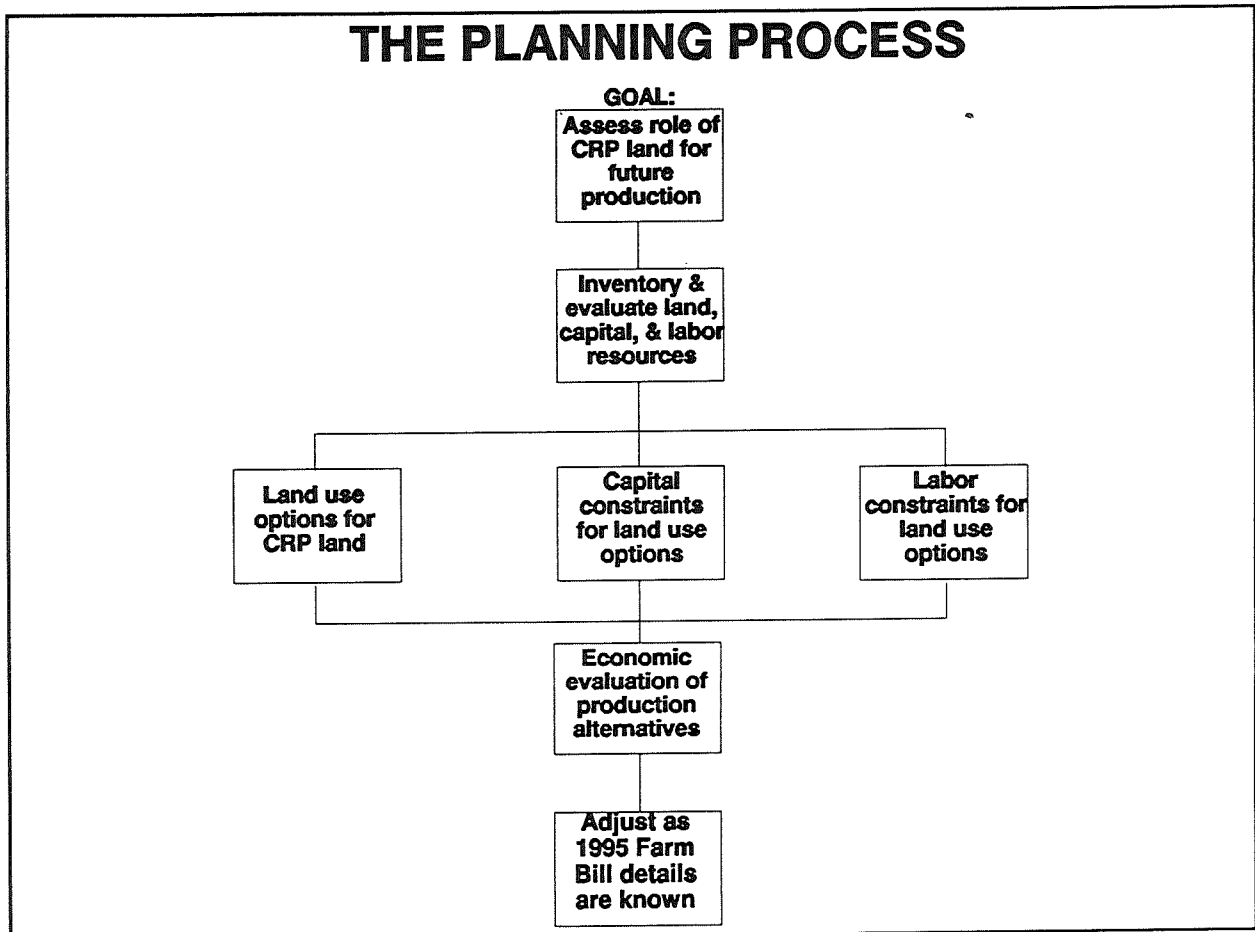
Once the resources are inventoried and evaluated, each potential use of CRP land should be evaluated on the basis of its economic feasibility. The following discussion contains a brief synopsis of the choices available to contract holders.

### The Choices

A large percentage of Kansas contract holders have either no plans or are uncertain as to what to do with the CRP land after the contracts expire. Results from the Kansas survey (Diebel et al., 1993) indicate that 36.6 percent of Kansas contract holders have either no plans or are uncertain. About 54 percent of the survey respondents indicated that they will keep at least some of the CRP acres in grass for

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<sup>1</sup> The authors wish to acknowledge work of Lonnie Schulze, Resource Conservationist, USDA Soil Conservation Service for assisting in the development of the resource evaluation and planning material in a previous paper.



**Figure 1.** The flow chart for the planning process to determine the best potential use for CRP land. (Adapted from SCS material)

either livestock grazing or hay production. About 29 percent of the survey respondents plan to return at least some of their CRP acres to crop production. This 29 percent is broken down as follows: 24 percent plan to produce crops under conservation compliance provisions; and 5 percent plan to produce crops without conservation compliance. About 23 percent of the respondents indicated that they plan to keep at least some of the CRP acres in grass for erosion control. Other respondents indicated that they plan to keep the CRP acres in grass and/or trees for wildlife habitat (10.2 percent), sell the land (2.6 percent), or keep in trees (2.3 percent).

When the CRP contracts expire, contract holders face several options. Contract holders can: (1) graze the land, (2) hay the land, (3) produce crops under conservation compliance provisions, (4) produce crops without conservation compliance, (5) use for wildlife habitat, (6) keep in trees, (7) rent as pasture or hay land, (8) rent as crop land, and (9) sell the land. The 1995 Farm Bill may also allow contract holders to renew or extend their contracts.

Figure 2 gives a conceptual overview of the permanent cover and cropping options available to CRP contract holders. The relative demands and prices for wheat, feed grains, hay, and cattle will be important determinants in the choice between these two options.



**Table 1. An example of the factors to consider in evaluating the potential uses of CRP land. (adapted from SCS material)**

SOIL Resource Consideration		
1. <b>Erosion</b> Sheet and rill Wind Ephemeral gully/ Concentrated flows Classic gully Streambank Irrigation induced Soil mass movement Roadbanks and construction sites Safety	2. <b>Condition</b> Soil tilth Water Infiltration Organic matter Soil Compaction  <u>Soil Contaminants</u> Chemical, salt, etc. Animal wastes & organics	3. <b>Deposition</b> <u>Damage</u> Onsite offsite  <u>Safety</u> Onsite Offsite
WATER Resource Considerations		
1. <b>Quantity</b> <u>Excess amounts</u> Seeps Runoff/flooding Subsurface water Inadequate outlets  <u>Restricted Capacity From Sediments</u> Small water conveyances - onsite Small water conveyances -offsite Water bodies, streams, lakes  <u>Water management</u> Irrigated land Non-irrigated land	2. <b>Quality</b> <u>Groundwater contaminants</u> Pesticides Nutrients and organics Salinity Heavy metals Pathogens Other  <u>Surface water contaminants</u> Pesticides Nutrients and organics Suspended sediments and turbidity Low dissolved oxygen Heavy metals Temperature Pathogens	
AIR Resource Considerations		
1. <b>Quality</b> <u>Sediment and smoke particulate</u> <u>causing problems</u> Safety Machine, vehicle, structure Health Airborne sediment particulates <u>Airborne chemical drift</u> Onsite Offsite Airborne odors	2. <b>Condition</b> Air temperature Air movement Humidity	
PLANT Resource Considerations		
1. <b>Suitability</b> Plants not well adapted Plants suitable	2. <b>Condition</b> <u>Productivity</u> Cropland Hayland and pastureland Rangeland Seeded rangeland Forestland Health and vigor Plant damage by wind erosion	3. <b>Management</b> Establishment, growth, and harvest Nutrient management Pests (brush, weeds, insects, etc.
ANIMAL Resource Considerations		
1. <b>Habitat</b> <u>Domestic animals</u> Food Cover or shelter Quantity and quality of drinking water	<u>Wildlife</u> Food Cover or shelter Quantity and quality of drinking water	2. <b>Management</b> Population/Resource balance Animal health

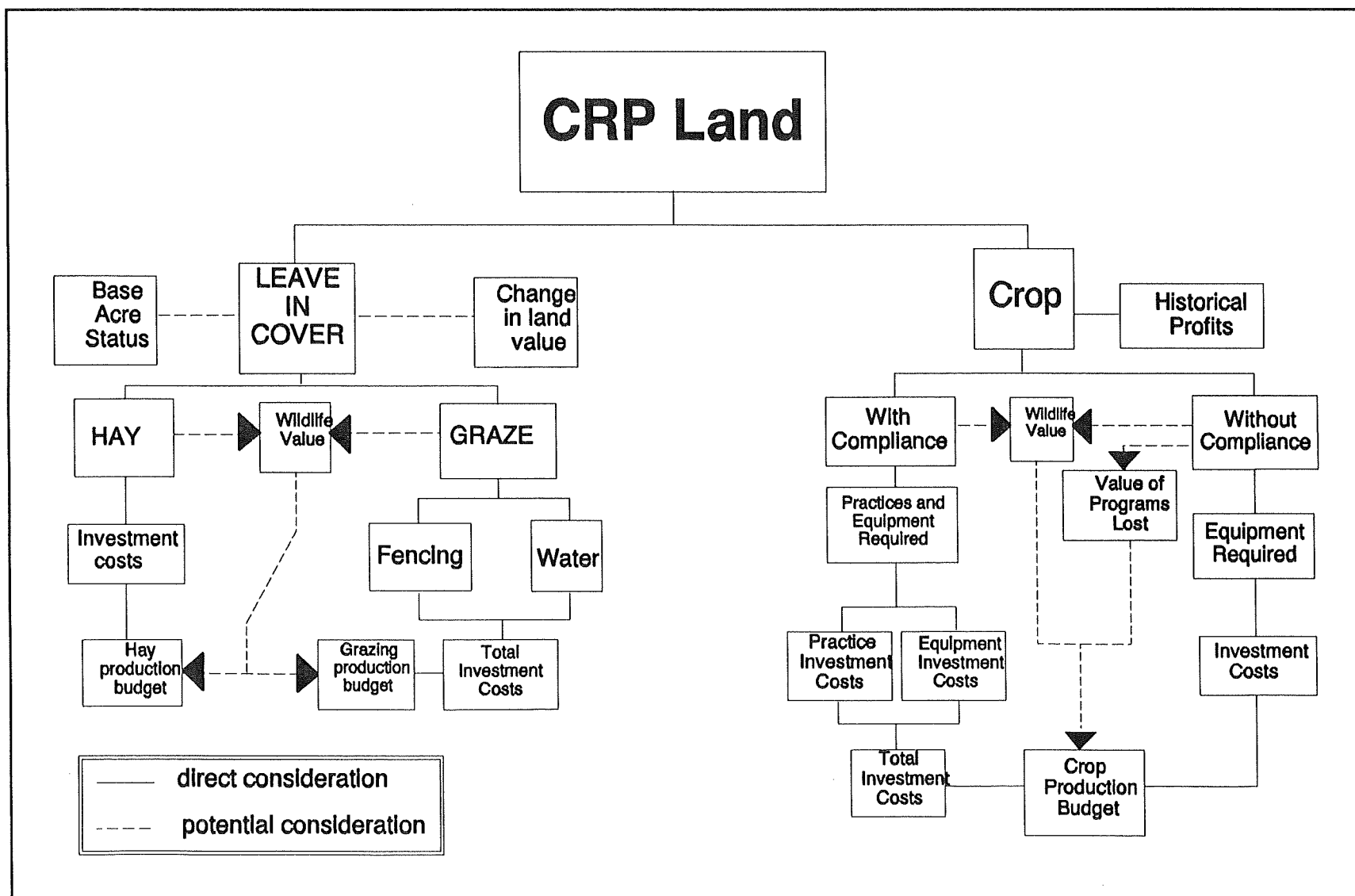


Figure 2. A conceptual decision making flow chart for use by CRP contract holders.

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Contract holders will want to answer several questions before deciding what they are going to do with their CRP land. Specifically, for each option being considered landowners must ask:

- What investments are needed?
- How much debt will be incurred?
- What are the expected annual cash outflows per acre?
- What are the expected annual cash inflows per acre?

The information needed to make these decisions include: 1) cropping history; 2) historical costs and returns; 3) government program history; 4) investment costs; 5) future costs of production; and 6) future expected returns.

As indicated above, historical profitability is an important factor to consider when evaluating CRP options. Specific questions that need to be addressed include: (1) What were the annual returns for the 10 years prior to enrollment in CRP? and (2) Were government farm payments needed for the tract to be profitable? If historical returns were small or negative, there would appear to be little value, except for possible government payments, in returning the land to cropping.

### Calculating Investment Costs

Several of the CRP options available to contract holders will involve making purchases of capital assets such as machinery and fencing. Unlike feed or fertilizer, capital assets typically have a useful life of several years. Because of this, the costs associated with the ownership of capital assets should be spread over several years. The annual cost of owning a capital asset can be computed using the amortization formula. The amortization formula can be expressed as follows:

$$(1) A = \{ (r \times (1 + r)^n) \div ((1 + r)^n - 1) \} \times P$$

where             $r$     = the interest rate,  
                      $n$     = the useful life,  
                      $P$     = the purchase price of the asset  
                      $A$     = the annualized cost of owning the asset.

The annualized cost can also be calculated using amortization tables. For example, KSU Farm Management Guide MF-489 (Langemeier, 1990) contains an amortization table for assets with a useful life of 3 to 40 years, and interest rates of 8 to 20 percent. Also, most spreadsheets and calculators contain formulas to compute annualized costs.

An example of an annualized cost computation is as follows. Let's assume that \$25,000 worth of additional equipment is needed to farm an additional 160 acres of CRP ground in 1996. This equipment has a expected useful life of 10 years, and a zero salvage value. The interest rate is 9 percent. With these assumptions the annualized cost of owning this asset would be \$3895.50. If we had 160 acres of CRP, the annualized cost per acre would be \$3895.50 ÷ 160 or \$24.35. This \$24.35 per acre would need to be incorporated into budget projections.

### The Permanent Cover Option

CRP land left in cover can be used for haying or grazing. Estimated hay production and carrying capacities will need to be known to fully evaluate the haying and grazing options. In addition, producers who are seriously considering the haying and grazing options must determine whether investments are needed to hay or graze the land.

Investment costs for the hay production option would include the costs of any new haying equipment needed. Once the investment costs are known, they should be annualized and added to hay production budget projections. Cash income for this option would come from the sale of hay or the value of hay fed. Cash outflows would include annualized investment costs and annual costs of production.

Table 2 contains an example of a native hay budget. Custom rates obtained from the Kansas Agricultural Statistical Service (Kansas Custom Rates, 1992) are used to estimate the costs in the budget. A native hay price of \$45 per ton is used in the table. Because custom rates are used the only fixed cost item in the budget is real estate taxes. Custom rates include operating as well as fixed ownership costs. Swathing costs are assumed to be \$7 per acre. Baling and hauling costs are typically expressed on a per bale or per ton basis. The budget uses rates of \$6.50 for baling and \$2.75 for hauling large round bales. Large round bales are assumed to weigh 1500 pounds.

Yield per acre is the only item that varies across the middle three columns of Table 2. Net return to land and management on a per acre basis ranges from \$8 for yields of 0.60 ton to \$20 for yields of 1.0 ton. Potential hay yields from CRP land are more likely to be toward the lower end of the range in Table 2.

Potential native hay returns are sensitive to price and yield assumptions. Native hay prices vary substantially from year to year, and across geographic location. In addition, the quality of hay can have a large impact on the price. Table 3 presents the sensitivity of native hay returns per acre to changes in native hay prices and yields.

Contract holders considering the grazing option need to assess the cost of any improvements or investments needed. Contract holders surveyed by Diebel et al. (1993) were asked to indicate whether certain improvements were needed before the CRP land could be grazed. Only 14 percent of the respondents indicated that no

**Table 3.** Sensitivity of native hay returns to yield and price assumptions.

Yield	Price per ton				
	\$35	\$45	\$55	\$65	\$75
0.4	(\$ 5)	(\$ 1)	\$ 3	\$ 7	\$ 11
0.6	2	8	14	20	26
0.8	9	17	25	33	41
1.0	16	26	36	46	56
1.2	23	35	47	59	71



**Table 2. An example of a native hay production budget.**

	Yield in Tons Per Acre			
	0.60	0.75	1.00	Your
	Ton	Ton	Ton	Farm
A. Hay Sales				
1. Acres	160	160	160	_____
2. Yield Per Acre	0.60	0.75	1.00	_____
3. Expected Market Price	\$45	\$45	\$45	_____
4. Revenue from Hay Sales	\$4,320	\$5,400	\$7,200	_____
B. Variable Costs Per Acre				
5. Swathing	\$7.00	\$7.00	\$7.00	_____
6. Baling	5.25	6.50	8.75	_____
7. Hauling	2.25	2.75	3.75	_____
8. Labor	0.00	0.00	0.00	_____
9. Fertilizer and Lime	0.00	0.00	0.00	_____
10. Herbicide and Insecticide	0.00	0.00	0.00	_____
11. Fuel and Oil	0.00	0.00	0.00	_____
12. Machinery Repairs	0.00	0.00	0.00	_____
13. Miscellaneous	0.00	0.00	0.00	_____
14. Interest on Variable Costs	0.65	0.73	0.88	_____
15. Total Variable Costs	\$15.15	\$16.98	\$20.38	_____
C. Fixed Costs Per Acre				
16. Real Estate Taxes	\$4.25	\$4.25	\$4.25	_____
17. Annualized Machinery Costs	0.00	0.00	0.00	_____
18. Annualized Cost of Terraces	0.00	0.00	0.00	_____
19. Annualized Cost of Waterways	0.00	0.00	0.00	_____
20. Total Fixed Costs	\$4.25	\$4.25	\$4.25	_____
D. Net Return to Land and Management				
21. Net Return for 160 Acres	\$1,216	\$2,003	\$3,260	_____
22. Net Return Per Acre	\$8	\$13	\$20	_____
23. Return on Investment	1.94%	3.12%	5.00%	_____

improvements were needed. About 57 percent of the respondents who plan to use at least some of their CRP acres for grazing needed to construct fences. About 12 percent needed livestock handling facilities and 22 percent needed to develop a livestock water source. Almost 34 percent of the respondents indicated that they were not sure whether improvements would be needed to graze the land.

Potential major improvements include fencing and livestock water developments. Potential investments also include equipment and/or buildings needed to graze the land. Potential investment costs will vary substantially among contract holders. Total investments in buildings and equipment for a producer that is starting

a cow-calf operation is estimated to be \$675 per cow in KSU Farm Management Guide MF-266 (Fausett and Langemeier, 1992). In contrast, a contract holder with an existing cow-calf operation may not need to make any investments to graze the land.

Investment and improvement costs should be annualized over their expected life and added to appropriate budget projections. Cash income for this option would include livestock sales or rental payments. Cash outflows would include annualized investment costs and annual costs of production.

A cow-calf budget is used in Table 4 to illustrate the budgeting process for the grazing option. The assumed stocking rate in Table 4 is one cow-calf pair per ten acres. Stocking rates will depend upon many factors including the type of grass planted on the CRP land, cattle type and frame size, and environmental conditions. The assumed calf crop percent, replacement rate, and weaning weights are presented in the "Livestock Sales" section. Calf crop percent is defined as the number of calves weaned divided by the number of cows exposed to the bull.

Cattle prices used in Table 4 represent average prices for the 1988-1992 period. Variable cost information is taken from KSU Farm Management Guide MF-266. Variable costs and gross returns do not vary across the middle three columns. Net returns in Table 4 represent the residual return to land and management. Thus, pasture rent or the opportunity cost associated with owning the pasture is zero in the budget.

Real estate taxes are assumed to be \$3.25 per acre or \$32.50 per cow. Interest on breeding livestock represents the opportunity cost associated with investing money in cows, heifers, and bulls. If a contract holder's money was invested in some asset other than breeding livestock, \$60 in income could be generated per cow with a rate of return on the investment of 9%.

The difference between the middle three columns in the budget relates to the improvements and investments needed. The second column assumes that the contract holder will not need to invest in any improvements or equipment to graze the land. The third column assumes that perimeter fencing is needed to graze the land. Perimeter fencing is assumed to cost \$0.60 per foot (10,560 feet of fence is needed for the 160 acres) and have a useful life of 20 years. Using an interest rate of 9%, the annualized cost of the perimeter fencing is \$694 for the 160 acres or \$43.38 per cow (\$4.34 per acre). The fourth column assumes that in addition to perimeter fencing a \$10,000 investment in equipment is needed before the CRP land can be grazed. The equipment is assumed to have a useful life of 15 years. Using an interest rate of 9%, the annualized cost of the \$10,000 investment in equipment is \$77.50 per cow.

Perimeter fencing costs will vary by the size of the CRP tract. For example, perimeter fencing costs would be only \$21.69 per cow or \$2.17 per acre for a CRP tract of 640 acres. Perimeter fencing costs for an 80-acre CRP tract would be \$65.07 per cow or \$6.51 per acre. High costs of fencing and bulls will likely make it prohibitive to graze relatively small CRP tracts.

Cow-calf returns in Table 4 are sensitive to changes in cattle prices, production efficiency measured as the calf crop percent, and size of the CRP tract. Table 5 presents cow-calf returns per acre for various price and calf crop percentages. Average costs of production are used to develop Tables 4 and 5. A contract holder



**Table 4.** An example of a cow-calf production budget.

	<u>No</u> <u>Investment</u>	<u>Add</u> <u>Fencing</u>	<u>\$ 10,000</u> <u>Investment</u>	<u>Your</u> <u>Farm</u>
<b>A. Livestock Sales</b>				
1. Acres	160	160	160	_____
2. Number of Cows	16	16	16	_____
3. Calf Crop Percent	90%	90%	90%	_____
4. Percent of Heifers Retained	16%	16%	16%	_____
5. Cow Death Loss	2%	2%	2%	_____
6. Steer Sales	7	7	7	_____
7. Heifer Sales	5	5	5	_____
8. Cow Sales	2	2	2	_____
9. Weaning Weight for Steers	560	560	560	_____
10. Weaning Weight for Heifers	540	540	540	_____
11. Weight of Cull Cows	1050	1050	1050	_____
12. Steer Price Per Cwt.	\$94.00	\$94.00	\$94.00	_____
13. Heifer Price Per Cwt.	\$85.75	\$85.75	\$85.75	_____
14. Cull Cow Price Per Cwt.	\$52.50	\$52.50	\$52.50	_____
15. Gross Returns Per Cow	\$448.34	\$448.34	\$448.34	_____
<b>B. Variable Costs Per Cow</b>				
16. Pasture	0.00	0.00	0.00	_____
17. Crop Residue	6.25	6.25	6.25	_____
18. Winter Hay and Forage	98.00	98.00	98.00	_____
19. Protein and Minerals	21.50	21.50	21.50	_____
20. Grain	0.00	0.00	0.00	_____
21. Labor	64.00	64.00	64.00	_____
22. Veterinary, Drugs, and Supplies	12.25	12.25	12.25	_____
23. Marketing Costs	9.35	9.35	9.35	_____
24. Utilities, Fuel, and Oil	15.50	15.50	15.50	_____
25. Building and Equipment Repairs	19.75	19.75	19.75	_____
26. Miscellaneous	8.25	8.25	8.25	_____
27. Interest on Variable Costs	11.47	11.47	11.47	_____
28. Total Variable Costs	\$266.32	\$266.32	\$266.32	_____
<b>C. Fixed Costs Per Cow</b>				
29. Real Estate Taxes	32.50	32.50	32.50	_____
30. Depreciation on Bull	10.00	10.00	10.00	_____
31. Insurance	5.00	5.00	5.00	_____
32. Annualized Investment Costs	0.00	0.00	77.50	_____
33. Annualized Fencing Costs	0.00	43.38	43.38	_____
34. Interest on Breeding Livestock	60.00	60.00	60.00	_____
35. Total Fixed Costs	\$107.50	\$150.88	\$228.38	_____
<b>D. Net Return to Land and Management</b>				
36. Net Return Per Cow	\$75	\$31	(\$46)	_____
37. Net Return Per 160 Acres	\$1,192	\$498	(\$742)	_____
38. Net Return Per Acre	\$7	\$3	(\$5)	_____
39. Return on Investment	3.73%	2.80%	1.44%	_____

**Table 5.** Sensitivity of cow-calf returns per acre to price and calf crop assumptions.

calf crop	Price as a percent of 1988-1992 price				
	90%	95%	100%	105%	110%
86%	\$ 1	\$ 3	\$ 5	\$ 8	\$ 10
88%	2	4	6	9	11
90%	3	5	7	10	12
92%	4	6	8	11	13
94%	5	7	9	12	14

**Note:** Assumes that fencing or other assets purchases are not needed to graze land.

would probably need to have below average costs per cwt. and have a relatively large contiguous CRP tract to make grazing of breeding livestock relatively more attractive than other CRP options.

Both the hay and the graze options may include income from the development of recreation and/or wildlife habitat. If these options are considered, the associated cash income and costs of these activities will need to be included in budget projections.

If land is left in permanent cover, contract holders may face a decline in the value of the CRP tract. This decrease in land value will affect the contract holder's net worth, credit worthiness, and the amount of money available for new investment. These balance-sheet effects should be considered in the decision-making process.

### The Cropping Option

For many CRP contract holders, conservation compliance will be an important consideration. Conservation compliance will more than likely increase investment costs. However, crop producers out of compliance will not be eligible for government program benefits. These benefits include direct government payments, USDA services, FmHA services, and federally subsidized crop insurance.

Contract holders who are considering returning some CRP land to crop production under conservation compliance will need to determine what practices or structures are needed to meet compliance. A large percent of the contract holders surveyed by Diebel et al. (49 percent) did not know what practices or structures were needed to meet government program compliance provisions. Only 22.5 percent of the respondents indicated that investments in conservation practices or structures would not be needed to meet compliance. About 22 percent of the respondents indicated that conservation tillage or residue management would be needed to meet compliance.

Terraces and waterways were needed by 19.6 and 7.5 percent of the contract holders surveyed. Other survey responses included no-till (2.7 percent), crop rotations that include grass or legume pasture (2.7 percent), contours without terraces (2.5 percent), and ridge-till (1.1 percent).

In addition to any new equipment needed to farm additional land, conservation compliance may require conservation practices or investments in conservation structures such as terraces or waterways. Contract holders surveyed by Diebel et al. (1993) were asked to list improvements currently on CRP land. About 51 percent of the survey respondents indicated that they had terraces on at least some of their CRP land. Another 33 percent of the respondents had waterways on their CRP land.

Once investment costs are known, they need to be annualized over their expected life and added to budget projections. Projected cash inflows for this option would include government program benefits and potential crop income. Projected cash outflows would include annualized investment costs and annual costs of production. Wheat and grain sorghum enterprises are used to illustrate the budgeting process for the cropping option below.

#### **Wheat.**

Table 6 presents a wheat budget that includes government program payments. To be eligible for government program payments, CRP land must have a government program base. Approximately three-fourths of the CRP land has a government program base. Base acres can have either a wheat or feed grain base. Table 6 assumes that the CRP land has a wheat base of 160 acres associated with it. The budget also assumes a 15% flex acre and 5% set-aside requirement. In 1993, 15% of the eligible acres were required to be flex acres and there was a 0% set-aside. Producers can plant almost any crop on the flex acres. The budget assumes that wheat is planted on the flex acres. The expected crop price used in Table 6 represents the average price from 1988 to 1992.

KSU Farm Management Guide MF-574 (Warmann and Langemeier, 1992a), Continuous Cropped Winter Wheat in Central Kansas, is used to estimate variable costs for program and flex acres. Machinery investment is assumed to be \$112 per acre or one-half of the investment per acre reported in MF-574. Thus, a contract holder is assumed to need more equipment to farm the additional acres. Machinery is assumed to have a useful life of 10 years. Using an interest rate of 9%, the annualized cost of the machinery investment is \$17.45.

The second and third columns of Table 6 are identical except for the expected wheat yield. Program yield does not vary with annual fluctuations in wheat yield, thus deficiency payments remain the same under the two yield scenarios. The lower yield has a large negative impact on expected revenue from grain sales and expected net returns.

In the fourth column of Table 6 the CRP tract is assumed to need to terraces and waterways to meet compliance. The expected yield and other costs are identical to those in the second column. The investment in waterways is based on 6 acres of waterway constructed at \$500 per acre. The investment in terraces is based on three miles of terraces at \$0.50 per foot. The useful life of the waterways and terraces is assumed to be 10 years. Using a 9% interest rate, the annualized costs for

**Table 6. An example of a wheat production budget with government program payments.**

	Average Yield	Low Yield	With Terraces	Your Farm
<b>A. Grain Sales</b>				
1. Program Acres	160	160	160	_____
2. Percent Flex Acres	15%	15%	15%	_____
3. Percent Set Aside Acres	5%	5%	5%	_____
4. Payment Acres	128	128	128	_____
5. Flex Acres	24	24	24	_____
6. Program Yield Per Acre	35	20	35	_____
7. Flex Yield Per Acre	35	20	35	_____
8. Expected Market Price	\$3.25	\$3.25	\$3.25	_____
9. Expected Flex Crop Price	3.25	3.25	3.25	_____
10. Revenue from Program Crop	14,560	8,320	14,560	_____
11. Revenue from Flex Crop	2,730	1,560	2,730	_____
12. Total Revenue from Grain Sales	\$17,290	\$9,880	\$17,290	_____
<b>B. Deficiency Payments</b>				
13. Permitted Acres	128	128	128	_____
14. Target Price	\$4.00	\$4.00	\$4.00	_____
15. National Average Price	3.25	3.25	3.25	_____
16. Deficiency Payment	0.75	0.75	0.75	_____
17. Program Yield	35	35	35	_____
18. Revenue from Deficiency	\$3,360	\$3,360	\$3,360	_____
<b>C. Variable Costs Per Program Acre</b>				
19. Labor	\$13.60	\$13.60	\$13.60	_____
20. Seed	6.00	6.00	6.00	_____
21. Herbicide and Insecticide	9.75	9.75	9.75	_____
22. Fertilizer and Lime	9.00	9.00	9.00	_____
23. Fuel and Oil	8.20	8.20	8.20	_____
24. Machinery Repairs	12.40	12.40	12.40	_____
25. Custom Hire	0.00	0.00	0.00	_____
26. Miscellaneous	5.00	5.00	5.00	_____
27. Interest on Variable Costs	2.88	2.88	2.88	_____
28. Total Variable Costs	\$66.83	\$66.83	\$66.83	_____
<b>D. Fixed Costs Per Program Acre</b>				
29. Real Estate Taxes	\$5.25	\$5.25	\$5.25	_____
30. Annualized Machinery Costs	17.45	17.45	17.45	_____
31. Annualized Cost of Terraces	0.00	0.00	7.71	_____
32. Annualized Cost of Waterways	0.00	0.00	2.92	_____
33. Total Fixed Costs	\$22.70	\$22.70	\$33.33	_____
<b>E. Costs Per Flex Acre</b>				
34. Total Variable Costs	\$66.83	\$66.83	\$66.83	_____
35. Total Fixed Costs	\$22.70	\$22.70	\$33.33	_____
<b>F. Maintenance of Set-Aside Acres</b>				
36. Set-Aside Acres	8	8	8	_____
37. Total Variable Costs	\$12.00	\$12.00	\$12.00	_____
38. Total Fixed Costs	\$22.70	\$22.70	\$33.33	_____
<b>G. Net Return to Land and Management</b>				
39. Net Return for 160 Acres	\$6,764	(\$646)	\$5,063	_____
40. Net Return Per Acre	\$42	(\$4)	\$32	_____
41. Return on Investment	7.88%	0.61%	6.05%	_____

waterways and terraces are \$2.92 and \$7.71 per acre. The projected net return per acre is \$10.63 lower for the scenario in which terraces and waterways are needed.

Terrace and waterway costs on a per-acre basis will vary depending on the size of CRP tract. Projected costs for a 320-acre CRP tract are \$11.37 per acre. For a 40-acre CRP tract, projected costs per acre are \$9.66.

Table 7 presents the sensitivity of wheat returns within the government program to various price and yield assumptions. At low yields (25 bushels and lower) returns per acre are actually lower at higher prices. When yields are low a higher proportion of income is derived from deficiency payments. Deficiency payments increase as price decreases. In general, using the assumptions in Table 6, net returns per acre are positive as long as yields are above 22 bushels per acre.

**Table 7. Sensitivity of wheat returns per acre to yield and prices assuming government program participation.**

Yield	Price per bushel				
	\$2.75	\$3.00	\$3.25	\$3.50	\$3.75
25	\$ 13	\$ 12	\$ 11	\$ 10	\$ 9
30	27	27	27	27	27
35	40	41	42	44	45
40	53	55	58	60	63
45	66	69	73	77	80

**Note:** Assumes investment in terraces and waterways are not needed.

Producers who choose to be out of compliance will not have to make the investments in conservation practices or structures. However, these producers will also not be eligible for government payments. Comparisons between the "with conservation compliance" and "without conservation compliance" options should be made with these considerations in mind.

Table 8 presents a wheat budget without government program participation. This table uses the same cost, price, and yield assumptions as Table 6. Because of this, the net return per acre for each scenario can be directly compared to that in Table 6. Using a yield of 35 bushels per acre, net returns are \$18 lower than those with government program participation. For the "low yield" scenario, net returns per acre are also \$18 lower.

The sensitivity of wheat returns outside the government program to price and yield assumptions is presented in Table 9. Unless price is above \$3.50, net returns are negative with expected yields of 25 bushels and below. The benefits associated with crop insurance are not included in Tables 6-9. Crop insurance would partially mitigate the low returns associated with low yields. A comparison of Tables 7 and

**Table 8.** An example of a wheat production budget without government program payments.

	<u>Avg. Yield</u>	<u>Low Yield</u>	<u>With Terraces</u>	<u>Your Farm</u>
<b>A. Grain Sales</b>				
1. Acres	160	160	160	_____
2. Yield Per Acre	35	20	35	_____
3. Expected Market Price	\$3.25	\$3.25	\$3.25	_____
4. Revenue from Grain Sales	\$18,200	\$10,400	\$18,200	_____
<b>B. Variable Costs Per Acre</b>				
5. Labor	\$13.60	\$13.60	\$13.60	_____
6. Seed	6.00	6.00	6.00	_____
7. Herbicide and Insecticide	9.75	9.75	9.75	_____
8. Fertilizer and Lime	9.00	9.00	9.00	_____
9. Fuel and Oil	8.20	8.20	8.20	_____
10. Machinery Repairs	12.40	12.40	12.40	_____
11. Drying	0.00	0.00	0.00	_____
12. Miscellaneous	5.00	5.00	5.00	_____
13. Interest on Variable Costs	2.88	2.88	2.88	_____
14. Total Variable Costs	\$66.83	\$66.83	\$66.83	_____
<b>C. Fixed Costs Per Acre</b>				
15. Real Estate Taxes	\$5.25	\$5.25	\$5.25	_____
16. Annualized Machinery Costs	17.45	17.45	17.45	_____
17. Annualized Cost of Terraces	0.00	0.00	7.71	_____
18. Annualized Cost of Waterways	0.00	0.00	2.92	_____
19. Total Fixed Costs	\$22.70	\$22.70	\$33.33	_____
<b>D. Net Return to Land and Management</b>				
20. Net Return for 160 Acres	\$3,876	(\$3,924)	\$2,175	_____
21. Net Return Per Acre	\$24	(\$25)	\$14	_____
22. Return on Investment	5.05%	-2.61%	3.49%	_____

9 indicates that participation in the government program tends to be beneficial for most price and yield scenarios.

#### Grain Sorghum.

Table 10 and Table 11 present grain sorghum budgets with and without participation in the government program. The format for these tables is similar to that for the wheat budgets. In Table 10, a 15% flex acre and a 5% set-aside requirement is assumed. A 160-acre feed grain base is assumed. In addition, flex acres are assumed to be planted to grain sorghum. The expected crop price used in Table 10 and Table 11 represents the average grain sorghum price from 1988 to 1992.

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**Table 9.** Sensitivity of wheat returns per acre to yield and prices assuming no government program participation.

Yield	Price per bushel				
	<u>\$2.75</u>	<u>\$3.00</u>	<u>\$3.25</u>	<u>\$3.50</u>	<u>\$3.75</u>
25	(\$ 21)	(\$ 15)	(\$ 8)	(\$ 2)	\$ 4
30	(7)	0	8	15	23
35	7	15	24	33	42
40	20	30	40	50	60
45	34	45	57	68	79

**Note:** Assumes investments in terraces and waterways are not needed.

KSU Farm Management Guide MF-575 (Warmann and Langemeier, 1992b), Dryland Grain Sorghum in Central Kansas, is used to estimate variable costs for program and flex acres. Machinery investment costs are assumed to be one-half of the machinery investment requirements reported in MF-575, or \$117.50 per acre. The useful life of the machinery is assumed to be 10 years. Using an interest rate of 9%, the annual cost of machinery is \$18.30 per acre.

Using Table 10 and Table 11, net return per acre is about \$20 higher with government program participation and yield per acre of 55 bushels. Under the "low yield" scenario returns per acre are about \$21 higher with government program participation.

Net returns per acre are higher with government program participation for most of the price and yield scenarios reported in Table 12 and Table 13. Given the assumptions in Tables 10-13, in general it will be beneficial for producers to meet compliance and participate in the government program. Once compliance is met, producers can compare potential net returns from participation and non-participation each year.

Any potential recreation and/or wildlife income should be added to budget projections for the cropping options. There also may be expenses associated with the development of recreation or wildlife habitat. These should also be included in budget projections.

Contract holders can plant several other crops besides wheat and grain sorghum on the CRP land once their contracts expire. A budgeting process similar to that for wheat and grain sorghum can be used to evaluate the feasibility of these other crops.

#### Other Options

In addition to haying, grazing, or cropping their CRP land, contract holders may want to consider renting or selling the land. Net returns on a per acre basis should be calculated for these options and compared to potential net returns from haying,

grazing, or cropping. If contract holders rent the ground, they will need to subtract real estate taxes, annualized improvement costs, and any maintenance costs associated with improvements from their rental income.

If the federal government decides to extend or renew CRP contracts, the potential returns from this extension or renewal should be compared to the options discussed above. For many contract holders, extending or renewing CRP contracts would be more attractive than other available options.

### Policy Considerations and Options

The 1995 Farm Bill will be a critical factor that needs to be considered in any decision regarding CRP land. The 1995 Farm Bill is likely to have a large impact on the relative profitability of the various options discussed above. Some of the topics being addressed by certain organizations include:

Cost-sharing on fencing and water development.

Changing the status of BASE ACRES protected by CRP contracts.

**Table 13.** Sensitivity of grain sorghum returns per acre to yield and prices assuming no government program participation.

<u>Yield</u>	<u>Price per bushel</u>				
	<u>\$1.80</u>	<u>\$2.10</u>	<u>\$2.40</u>	<u>\$2.70</u>	<u>\$3.00</u>
35	(\$ 50)	(\$ 39)	(\$ 29)	(\$ 18)	(\$ 8)
45	(32)	(18)	(5)	9	22
55	(14)	3	19	36	52
65	4	24	43	63	82
75	22	45	67	90	112

**Note:** Assumes investment in terraces and waterways are not needed.

Analyzing the effect of economic changes on local communities.

The possibility of extending or renewing CRP contracts.

### Cost Sharing for Grazing Improvements

Current policy allows the development of improvements such as fencing and livestock water anytime after the permanent cover is established. Before making the improvements, the contract holder must modify the contract and have all approvals completed.

**Table 10. An example of a grain sorghum production budget with government program payments.**

	<u>Average Yield</u>	<u>Low Yield</u>	<u>With Terraces</u>	<u>Your Farm</u>
<b>A. Grain Sales</b>				
1. Program Acres	160	160	160	_____
2. Percent Flex Acres	15%	15%	15%	_____
3. Percent Set Aside Acres	5%	5%	5%	_____
4. Payment Acres	128	128	128	_____
5. Flex Acres	24	24	24	_____
6. Program Yield Per Acre	55	30	55	_____
7. Flex Yield Per Acre	55	30	55	_____
8. Expected Market Price	\$2.10	\$2.10	\$2.10	_____
9. Expected Flex Crop Price	2.10	2.10	2.10	_____
10. Revenue from Program Crop	14,784	8,064	14,784	_____
11. Revenue from Flex Crop	2,772	1,512	2,772	_____
12. Total Revenue from Grain Sales	\$17,556	\$9,576	\$17,556	_____
<b>B. Deficiency Payments</b>				
13. Permitted Acres	128	128	128	_____
14. Target Price	2.61	2.61	2.61	_____
15. National Average Price	2.10	2.10	2.10	_____
16. Deficiency Payment	0.51	0.51	0.51	_____
17. Program Yield	55	55	55	_____
18. Revenue from Deficiency	\$3,590	\$3,590	\$3,590	_____
<b>C. Variable Costs Per Program Acre</b>				
19. Labor	\$14.40	\$14.40	14.40	_____
20. Seed	2.10	2.10	2.10	_____
21. Herbicide and Insecticide	22.95	22.95	22.95	_____
22. Fertilizer and Lime	11.55	11.55	11.55	_____
23. Fuel and Oil	8.10	8.10	8.10	_____
24. Machinery Repairs	15.70	15.70	15.70	_____
25. Drying	5.50	3.00	5.50	_____
26. Miscellaneous	5.00	5.00	5.00	_____
27. Interest on Variable Costs	3.84	3.73	3.84	_____
28. Total Variable Costs	\$89.14	\$86.53	\$89.14	_____
<b>D. Fixed Costs Per Program Acre</b>				
29. Real Estate Taxes	\$5.25	\$5.25	\$5.25	_____
30. Annualized Machinery Costs	18.30	18.30	18.30	_____
31. Annualized Cost of Terraces	0.00	0.00	7.71	_____
32. Annualized Cost of Waterways	0.00	0.00	2.92	_____
32. Total Fixed Costs	\$23.55	\$23.55	\$34.18	_____
<b>E. Costs Per Flex Acre</b>				
33. Total Variable Costs	\$89.14	\$86.53	\$89.14	_____
34. Total Fixed Costs	\$23.55	\$23.55	\$34.18	_____
<b>F. Maintenance of Set-Aside Acres</b>				
35. Set-Aside Acres	8	8	8	_____
36. Total Variable Costs	\$12.00	\$12.00	\$12.00	_____
37. Total Fixed Costs	\$23.55	\$23.55	\$34.18	_____
<b>G. Net Return to Land and Management</b>				
38. Net Return for 160 Acres	\$3,733	(\$3,850)	\$2,033	_____
39. Net Return Per Acre	\$23	(\$24)	\$13	_____

**Table 11. An example of a grain sorghum production budget without government program participation.**


	Average Yield	Low Yield	With Terraces	Your Farm
<b>A. Grain Sales</b>				
1. Acres	160	160	160	_____
2. Yield Per Acre	55	30	55	_____
3. Expected Market Price	2.10	2.10	2.10	_____
4. Revenue from Grain Sales	\$18,480	\$10,080	\$18,480	_____
<b>B. Variable Costs Per Acre</b>				
5. Labor	14.40	14.40	14.40	_____
6. Seed	2.10	2.10	2.10	_____
7. Herbicide and Insecticide	22.95	22.95	22.95	_____
8. Fertilizer and Lime	11.55	11.55	11.55	_____
9. Fuel and Oil	8.10	8.10	8.10	_____
10. Machinery Repairs	15.70	15.70	15.70	_____
11. Drying	5.50	3.00	5.50	_____
12. Miscellaneous	5.00	5.00	5.00	_____
13. Interest on Variable Costs	3.84	3.73	3.84	_____
14. Total Variable Costs	\$89.14	\$86.53	\$89.14	_____
<b>C. Fixed Costs Per Acre</b>				
15. Real Estate Taxes	5.25	5.25	5.25	_____
16. Annualized Machinery Costs	18.30	18.30	18.30	_____
17. Annualized Cost of Terraces	0.00	0.00	7.71	_____
18. Annualized Cost of Waterways	0.00	0.00	2.92	_____
19. Total Fixed Costs	\$23.55	\$23.55	\$34.18	_____
<b>D. Net Return to Land and Management</b>				
20. Net Return for 160 Acres	\$450	(\$7,532)	(\$1,251)	_____
21. Net Return Per Acre	\$3	(\$47)	(\$8)	_____
22. Return on Investment	1.86%	-5.92%	0.62%	_____

#### **Base Acres Protected Under the Contract**

Under the CRP contract, base acres of wheat and feed grains are protected for the term of the contract. After the contract expires, the base acres will be lost at the rate of 20% per year (after 5 years, no base acres left) unless the land is returned to cropland. The 1990 Farm Bill allows for the election of an additional 5 years of protection.

The concern for the potential loss of base acres has led to the proposal and discussion of several policy options with respect to base acres. Options being discussed include:

- Retain current situation.
- Extend base acre protection.
- Use base acres as Set Aside or Flex Acres.
- Zero certification.

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**Table 12.** Sensitivity of grain sorghum returns per acre to yield and prices assuming government program participation.

Yield	Price per bushel				
	<u>\$1.80</u>	<u>\$2.10</u>	<u>\$2.40</u>	<u>\$2.70</u>	<u>\$3.00</u>
35	(\$ 11)	(\$ 15)	(\$ 18)	(\$ 17)	(\$ 7)
45	5	4	4	8	20
55	21	23	26	32	48
65	37	42	49	57	75
75	53	61	69	82	103

**Note:** Assumes investment in terraces and waterways are not needed.

0/92 Program - **DO NOT** graze or hay during growing season.

0/92 Program - graze or hay if desired.

Zero certification would allow producers to protect base acres, but would not include any government payments. Also, zero certification would involve the whole farm, not just the land currently in CRP. An extension of the 0/92 program to CRP tracts would be more attractive than the zero certification option. The 0/92 option would include government payments and would protect base acres, but would probably also restrict grazing during summer months.

#### Local Community Economy Impacts

As the CRP contracts expire, the economic impact of the program on communities, grain income, and livestock income needs to be evaluated. Some communities suffered major economic reductions (loss of jobs, businesses) at the beginning of the CRP program. There appears to be a potential for this to occur again as the contracts expire. Production expenses for CRP land returned to production may or may not have the same economic impact on a community as the CRP rental payments have had. Another concern is that land left for haying or grazing will be taxed at a lower rate, reducing the potential property tax base in some counties.

The aggregate economic effects of CRP land returning to crop production has been analyzed by Taylor and Smith (1993). Because the CRP program took cropland out of production, potential crop supplies were reduced. The CRP program had a positive impact on grain prices. If CRP land is brought back into production, crop supplies would increase, depressing crop prices. Taylor and Smith (1993) project feed grain prices to decrease by about 6 percent, and wheat and soybean prices to decrease by 5 percent during the 1997 to 2000 period. The lower feed prices would trigger a small supply response in the livestock sector. As a result, livestock prices are projected to decline slightly (0.4 percent) during the 1997 to 2000 period. Taylor

and Smith (1993) assume that the CRP contracts will not be extended. Extending even a portion of the CRP contracts would lessen the impact on prices.

According to an economic analysis of the projected CRP expiration made by the Tenth Federal Reserve District (Waldinger, 1993): "...the impact on rural communities in the Tenth District should be minimal. Farm incomes, commodity prices, and land values might edge lower, but other factors affecting these markets, such as the global markets, weather, and other, more encompassing farm programs, generally have a greater effect than a single program like CRP. The district's rural communities will be affected to varying degrees depending on the number of acres enrolled in the CRP." It would seem that a more in-depth study is needed to fully project the effect of the expiration of the CRP contracts.

## A LOOK AHEAD

The ultimate success of CRP in terms of its stated goals depends on future actions by Congress, USDA, contract holders, and the public. The future of the CRP investment is yet to be decided.

Congress will begin deliberations on the 1995 Farm Bill during 1994. Many organizations, special interest groups, and agencies are contributing to the debate. It is hoped that Congress will consider developing a comprehensive land resource management policy that protects and conserves the land together with plants, water quality, and wildlife by providing an environment and incentives for land owners and operators to carry out that policy.

Developing a comprehensive land resource management policy may be the most important consideration for the 1995 Farm Bill. Some form of continuation of the CRP concept should be one of the foundations of such a policy.

The accomplishments of CRP, from the standpoint of cost and benefits, both past and future, may offer a broader basis for a new thrust to 'reuse, reduce and recycle' resources. Land can be 'reused' without destroying its production potential. Land can be managed in a way that 'reduces' the contaminants and improves water and air quality. Most important, land is the original 'recycling' system. Plants and animals die, decompose, and return to the land to replenish the system. These recycled materials, along with water, are taken up by plant roots and to produce new plant material for the food chain. Through the miracle of photosynthesis, management of the land, plants, and animals can continue to provide mankind with food, clothing, and shelter. This process has functioned for centuries and will continue in some fashion for the foreseeable future regardless of what mankind does.

Mankind will determine what future land conditions will be. The future policies for CRP land could begin a new conservation commitment for maintaining, and maybe even improving, the quality and productivity of the world's land resources. As the land resources improve, water and air quality could also be improved. The important factor is the people who own, manage and use the land: agriculture, businesses, individuals, and governments. Their ability to understand the ecologic and economic is critical. Rigid, preconceived, heavy handed policies and regulations developed without consideration for the land resource management needs, the people who must manage them, and for the availability of resources for inputs will do much to destroy the land resources. Considering a policy that allows and rewards the development of

ecologically sound businesses that supply the needs of society may be the best answer.

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## **KANSAS INTERAGENCY AGRICULTURAL COORDINATING COMMITTEE**

The KIACC was originally organized in 1986 to coordinate the introduction of the Conservation Reserve Program (CRP) and other parts of the Food Security Act of 1985 (FSA). It is an informal committee with a revolving chair that coordinates interagency programs and events. Membership in KIACC is open to all state and federal agencies serving agriculture and its various entities. Each member agency has one or two representatives on the committee. Current agency members are:

- Kansas State University
- USDA Soil Conservation Service
- USDA Agricultural Stabilization and Conservation Service
- Kansas Department of Wildlife and Parks
- Kansas State Board of Agriculture
- State Conservation Commission
- Kansas Department of Health and Environment
- US Fish and Wildlife Service
- Kansas State and Extension Forestry
- Kansas Water Office

KIACC operates through its representatives to provide a cooperative environment to develop programs and events. Technical work sessions on specific topics require appropriate technical personnel be involved. This environment allows the participants to develop consensus policies, materials, and programs on many topics to better serve agricultural producers and interests.



# THE FUTURE OF CONSERVATION RESERVE PROGRAM LAND IN KANSAS:

## THE LANDOWNER'S VIEW

*Report of Progress 690*

*Agricultural Experiment Station  
Kansas State University, Manhattan  
Marc A. Johnson, Director*



*HOUSE AGRICULTURE  
2-23-94  
Attachment #2*

# THE FUTURE OF CONSERVATION RESERVE PROGRAM LAND IN KANSAS: THE LANDOWNER'S VIEW<sup>1</sup>

Penelope L. Diebel, Ted T. Cable, and Philip S. Cook<sup>2</sup>

## ABSTRACT

Nearly three million acres of Kansas cropland were idled in the first nine sign-ups of the Conservation Reserve Program's (CRP). Kansas CRP land enrollment is the largest of the Central Great Plains states (Colorado, Kansas, Nebraska, Oklahoma, and Wyoming). These five states contain almost one-fourth of the total national acres enrolled in CRP. Therefore, a study of Kansas CRP landowners is paramount to determining the future use of CRP lands when contracts expire. The fate of CRP lands could have tremendous impacts on the agricultural sector, wildlife habitat, recreation, and rural communities. A statewide random sample of 3,000 CRP contracts, approximately 10% of total Kansas contracts, was selected from the Agricultural Stabilization and Conservation Services CRP database. By using the contract as the unit of analysis, a drawing was made from a population of known size and could be aligned with additional data bases (soil types, exact acreage, previous uses, productivity, etc.) concerning the particular tract of land. Over 70 percent of the survey respondents were both owners and operators of land under CRP contract. Their average age was 58.6 years. A majority (85.1 percent) was satisfied with the CRP program; 88.8 and 84.5 percent would continue in the CRP program for 5 or 10 years, respectively. The largest percentage of respondents removed their CRP lands from wheat (81.2) and sorghum (57.3) production. Most of these lands were in western Kansas. A majority of producers ranked soil erosion as an important influence on their initial enrollment. Wildlife habitat was a consideration in choosing farming practices (67.7 percent). However, 57.6 percent said increases in wildlife populations on CRP lands were undesirable. Hunting was the most frequent form of recreation allowed on CRP land (76.4). Little other recreation was allowed. More respondents planned to keep CRP land in forage production for livestock than to return it to crop production; over a third were undecided. Market prices for crops, forage, and livestock were the key factors in the decision about future use of CRP land.

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## INTRODUCTION

Before a new farm program is delivered in 1995, many agricultural conservation and environmental issues will be debated. One of the most critical issues will be the expiration of Conservation Reserve Program (CRP) contracts. Farmers, cattlemen, other agricultural groups, and conservation and environmental organizations are concerned about the impact of this released land on cattle and grain prices and on the environmental benefits accrued during the contract life. The issue of CRP land is of great importance to Kansas and other Central Great Plains states (Colorado, Nebraska, Oklahoma, and Wyoming), because nearly one-fourth of the total national CRP acres is in this area. Kansas' total enrollment ranks among the top five in the nation.

### Conservation Reserve Program

Congress established the CRP in Title XII of the Food Security Act of 1985 as a voluntary, long-term, cropland retirement program to be administered by the U.S. Department of Agriculture (USDA). The USDA provides CRP participants with an annual per acre rent and half the cost of establishing a permanent cover (grass or trees) in exchange for retiring highly erodible or environmentally sensitive cropland for 10 years. The enrollment target was 40-45 million acres by the end of the 1990 crop year. The primary goal of the original CRP program was to reduce soil erosion on cropland. Secondary objectives included protecting the capability of long-run food and fiber production, curbing surplus production, supporting income, and improving environmental quality (water and wildlife habitat).

During each of the nine sign-up periods, producers proposed which fields to take out of production and annual rental payments (bids) and estimated the commodity crop base reduction. Crop base was reduced by the proportion of the farm's total cropland enrolled in CRP. After all bids were received, a maximum acceptable rental rate for multicounty regions (pools) was determined. In general, all bids not exceeding the maximum bid for each pool were accepted. The eligibility criteria were changed several times during the 1986-1990 period. Most of the changes affected the method of measuring the annual erosion and the minimum level of erosion necessary to enroll land.

The CRP program was extended under the Food, Agriculture, Conservation, and Trade Act (FACTA) of 1990 and revised again. The major revisions were to combine the CRP program with the Wetlands Reserve Program (WRP), a change in the bidding process, and additional incentives to promote tree planting on CRP lands in conservation priority areas. FACTA mandated an enrollment of 40-45 million acres by 1995, including the 33.9 million acres enrolled in the previous CRP program. Another three sign-ups have been conducted. The tenth and eleventh were held in 1991, and the twelfth was in 1992. No sign-ups were held in 1990.

The future of the CRP program under a new farm bill in 1995 is unknown. However, given the current government efforts to reduce the federal budget deficit, the extension of current CRP contracts and of the CRP program as it now exists seems unlikely. Options that are currently being discussed are extension of contracts on particularly sensitive soils, federal government purchase of permanent easements on selected lands, and the extension of the entire program under a reduced set of benefits to producers. Another option being considered by several states is the establishment of smaller CRP programs funded by various agencies at the state level.

## **Kansas and the CRP**

The future of the CRP program will be critical to agricultural producers and communities, as well as environmental groups, in Kansas. Over 2.8 million acres of Kansas cropland were idled in the first nine CRP sign-ups (1986-1990). This represents 9.9 percent of Kansas' tillable cropland. Over 60 percent of these acres are situated in western Kansas (west of a line north and south at Russell). Geographical dispersion of CRP variables in this study was based on state Crop Reporting Districts (CRD), shown in Figure 1. Figures 2 and 3 show the dispersion of CRP acreage and contracts within the state CRDs (1986-1990 sign-ups). The tenth, eleventh, and twelfth sign-ups added approximately another 83,000 acres. Kansas CRP enrollment is the largest of the Central Great Plains states.

The first of these 10-year contracts, a little over 100,000 acres, will expire in September, 1995. The bulk of Kansas' CRP acres will be released in 1996 and 1997. Approximately 1 million acres will become available for tillage in 1996; another 880,000 acres will follow in 1997. Nationally, 13.67 million acres will be released in late 1996 and early 1997. When these contracts expire, producers will face several options. If demand for U.S. wheat and feed grains is strong, most CRP land could return to crop production, with serious implications for soil erosion, water quality, and wildlife habitat. On the other hand, if the wheat and feed grain markets weaken, a smaller amount of CRP land would be expected to return to crop production immediately. Many other unpredictable forces will enter into the contract holder's decision: personal agendas, trade negotiations (such as GATT and NAFTA), former Soviet Union and Eastern Bloc purchase agreements, and changes in agricultural policy proposed by the current U.S. administration.

In order to address these issues, a survey of CRP contract holders in Kansas was conducted. A statewide random sample of 3,000 CRP contracts, approximately 10 percent of the total state contracts, was selected from the Agricultural Stabilization and Conservation Service (ASCS) database. The survey elicited potential producer action when CRP contracts expire, willingness to participate in an extended CRP program, wildlife benefits accruing from CRP acres, and general socioeconomic characteristics of Kansas CRP contract holders.



## METHODS AND SURVEY DESIGN

Dillman's (1978) Total Design Method was used to implement a mail survey. A questionnaire and cover letter were mailed to each contract holder in November, 1992. Approximately 1 week later, a postcard reminder was sent. Two weeks after the postcard was sent, another questionnaire was mailed to those who had not yet responded.

Of the 3,000 questionnaires sent out, 53 were undeliverable. Usable questionnaires were returned by 2,146 respondents, giving a 72.8 percent response rate (adjusted for undeliverables). The survey sample of contracts was tested against the state contract population for representativeness. The percent of surveyed contracts in each county was not significantly different than the actual population set using a Spearman Rank Correlation Coefficient (0.9220,  $p < 0.001$ ). The same statistical test indicated that the percent of survey contracts in each type of CRP treatment activity in each population was not significantly different than the true population (Spearman Rank Correlation Coefficient = 0.9503,  $p < 0.001$ ). In addition, two-tail F- and t-tests showed insignificant differences between the mean bids (F-test  $p < .961$ , t-test  $p < .894$ ) and the farm sizes (F-test  $p < .495$ , t-test  $p < .388$ ) of the sample and state populations. The distributions of CRP contracts and acres within the survey sample are shown by CRDs in Figures 4 and 5, respectively.

The data contained in the questionnaires were coded into a computer data base using dBASE III PLUS V1.1 (Ashton-Tate, 1986). Analyses of the data were done using SPSS/PC+ V3.1 (SPSS, 1989). The information collected was grouped into five areas. First, demographic information was solicited. General data on age, education, and assets were gathered. Second, reasons for CRP enrollment or nonenrollment were surveyed. Third, potential future use of CRP land after contracts expire was examined. Fourth, views about CRP's influence on wildlife populations were sought. Finally, information about CRP and outdoor recreation was gathered. A copy of the complete questionnaire is the Appendix (pg. 48).

## RESULTS

The following section presents a summary of the general results. For some questions a breakdown of responses by location (CRD) is also provided. Note that responses may not appear in the same order as respective questions in the questionnaire. More detailed responses are presented in Diebel and Cable (1993).

### Who Are CRP Participants?

Kansas residents made up 94.4 percent of the respondents (the rest owned land in Kansas but lived out of state), and the sample CRP contracts were spread throughout the state (Table 1). Over 70 percent of the sample contract holders were both owner and operator (Table 2). The 1987 Census of Agriculture found 43.7 percent of operators were full owners in Kansas, and 59.3 percent at the national level (U.S. Department of

Commerce, 1989). A survey of CRP contract holders by the Soil and Water Conservation Society (SWCS) also found that many (73 percent) contract holders were both owner and operator (SWCS, 1992). The respondents managed a mean of 1,476.3 acres. Most (88.3 percent) respondents were male, and their mean age was 58.6 years. Both of these statistics are slightly higher than 1987 average state and national levels. Men accounted for 95.7 percent of all farmers in Kansas and 93.7 percent nationally; the average age was 52 for the state and nationwide (U.S. Dept. of Commerce, 1989). The average age of respondents in the SWCS survey (1992) for the Northern Plains contract holders was approximately 55 years.

One quarter of respondents had at least a bachelor's degree or more education (Table 3). The SWCS survey (1992) found that over half of the CRP contract holders nationwide had "less than a high school degree" or "attained a high school diploma." Less than 20 percent of the Northern Plains respondents had a college degree (SWCS, 1992).

Almost 70 percent of respondents had incomes over \$30,000 annually (Table 4). Almost one-quarter (22.8 percent) of the respondents made less than \$10,000 annually from agricultural sources, and 39.5 percent made less than \$10,000 annually from nonagricultural sources. According to the U.S. Department of Commerce (1989), 2.8 percent of all farms in Kansas had net agricultural sales of less than \$10,000. National off-farm income follows a similar distribution, with 27 percent of farmers getting less than \$10,000 annually from off-farm jobs (U.S. Dept. of Commerce, 1989).

Among the respondents 7.8 percent had farm land and buildings valued at more than \$1,000,000 (Table 5), but only 0.8 percent had machinery and equipment valued at more than \$1,000,000 (Table 6). The mean percent of farm assets owned debt free was 79.4. These figures are fairly high compared to state and national statistics for all farms (U.S. Dept. of Commerce, 1989). The sampled contract holders had low debt and highly valued land and buildings. Machinery values were low because of age and purchase of used equipment. Only 4.4 percent of farms at the state level had land and buildings valued over \$1,000,000, and 4.7 percent at the national level (U.S. Dept. of Commerce, 1989). The debt to asset ratio in 1987 was less than 10 percent for only 18.5 percent of farms in Kansas and 13.4 percent in the U.S. (U.S. Dept. of Commerce, 1990).

Most of the respondents (75.0 percent) were participating in the USDA commodity program for wheat (Table 7). Participation was also high (60.6 percent) in the sorghum program. Few respondents were growing other crops under federal commodity program provisions.

Significant differences occurred among CRDs for many characteristics of the CRP contract holder. The characteristic with the least variation geographically was the gender of respondents (Figure 6). However, large differences occurred in mean age among locations (Figure 7). The Eastcentral district had the highest mean age of 59.9 years, and the Westcentral respondents were the youngest, with a mean age of 57.7 years.



Incomes from all sources varied significantly among districts (Table 8). The Eastcentral district had 43.2 percent of respondents with less than \$10,000 income from agricultural sources, whereas the Southwest district had 27.7 percent with over \$75,000 annual income from agriculture. Nonagriculture incomes were low across all regions. The Westcentral had the highest percent of respondents (7.5 percent), with over \$75,000 or more of nonagricultural income. The largest proportion of total incomes over \$50,000 annually (59 percent) was in the Southwest district. Over 23 percent of the respondents in the Southeast district reported total annual incomes of less than \$20,000. Values of land and buildings for all districts tended to be in the \$200,000 - \$1,000,000 range. In the Westcentral and Southwest districts, over 60 percent of respondents reported land and buildings valued at \$200,000 or more (Table 9). The highest percent of debt-free assets (84.5 percent) was reported in the Southeast district (Figure 8). The Northwest reported a significantly lower percent of debt-free assets (73.84 percent).

The highest response rate to enrollment in the USDA wheat commodity program was in the western districts (Table 10). Although participation was high in all districts for wheat and sorghum, the eastern CRDs had relatively high rates of nonparticipation in any USDA commodity program.

### **CRP Enrollment and Land Characteristics**

**Enrollment.** Respondents reported having a mean of 493.3 acres eligible for the CRP. They also reported enrolling a mean of 275.4 acres, with 51.6 percent of the respondents enrolling all the land that they have eligible. The mean number of CRP contracts for each respondent was 2.8. The mean size of the sampled contracts was 102.2 acres. Geographically, the mean size of contracts varied significantly (Figure 9). The smallest contracts were in the Southeast district where the mean size was 47.93 acres. The largest contract sizes were in the Westcentral and Southwest districts with mean sizes of 192.15 acres and 208.19 acres, respectively.

The most important reasons for enrolling land in CRP were "concern for soil erosion" and "most profitable use of land" (Table 11). The most important reasons for not enrolling some eligible land in CRP were "crop production was more profitable than receiving CRP payments" and "potential for increased crop prices" (Table 12). Most (85.1 percent) respondents reported being "satisfied" or "very satisfied" with their decision to enroll land in the CRP. No significant variation occurred among regions in satisfaction with the CRP program. However, some of the reasons for enrolling in the CRP program did have response rates that varied significantly over the regions (Table 13). Those reasons included the perceived ability to reduce labor, concern for soil erosion, and profitability. Concern for soil erosion had the highest mean ranking in the Northwest district. Profitability expectations ranked highest in the Southcentral and Northwest.

Most respondents reported that their land was planted to wheat before enrollment in CRP (Table 14). Previous crops on CRP land varied significantly by CRD (Table 15). Wheat was the dominant previous crop in all districts except for the Northeast and

Eastcentral, where the dominant previous crop was sorghum. The percent of respondents reporting wheat as the previous crop varied from 92.4 percent in the Southcentral district to 54.4 percent in the Eastcentral district. Most of the land in the sampled contracts was enrolled in CP-2, the native grass treatment (Table 16). The treatments, as classified by ASCS, follow.

- CP1: Permanent introduced grasses and legumes.
- CP2: Permanent native grasses.
- CP3: Tree planting.
- CP4: Permanent wildlife habitat.
- CP5: Field windbreaks.
- CP6: Diversions, Type 1.
- CP7: Erosion control structures
- CP8: Grass waterways
- CP9: Shallow water areas for wildlife.
- CP10: Vegetative-cover, grass already established.
- CP11: Vegetative-cover, trees already established.
- CP12: Wildlife food plots.
- CP13: Filter strips.
- CP14: Wetland trees.

**Management.** Most respondents reported that some type of improvement existed on their CRP acres (Table 17). Approximately half of the respondents had existing terraces on the CRP acres. Almost all CRP participants had done some type of active management on their CRP acres in the last 2-3 years, with mowing and weed control being the two most common management activities (Table 18).

## **The Future of CRP Land**

The picture of what will happen to CRP land after the contracts expire is somewhat cloudy. When asked to choose between various alternatives, slightly over one-third of the respondents revealed that they had made no plans or were uncertain about what they will do with their CRP land after the contract expires (Table 19). The response rate to most of these options varied significantly across the state (Table 20). Keeping CRP land in grass for livestock was a highly selected option for all districts except Westcentral and Southwest. In the Westcentral district, responses "return to annual crop production" and "keep in grass for livestock grazing" were selected equally (32 percent each). In the Southwest, respondents favored crop production (34.1 percent), to livestock grazing (26.2 percent).

Approximately the same percentages of respondents chose to leave some land in grass for livestock grazing and stated that they were uncertain of their plans. Yet, when asked directly if they planned to return some acres to livestock grazing, 57.7 percent responded positively. Little geographic variation occurred in the response to this question (Figure 10). Note that these questions refer to any or all acres on the contract number being surveyed. More than one possibility exists for each contract.

When asked to choose between alternatives, slightly under one-fourth of respondents selected to return some of their CRP acres to crop production under conservation compliance provisions (Table 19). However, when asked directly if they planned to return some acres to crop production under conservation compliance provisions, 42.8 percent responded positively. The direct question responses by CRD appear in Figure 11. The inconsistency between the direct and indirect questions may show that many producers have yet to decide clearly what they will do with the acres under CRP contract.

The SWCS survey (1992) asked a similar question about future plans. Approximately 34 percent of the Northern Plains respondents would keep some or all their CRP land in grass for livestock forage, and 30.4 percent would return acres to crop production under conservation compliance. Responses indicating maintenance of grass for livestock in Kansas were high compared to the national response of 20.2 percent (SWCS, 1992).

Among those respondents who said they would return some acres to production under conservation compliance provisions, almost half were uncertain what structures or practices would be required to meet those provisions on the CRP acres (Table 21). Of those who reported that they would return some acres to grazing, one-third reported that they were uncertain about what type of construction would be needed to make the CRP acres suitable for grazing (Table 22).

Despite the uncertainty about what they will do with their CRP land after the contracts expire, respondents were able to rate the importance of likely influences on their decision (Table 23). Market prices of crops/livestock were most important, followed by the availability of cost sharing for fencing and water development for livestock. Market prices for crops and livestock had the highest mean ranking in the Southwest (Table 24). That district also ranked government payments and expected costs of crop production high.

These state responses follow a national trend. The SWCS survey (1992) grouped market prices and government price supports together; they received a ranking of most important by 35.7 percent of those surveyed. Costs of production were ranked most important by 11.4 percent of the respondents.

When asked about the possibility of extending their current CRP contract for an additional 5 years, assuming crop prices and government price supports remain at 1991-92 levels, 88.8 percent of respondents would like to remain in the program. For those responding positively, the mean bid for the additional 5 years was \$53.12 per acre per year, which is slightly less than the current mean payment for all respondents (\$54.49). Of those willing to extend their contract, most (72.5 percent) bid the same or less than their current payment (Table 25). Slightly fewer respondents (84.5 percent) were willing to extend their contract for 10 years, assuming that crop prices and government price supports remain at 1991-92 levels, and the mean payments were slightly higher (\$53.69) than the amount bid for an additional 5 years.

Geographically, only slight variation occurred in the willingness of respondents to participate in both the 5- and 10-year options to extend CRP program enrollment (Figures 12 and 13). Bids did vary significantly across the state. The highest mean 5- and 10-year bids

were in the Northeast district (\$64.90 and \$65.79, respectively). These bids are above the current mean payment of \$62.87 in the Northeast. All three eastern districts had mean bids for both 5- and 10-year extensions that were higher than their current mean bids (Figure 14).

On a national level, the SWCS survey (1992) found that extending contracts for another 5 years would cost an additional \$9.79 per acre per year beyond the current rental rate. This would result in a bid much higher than those reported in this survey. According to SWCS (1992), a 10-year extension would cost an additional \$15.17 per acre per year. Nationally, the lowest bid rates were found in the Southern Plains and the highest in the Northeast.

When asked if they were willing to leave their CRP acres in permanent cover after the contract expires, without an annual rental payment, provided that the acres continued to be protected as commodity base acres and could be used for annual set-aside requirements, only 15.4 percent of respondents responded "yes". Thirty-seven percent responded "uncertain", and 47.6 percent responded "no". Significant differences occurred in the response rates to this question among CRDs (Figure 15). The Southwest and Westcentral had the strongest negative responses (59.7 and 55.1, respectively). The strongest positive response (21.9 percent) was in the Northcentral district. Undecided responses were very high, with the highest of 44.0 percent being in the Northwest.

When asked about extending their CRP contracts for 5 years subject to conditions other than those currently allowed, the mean bids ranged from \$37.31 per acre per year to \$43.92 per acre per year depending on the condition (Table 26). However, the response rate to all conditions was low.

## **CRP and Wildlife**

Over two-thirds (67.7 percent) of respondents felt that wildlife is an important consideration in their choice of farming practices; however, only 24.0 percent were willing to change some of the current vegetative cover on their CRP acres to increase wildlife if 50 percent cost-sharing funds were available. The remaining respondents were split evenly between "no" and "uncertain" (both 38.0 percent). No significant difference occurred among districts of the state for either of these questions.

Almost two-thirds (64.7 percent) of the respondents "agreed" or "strongly agreed" that enrollment in CRP has increased the diversity of wildlife on their farm. Regarding individual species, deer, pheasant, and quail were reported to have increased by over one-half of the respondents (Table 27). Increases in wildlife were considered undesirable by 42.4 percent of respondents, with increases in coyote (58.2 percent of those respondents finding wildlife increases undesirable) and deer (44.0 percent) mentioned most often as undesirable. Of those respondents indicating an increase in deer specifically, only 25.8 percent found the increase undesirable. However, of those that saw an increase in coyotes, 47.6 percent felt that increase was undesirable.

The Northcentral, Central, and Northeast were the only CRDs that had less than a 70 percent response rate for perceiving increases in deer population (Table 28). Pheasant increases were reported by over 80 percent of respondents in all districts but the Eastcentral and Southeast. The population of quail was reported as increasing by over 70 percent of respondents in all but the three western districts. Coyote population increases were reported most often (70.3 percent) by respondents in the Southwest region of the state. The responses to whether the general increases in wildlife were undesirable were significantly different across districts. Figure 16 shows the percentages of respondents finding the general increases undesirable and the percentages of respondents (who specifically listed increases in deer and coyotes) finding deer and coyote increases undesirable. Coyote increases were overwhelmingly undesirable in most regions.

The SWCS survey (1992) found half of the national respondents willing to plant a different vegetative cover on CRP acres to improve wildlife, if cost was shared. The Northeast area of the U.S. was the most accepting of this proposal (66.7 percent); the Northern plains was the least accepting (38.5 percent). However, this low positive response rate did not reflect outright rejection but the desire for more information (SWCS, 1992).

## CRP and Recreation

Almost two-thirds of the respondents allowed friends and neighbors recreational access to their CRP acres (Table 29). A mean of 13 friends and neighbors used the CRP acres each year. Over 40 percent of respondents allowed anyone who asks permission recreational access. Only 13.8 percent of respondents reported not allowing anyone recreational access to their CRP acres.

Hunting was allowed on CRP land by over three-quarters of the respondents (Table 30), and other types of recreation were allowed by 15.6 percent of respondents. The data indicate that, although only 13.8 percent of respondents reported not allowing anyone access to their CRP land for recreation, 23.5 percent reported not allowing any recreational activity on their land. Only the responses to "other recreation" varied significantly across districts. Figure 17 shows that the highest response to "other recreation" was in the Southeast (25.3 percent).

Few respondents charged a fee for recreational access (Table 30). Of those who allowed no one access and allowed no recreational activity, "liability concerns" was their most important reason (Table 31).

One-third (33.3 percent) of the respondents were interested in participating in a state-sponsored recreational access program. For those respondents who would consider participating, the most important feature of a program was the amount of the lease payment (Table 32). Respondents required a mean of \$33.62 per acre per year to participate. Other important attributes were the types of recreation allowed and "walk-in only/no vehicle access".

For the two-thirds (66.7 percent) of respondents who would not consider participating in a recreational access program, the most important reason was "liability concerns", followed by "trash/litter" and "vandalism" (Table 33).

## SUMMARY AND CONCLUSIONS

Extensive concern exists among Kansas landowners, policy-makers, and numerous agricultural and environmental groups about what will happen to the nearly 3 million acres of cropland currently enrolled in the CRP once their 10-year contracts expire. An additional 30.9 million acres are enrolled nationwide in this program. The entire CRP will eventually cost approximately \$20 billion (SWCS 1992). Tradeoffs of environmental quality, food production, and federal fiscal planning have made the future of these CRP lands a controversial topic for the 1995 farm bill agenda.

This study's objective was to determine what Kansas landowners will do with acreage enrolled in CRP when their contracts expire and landowners' attitudes toward extension of the current CRP and/or the use of alternative land conservation programs. The results depict a situation of high satisfaction with the current program but low expectations that an extension of the program will occur.

A majority of the landowners surveyed would like to extend their CRP contract for 5 or 10 years. The bid rates required by the landowners were at or below their current bid rates. This is an overwhelming endorsement of the program and could be caused by several factors. The most important factor influencing the landowner's decision was economics. The market prices for crops, forage, and livestock were the key factors in this decision formula. The uncertainty surrounding these factors, complicated by federal deficits, trade negotiations, and instability in Eastern Europe, may contribute to the strong responses for staying in the CRP at very reasonable bid levels. These factors also are reflected in the landowners' uncertainty when depicting their plans after contract expiration. Less than 25 percent would return land to crop production. A larger proportion (36.6 percent) was uncertain or had no plans at the time of the survey. Landowners also may be concerned about the expense of returning land to crop production under conservation compliance. A majority of producers ranked soil erosion as an important or very important influence on their initial enrollment. To bring this erodible land back into production under compliance could be costly because of structural, management, and other input expenses. Keeping land in forage production for livestock drew a large response (36.2 percent). This also may be due to the perception that crop production is too risky and expensive.

Options to preserve current CRP land conditions under state wildlife and recreation programs were not very popular. However, producers did recognize the benefits CRP has had on wildlife diversity, and most found the increases in populations and diversity desirable. Most producers allowed access to their CRP land for hunting; however, producers wanted to remain in control of both who has access and the types of activities. Liability was the greatest concern among those who did not allow recreation and those who would not participate in a state-sponsored program.

This survey did not address all the options to the current CRP program. However, it provides the most extensive look at Kansas CRP contract-holders to date. Much information has been gathered and further analysis may reveal even more complicated relationships between Kansas landowners, economics, and the future of CRP lands.

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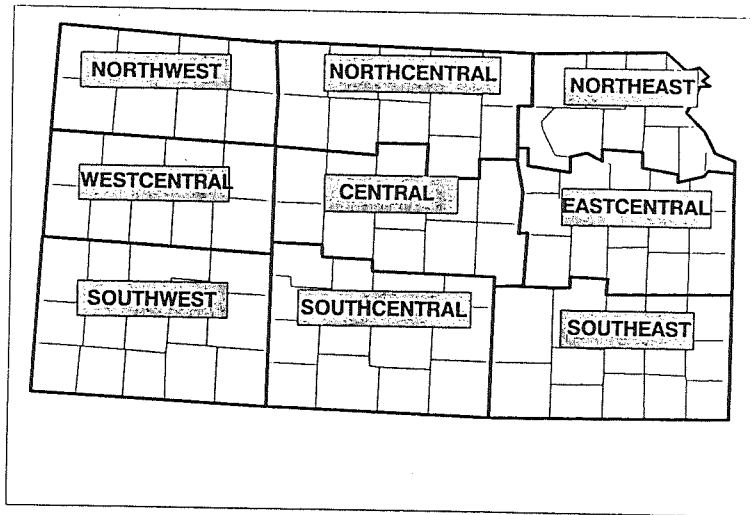


Figure 1. Kansas Crop Reporting Districts

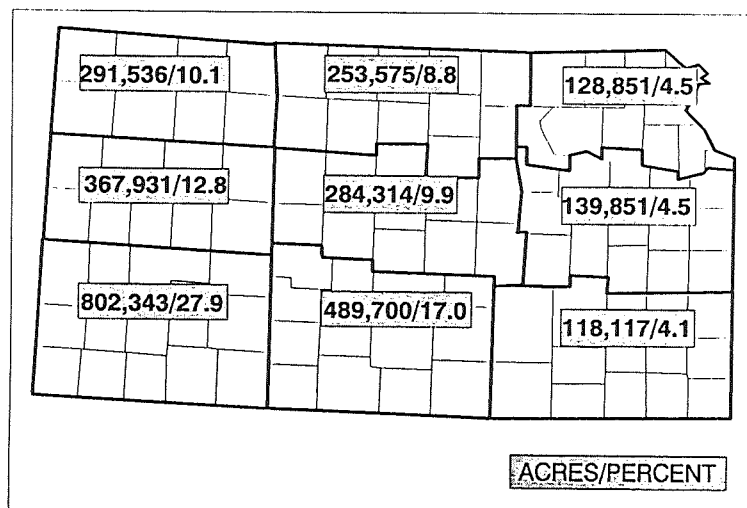


Figure 2. Location of Conservation Reserve Acreage in Kansas (1986-1990)

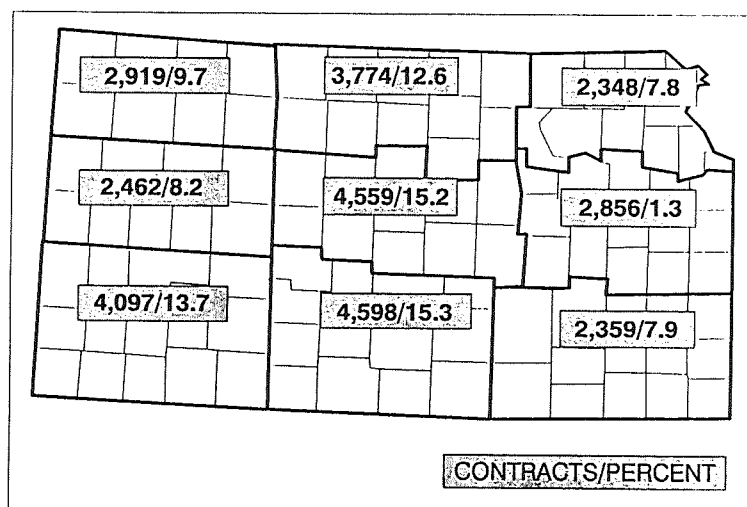


Figure 3. Location of Conservation Contracts in Kansas (1986-1990)



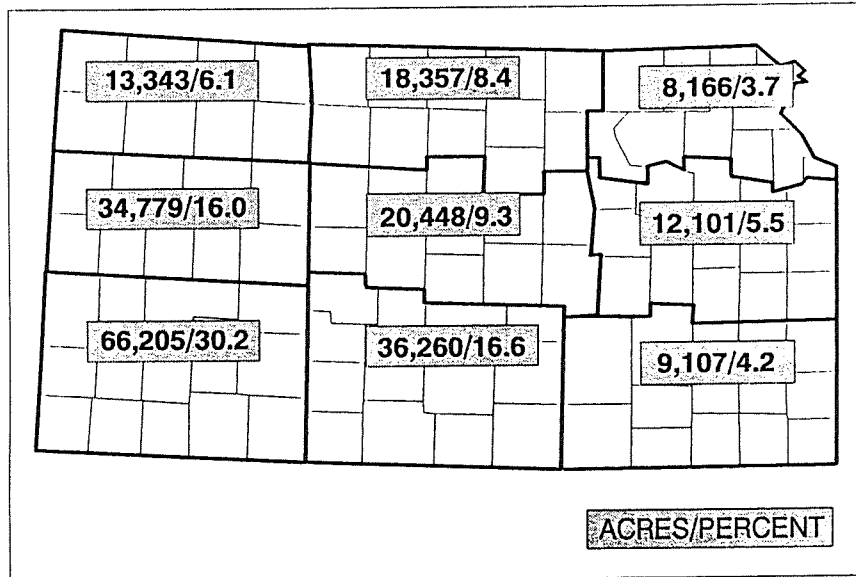


Figure 4. Location of Conservation Reserve Acres in Contracts Surveyed

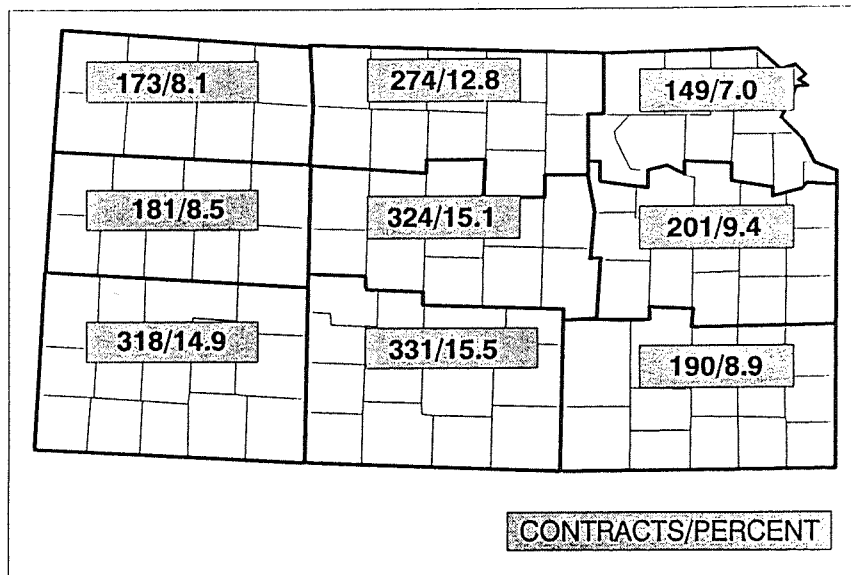


Figure 5. Location of Conservation Reserve Contracts Surveyed

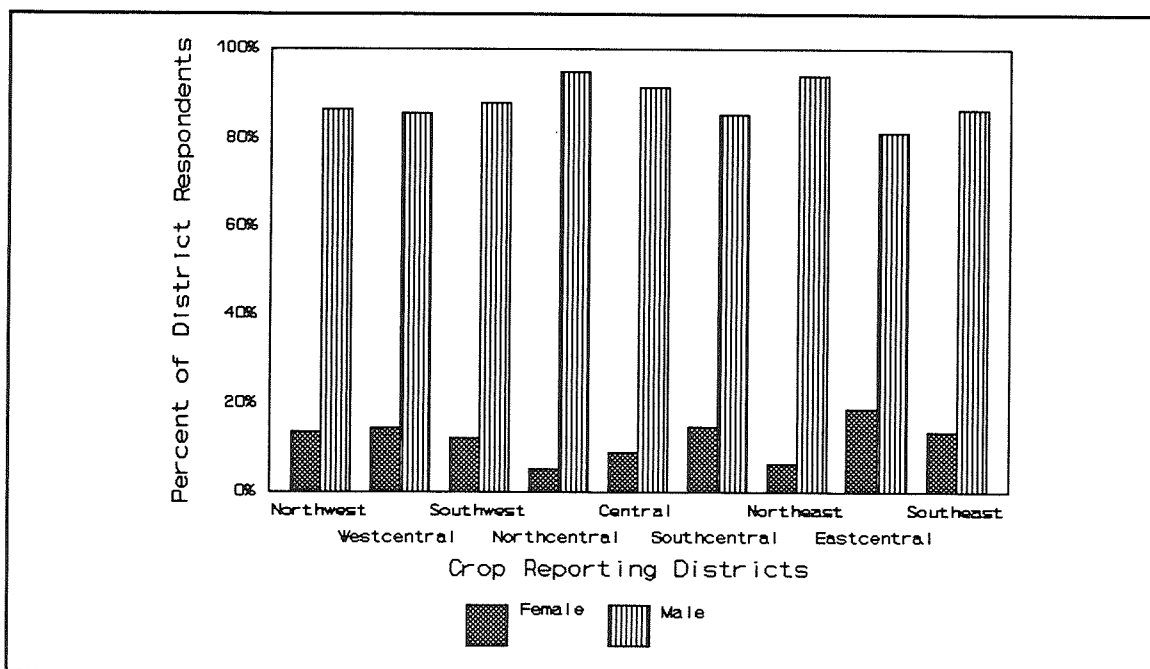


Figure 6. Gender of Respondents by Crop Reporting District

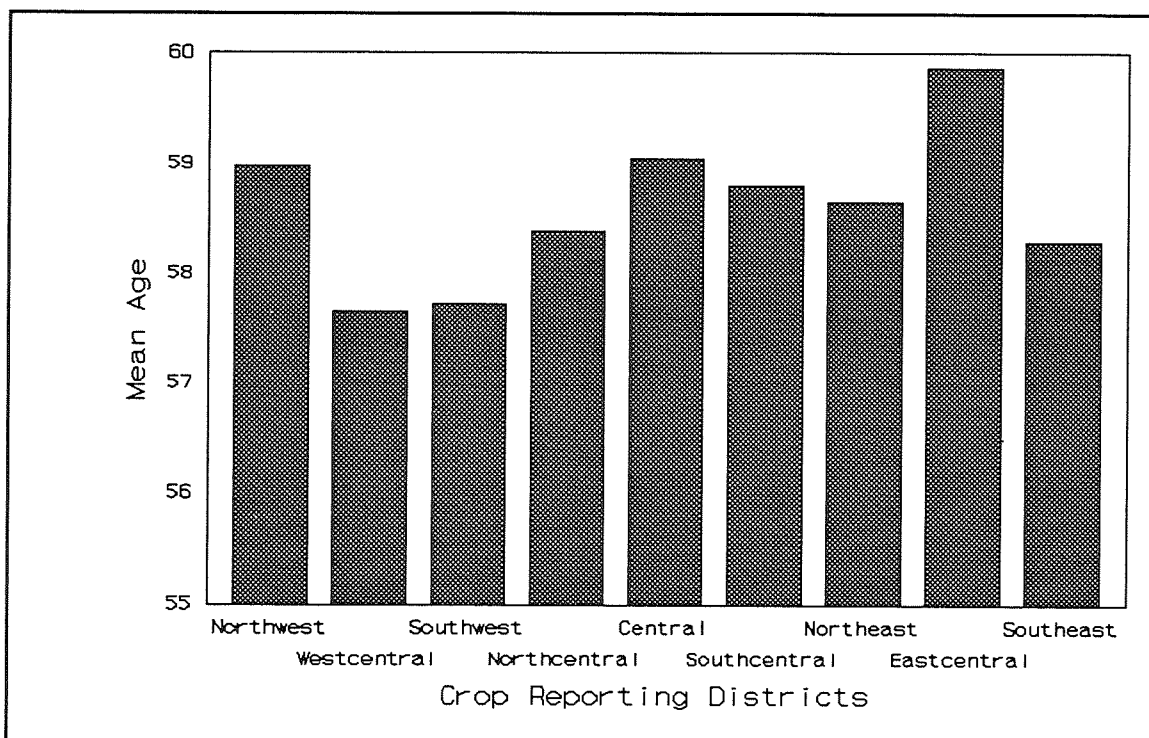


Figure 7. Mean Age of Respondents by Crop Reporting District

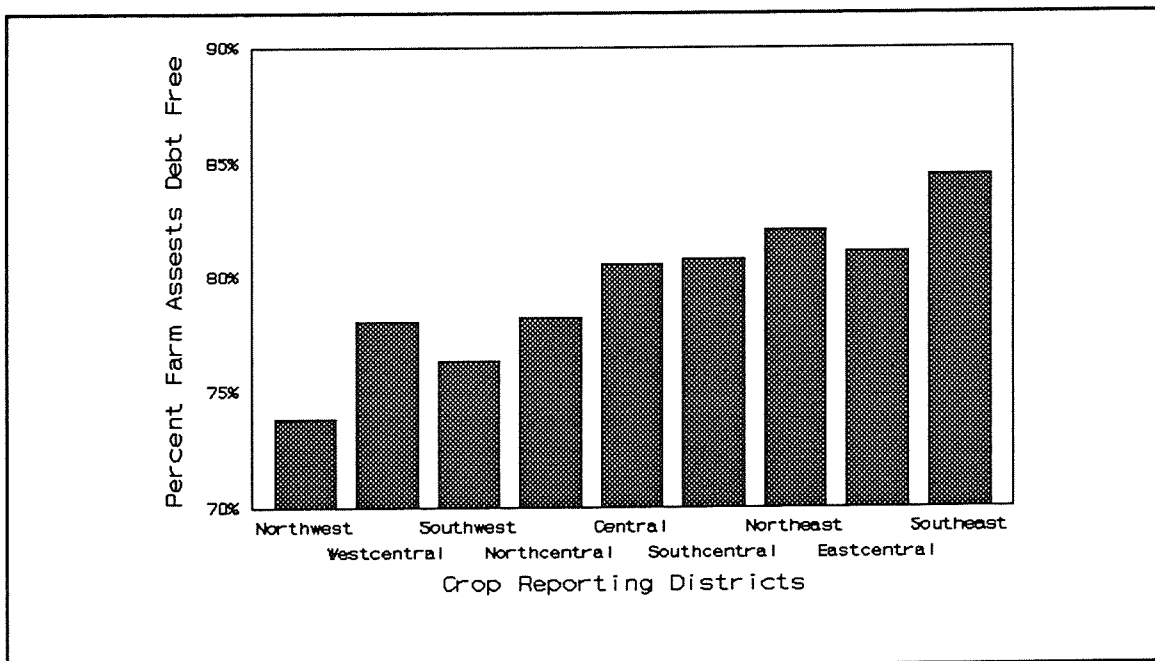


Figure 8. Mean Percent of Debt-Free Farm Assets of Respondents by Crop Reporting District

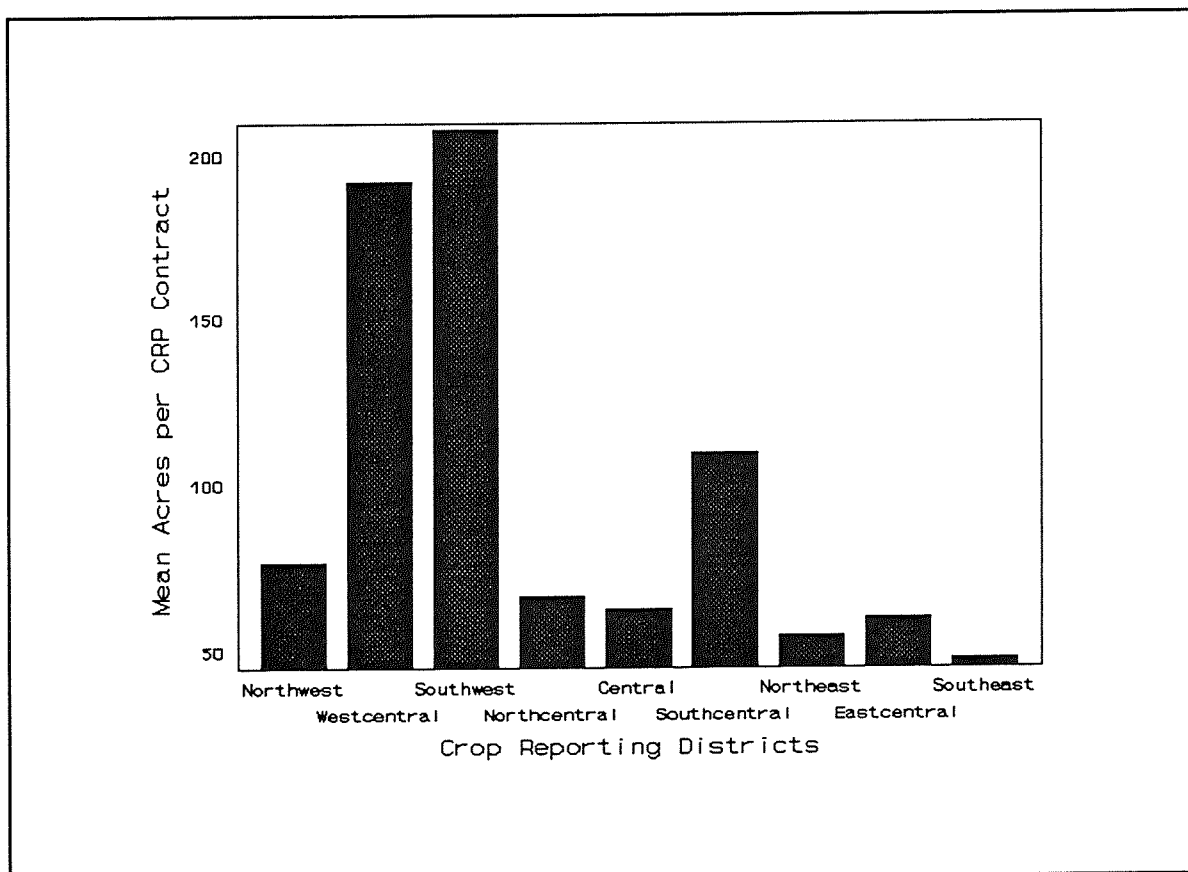


Figure 9. Mean Number of Acres per Contract by Crop Reporting District

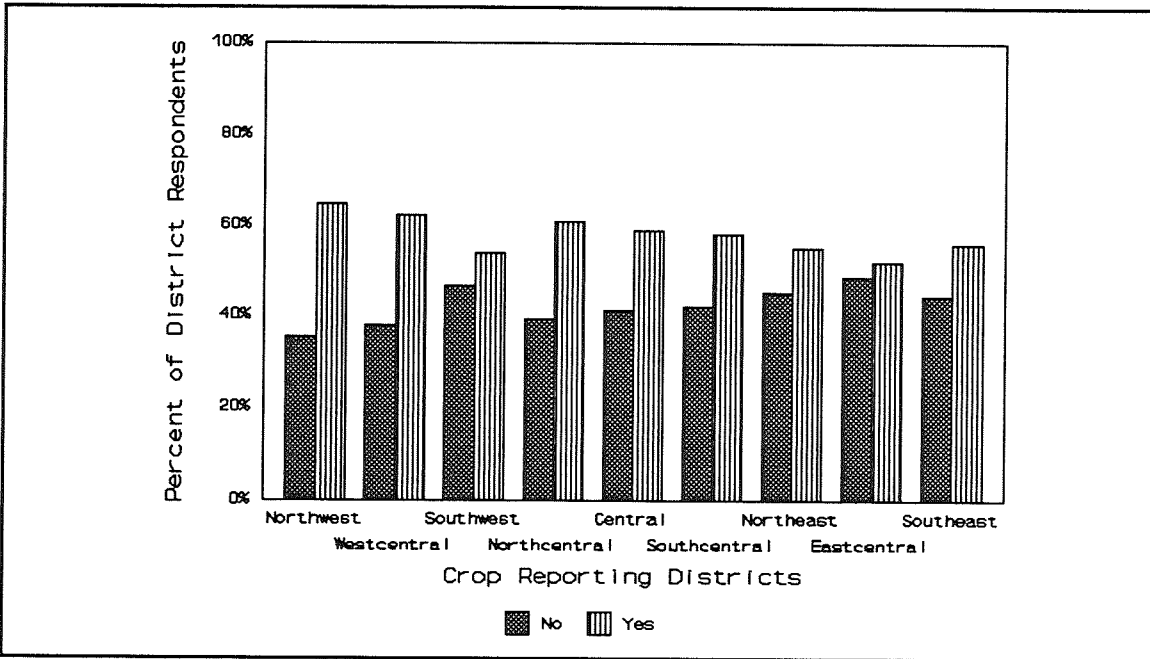


Figure 10. Percent of Respondents Planning to Keep Some CRP Acres in Grass for Livestock Grazing by Crop Reporting District

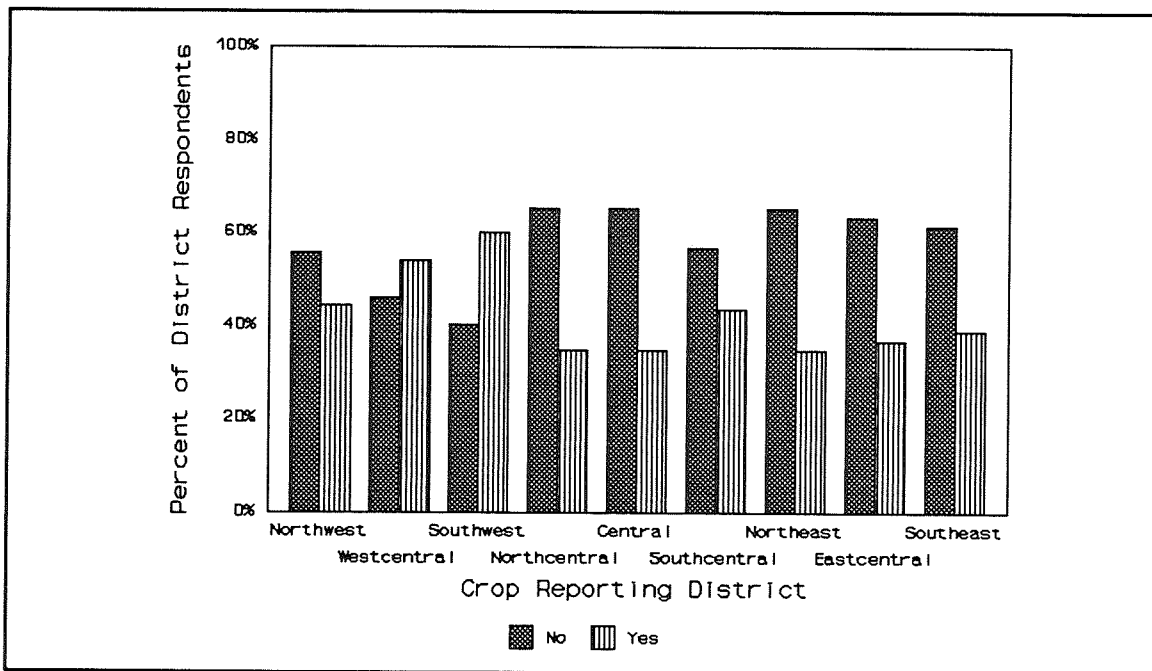


Figure 11. Percent of Respondents Planning to Return Some CRP Acres to Crop Production under Conservation Compliance by Crop Reporting District

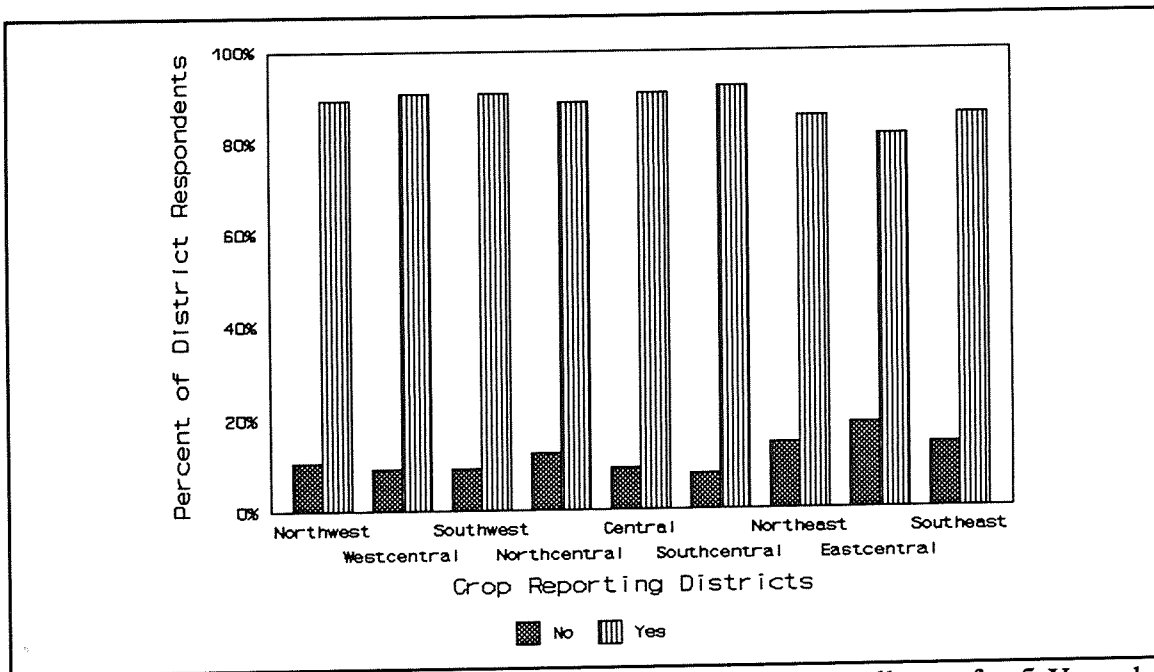


Figure 12. Percent of Respondents Willing to Extend CRP Enrollment for 5 Years by Crop Reporting District

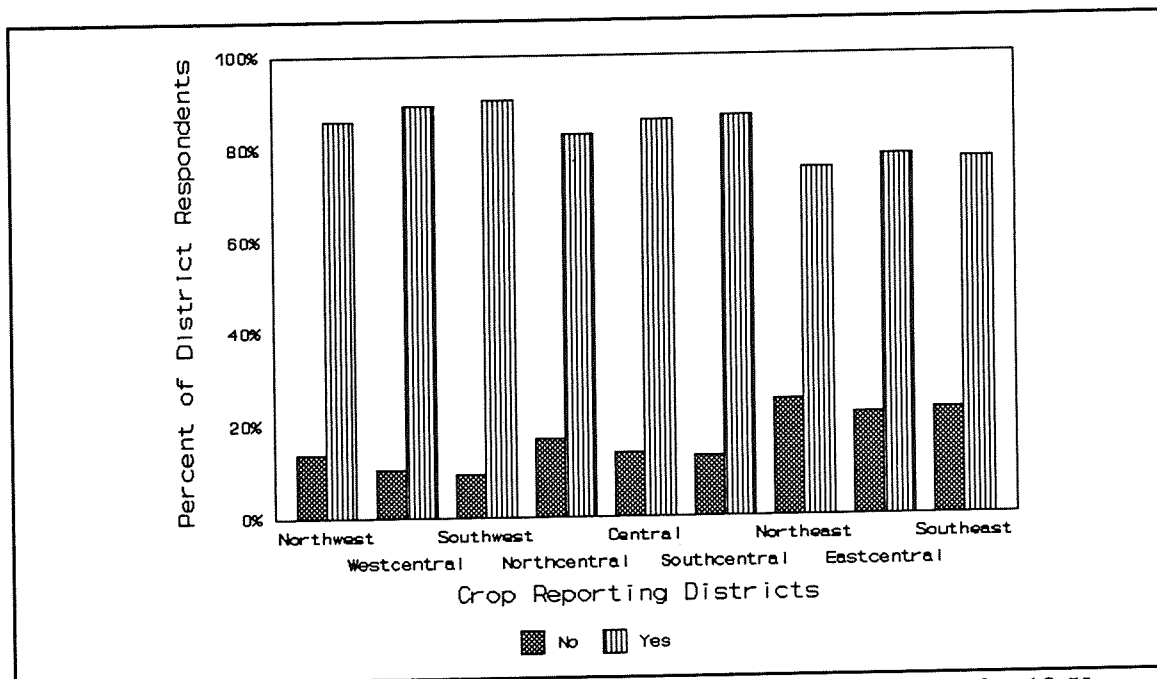


Figure 13. Percent of Respondents Willing to Extend CRP Enrollment for 10 Years by Crop Reporting District

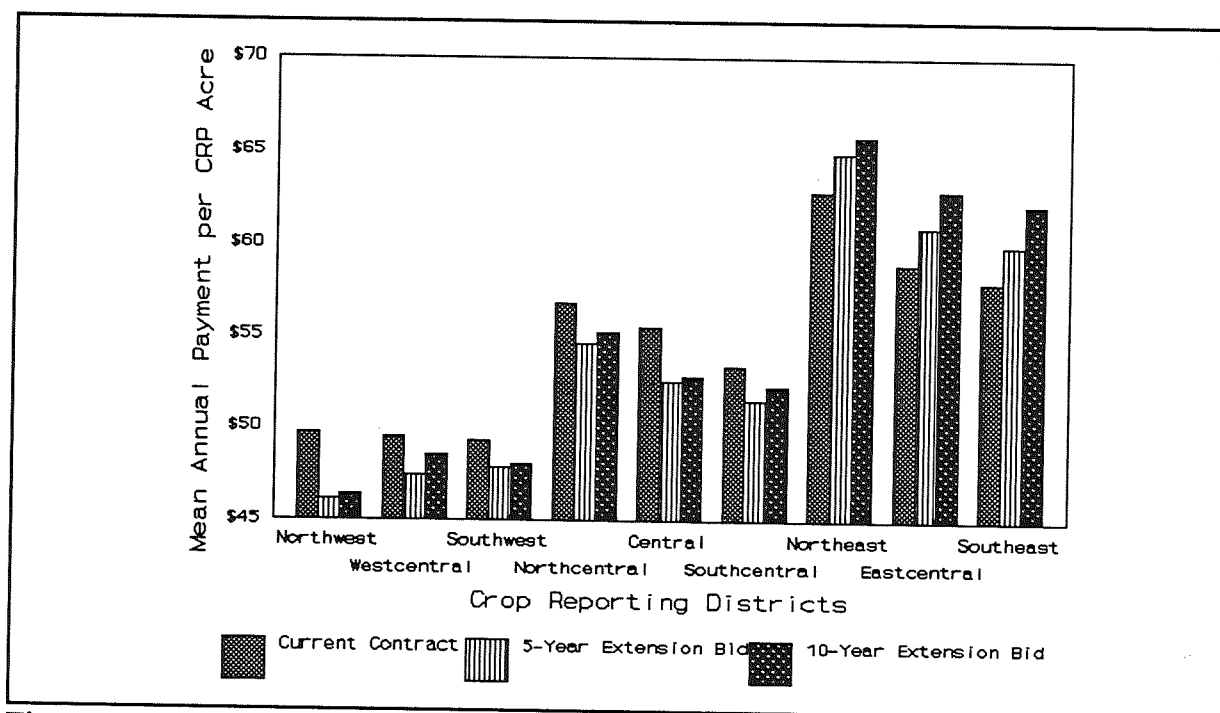


Figure 14. Mean Current CRP Payments and Mean Bids Required to Extend Enrollment for 5 and 10 Years by Crop Reporting District

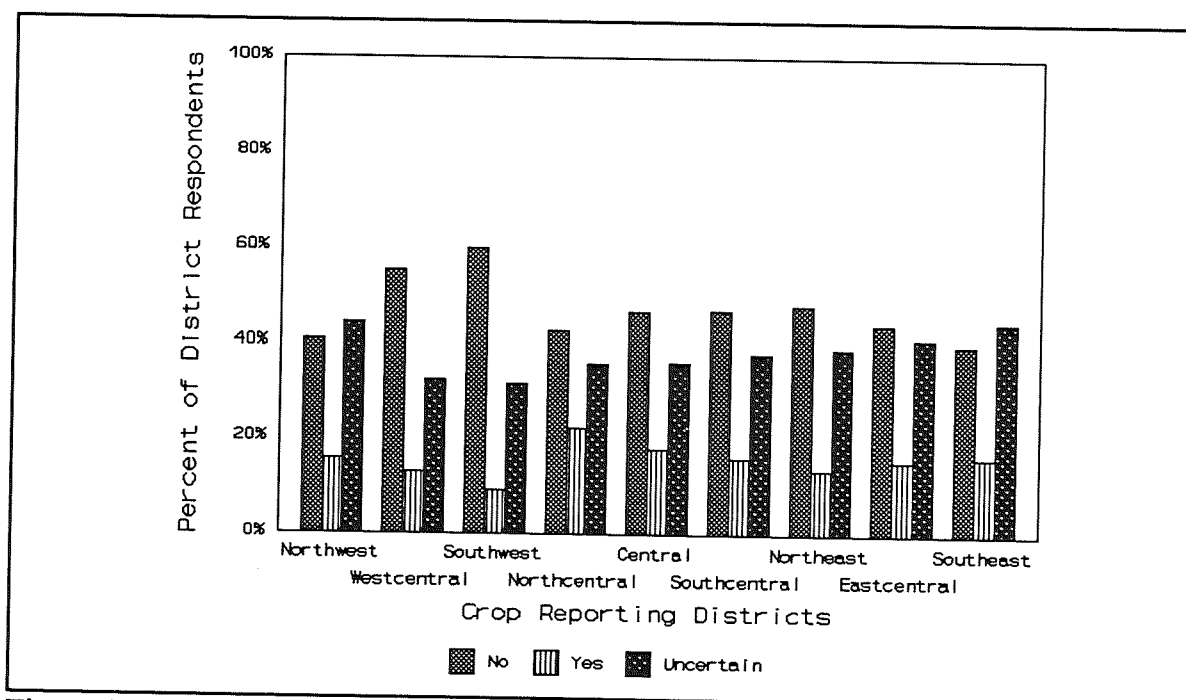


Figure 15. Percent of Respondents Willing to Continue in CRP Program Without Payments, if Base is Preserved, by Crop Reporting Districts

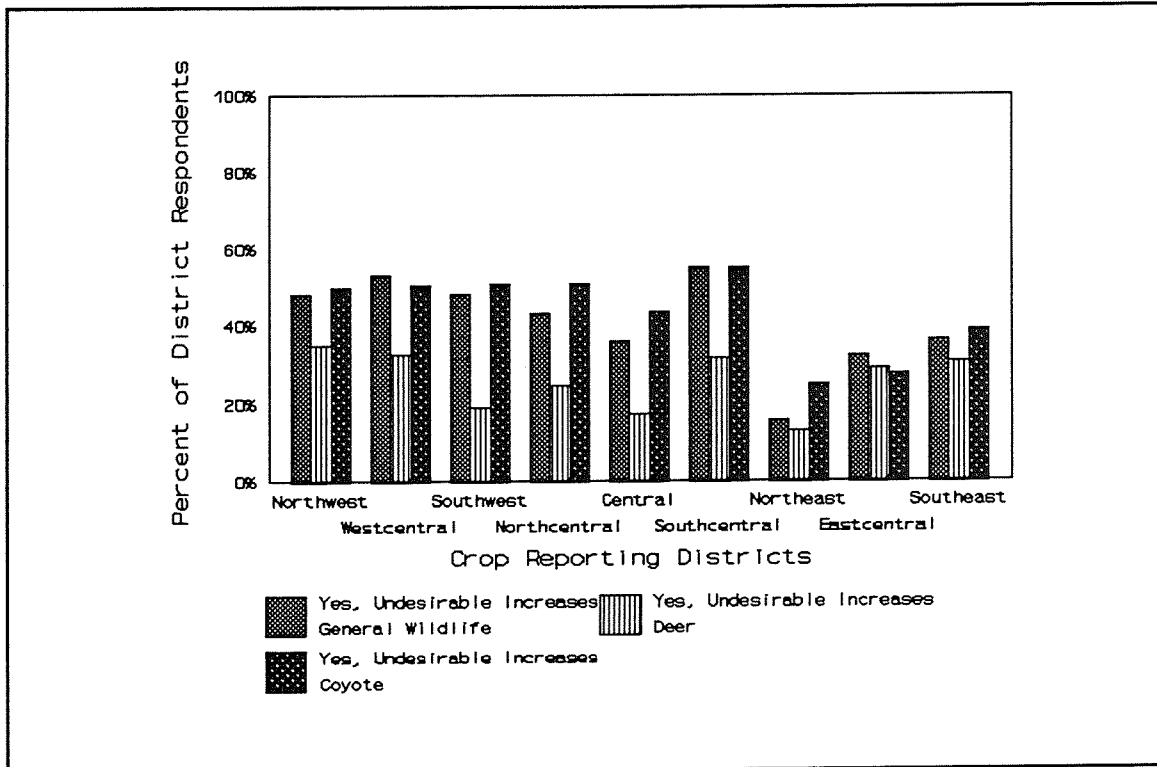


Figure 16. Percent of Respondents who Perceived Increases in General Wildlife, Deer, and Coyote as Undesirable by Crop Reporting District (deer and coyote reported only for those respondents indicating increases in those populations).

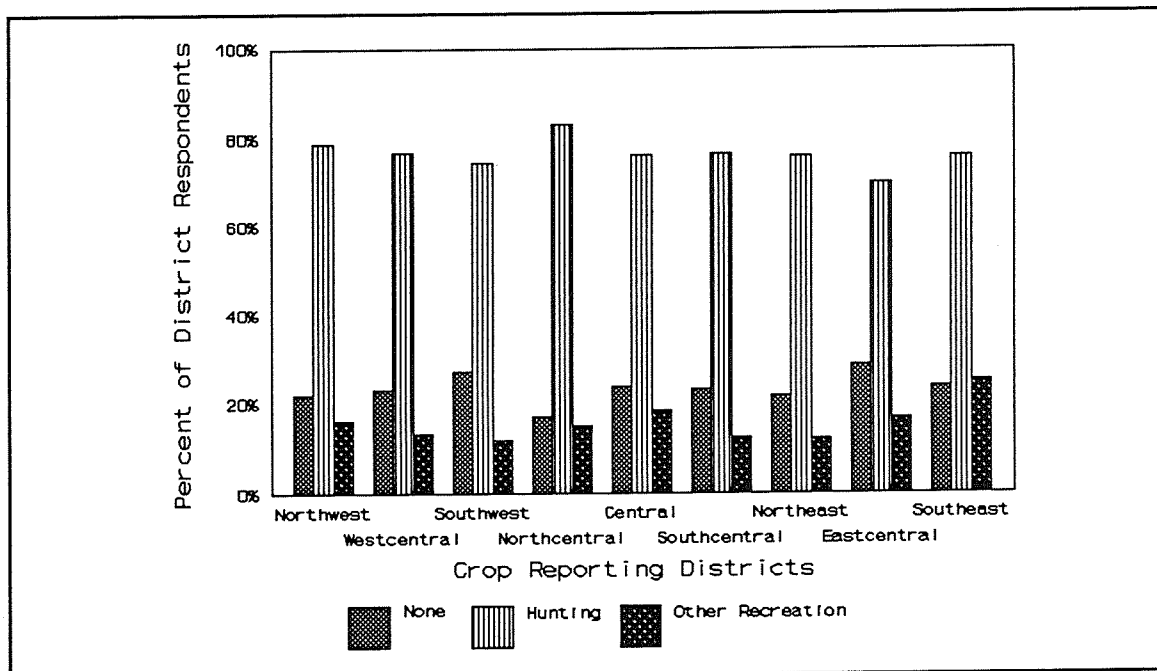


Figure 17. Percent of Respondents Allowing Recreational Activities on Their CRP Land by Crop Reporting District

Table 1. County of ASCS Office Where Sampled Contract is Administered

<u>County</u>	<u>Percent of respondents*</u>	<u>County</u>	<u>Percent of respondents*</u>	<u>County</u>	<u>Percent of respondents*</u>
Allen	0.4	Greeley	1.3	Osborne	1.1
Anderson	0.3	Greenwood	0.2	Ottawa	0.4
Atchison	0.3	Hamilton	2.1	Pawnee	1.7
Barber	1.0	Harper	0.7	Phillips	1.4
Barton	1.4	Harvey	0.3	Pottawatomie	1.0
Bourbon	1.0	Haskell	0.5	Pratt	1.2
Brown	0.5	Hodgeman	1.1	Rawlins	0.9
Butler	0.7	Jackson	1.0	Reno	3.4
Chase	0.1	Jefferson	1.2	Republic	0.6
Chautauqua	0.5	Jewell	1.1	Rice	0.7
Cherokee	0.5	Johnson	0.1	Riley	0.3
Cheyenne	1.4	Kearny	1.2	Rooks	1.9
Clark	1.1	Kingman	2.1	Rush	2.0
Clay	1.7	Kiowa	1.7	Russell	2.3
Cloud	0.7	Labette	0.7	Saline	0.9
Coffey	0.6	Lane	0.6	Scott	0.4
Comanche	0.9	Leavenworth	0.4	Sedgwick	0.3
Cowley	0.5	Lincoln	1.2	Seward	0.8
Crawford	1.2	Linn	1.1	Shawnee	0.5
Decatur	0.7	Logan	0.6	Sheridan	0.6
Dickinson	2.1	Lyon	1.8	Sherman	0.6
Doniphan	0.1	McPherson	1.2	Smith	1.0
Douglas	0.4	Marion	1.1	Stafford	0.4
Edwards	1.2	Marshall	0.7	Stanton	1.1
Elk	0.4	Meade	0.8	Stevens	1.3
Ellis	1.4	Miami	1.2	Sumner	0.6
Ellsworth	1.0	Mitchell	1.2	Thomas	0.3
Finney	1.0	Montgomery	0.4	Trego	1.5
Ford	1.2	Morris	0.7	Wabaunsee	0.7
Franklin	0.3	Morton	1.6	Wallace	1.3
Geary	0.1	Nemaha	1.4	Washington	1.6
Gove	0.8	Neosho	1.4	Wichita	0.6
Graham	2.0	Ness	1.4	Wilson	0.7
Grant	0.6	Norton	1.5	Woodson	0.3
Gray	0.4	Osage	1.4		

\*Total respondents = 2,141



Table 2. Relationship of Respondents to Land under CRP Contract

<u>Relationship</u>	Percent of <u>respondents*</u>
Owner and operator	70.8
Renter and operator	18.1
Absentee landowner	11.1

\*Total respondents = 2,109

Table 3. Highest Level of Education Obtained by Respondent

<u>Education level</u>	Percent of <u>respondents*</u>
Some elementary school	5.2
Some high school	6.1
High school diploma	31.9
Some college or post-high school	24.0
Vocational or technical school	7.8
Bachelor's degree	17.4
Graduate degree	7.7

\*Total respondents = 2,025

Table 4. Total Annual Income of Respondents

	From all sources	From agricultural sources	From non- agricultural sources
<u>Annual income</u>	<u>percent of respondents<sup>1</sup></u>	<u>percent of respondents<sup>2</sup></u>	<u>percent of respondents<sup>3</sup></u>
Less than \$10,000	2.8	22.8	39.5
\$10,000-\$19,999	9.5	17.0	20.1
\$20,000-\$24,999	9.2	10.4	9.4
\$25,000-\$29,999	8.6	7.7	8.4
\$30,000-\$49,999	25.1	15.3	12.0
\$50,000-\$74,999	16.9	8.9	5.3
\$75,000 or more	27.8	17.8	5.3

<sup>1</sup>Total respondents = 1,844

<sup>2</sup>Total respondents = 1,902

<sup>3</sup>Total respondents = 1,854

Table 5. Value of Farm's Land and Buildings

<u>Value</u>	<u>Percent of respondents*</u>
Less than \$40,000	5.7
\$40,000-\$69,999	10.9
\$70,000-\$99,999	9.6
\$100,000-\$149,999	12.1
\$150,000-\$199,999	10.9
\$200,000-\$499,999	27.3
\$500,000-\$999,999	15.7
\$1,000,000 or more	7.8

\*Total respondents = 1,861

Table 6. Value of Farm's Machinery and Equipment

<u>Value</u>	<u>Percent of respondents*</u>
Less than \$10,000	28.6
\$10,000-\$29,999	16.5
\$30,000-\$49,999	12.0
\$50,000-\$99,999	16.5
\$100,000-\$199,999	14.0
\$200,000-\$499,999	8.9
\$500,000-\$999,999	2.9
\$1,000,000 or more	0.8

\*Total respondents = 1,835

Table 7. Participation in USDA Commodity Programs

<u>Crop program</u>	<u>Percent of respondents*</u>	<u>Crop program</u>	<u>Percent of respondents*</u>
Wheat	75.0	Soybeans	12.2
Sorghum	60.6	Oats	12.1
Corn	19.1	Barley	9.5
		None	23.2

\*Total respondents = 2,078



Table 8. Total Annual Income of Respondents by Crop Reporting District

	<u>Percent of Respondents</u>								
	<u>North- west</u>	<u>West- central</u>	<u>South- west</u>	<u>North- central</u>	<u>Central</u>	<u>South- central</u>	<u>North- east</u>	<u>East- central</u>	<u>South east</u>
<b>Agricultural income</b>									
Less than \$10,000	14.2	9.7	13.1	14.8	23.2	22.3	35.9	43.2	39.7
\$10,000-\$19,999	17.4	11.0	8.7	17.3	20.4	18.2	23.7	25.9	14.9
\$20,000-\$24,999	11.0	13.6	11.1	13.2	12.1	9.8	7.6	5.1	7.5
\$25,000-\$29,999	7.1	9.7	6.9	10.7	6.8	9.8	5.3	5.1	6.3
\$30,000-\$49,999	14.8	22.1	21.5	16.0	14.3	13.2	9.9	12.5	10.3
\$50,000-\$74,999	11.0	9.7	11.1	9.5	8.2	8.8	6.9	6.8	7.5
\$75,000 or more	24.5	24.0	27.7	18.5	15.0	17.9	10.7	2.3	13.8
<b>Nonagricultural income</b>									
Less than \$10,000	46.3	42.9	42.0	48.1	36.3	38.6	31.3	31.4	34.7
\$10,000-\$19,999	26.5	19.0	22.8	16.7	20.5	18.8	23.4	18.0	17.6
\$20,000-\$24,999	7.5	8.2	9.3	10.9	10.6	10.9	5.5	12.8	5.9
\$25,000-\$29,999	8.8	9.5	5.0	5.4	9.9	10.9	9.4	10.5	7.6
\$30,000-\$49,999	7.5	8.2	8.2	13.0	12.5	10.2	15.6	13.4	22.4
\$50,000-\$74,999	1.4	4.8	5.7	2.5	4.8	5.8	8.6	7.6	7.6
\$75,000 or more	2.0	7.5	7.1	3.3	5.5	4.8	6.3	6.4	4.1
<b>All sources income</b>									
Less than \$10,000	3.4	2.7	.7	3.0	1.5	1.7	3.9	5.8	6.0
\$10,000-\$19,999	10.9	2.7	6.7	7.6	11.8	6.3	12.5	14.0	17.5
\$20,000-\$24,999	4.8	9.4	6.7	9.7	10.0	10.8	14.1	13.4	4.8
\$25,000-\$29,999	7.5	4.0	8.8	8.1	10.0	13.2	7.8	8.7	4.2
\$30,000-\$49,999	28.6	31.5	18.0	25.8	26.2	24.3	22.7	28.5	24.7
\$50,000-\$74,999	13.6	14.1	19.1	21.2	17.7	15.6	15.6	15.1	16.9
\$75,000 or more	31.3	35.6	39.9	24.6	22.9	28.1	23.4	14.5	25.9

Table 9. Values of Farm's Land and Buildings Crop Reporting District

<u>Value</u>	<u>Percent of respondents</u>								
	<u>North- west</u>	<u>West- central</u>	<u>South- west</u>	<u>North- central</u>	<u>Central</u>	<u>South- central</u>	<u>North- east</u>	<u>East- central</u>	<u>South east</u>
Less than \$40,000	5.4	3.4	6.0	5.8	5.1	6.0	8.5	7.4	4.1
\$40,000-\$69,999	10.9	8.7	7.7	10.4	12.3	8.1	10.0	15.4	17.2
\$70,000-\$99,999	6.1	6.7	7.4	10.8	10.9	8.1	9.2	14.3	13.0
\$100,000-\$149,999	9.5	8.7	7.7	10.8	12.3	13.7	16.2	19.4	13.0
\$150,000-\$199,999	8.8	8.1	10.9	10.4	12.0	11.9	14.6	10.3	10.1
\$200,000-\$499,999	27.2	30.2	27.7	32.8	30.8	26.0	23.1	24.0	19.5
\$500,000-\$999,999	22.4	20.8	19.3	14.1	10.9	17.9	14.6	5.1	17.8
\$1,000,000 or more	9.5	13.4	13.3	5.0	5.8	8.4	3.8	4.0	5.3

Table 10. Participation in USDA Commodity Programs Crop Reporting District

<u>Crop</u>	<u>Percent of respondents</u>								
	<u>North- west</u>	<u>West- central</u>	<u>South- west</u>	<u>North- central</u>	<u>Central</u>	<u>South- central</u>	<u>North- east</u>	<u>East- central</u>	<u>South east</u>
Wheat	94.1	89.9	74.1	85.3	86.5	78.6	45.8	42.9	58.7
Sorghum	73.4	71.9	58.6	75.8	70.2	53.3	41.7	41.8	48.9
Corn	32.5	15.2	28.5	12.8	11.9	14.2	29.2	19.6	16.3
Soybeans	-	-	1.0	6.8	2.5	2.1	37.7	47.2	50.0
Oats	21.9	10.1	6.8	21.1	18.6	8.4	6.3	6.9	6.0
Barley	17.8	30.3	16.5	6.4	7.1	5.3	-	2.1	-
None	5.9	10.1	23.9	12.8	13.5	20.4	50.7	51.9	37.0

Table 11. Importance of Reasons for Enrolling Acres in CRP

<u>Reason</u>	<u>Percent of respondents</u>					<u>Mean</u>
	Not		Very			
	Important			Important		
	1	2	3	4	5	
Concern for soil erosion	5.4	5.2	18.0	23.3	48.1	4.0
Most profitable use of land	5.6	5.1	18.9	22.2	48.2	4.0
Low risk associated with payments	11.1	6.8	22.8	25.9	33.1	3.6
Provide wildlife habitat	16.8	12.4	24.9	19.9	25.9	3.3
Easiest way to meet conservation compliance	18.3	12.3	25.3	18.5	25.6	3.2
Able to reduce labor/increase time for other activities	34.0	12.8	20.8	16.3	16.1	2.7
Able to retire/semi-retire	54.1	8.1	13.8	9.0	15.0	2.2
Made tree planting affordable	76.1	9.8	7.2	3.4	3.5	1.5



Table 12. Importance of Reasons for Not Enrolling Eligible Acres in CRP\*

<u>Reason</u>	<u>Percent of respondents</u>					<u>Mean</u>
	Not Important <u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	Very Important <u>5</u>	
Crop production was more profitable than receiving CRP payments	18.1	8.4	21.9	20.7	30.9	3.4
Potential for increased crop prices	21.9	10.7	25.1	22.6	19.6	3.1
Better able to utilize my labor and/or equipment	28.1	9.4	21.1	23.3	18.1	2.9
Needed crops for livestock feed	41.7	9.6	12.0	12.7	24.1	2.7
Needed to keep family member or tenant in farming	48.3	12.8	12.1	9.8	17.0	2.3
Profits from haying/grazing higher than CRP payments	44.7	19.1	15.6	9.6	11.0	2.2

\*Includes only responses for those who did not enroll all eligible acres

Table 13. Importance of Reasons for Enrolling Acres in CRP by Crop Reporting Districts

<u>Reason</u>	<u>Mean value*</u>								
	<u>North- west</u>	<u>West- central</u>	<u>South- west</u>	<u>North- central</u>	<u>Central</u>	<u>South- central</u>	<u>North- east</u>	<u>East- central</u>	<u>South east</u>
Concern for soil erosion	4.37	3.99	3.81	4.12	4.02	3.96	4.11	4.04	4.10
Most profitable use of land	4.16	4.11	4.14	3.95	4.08	4.21	3.73	3.72	3.86
Low risk associated with payments	3.65	3.61	3.81	3.56	3.43	3.67	3.48	3.61	3.54
Provide wildlife habitat	3.38	2.99	3.19	3.26	3.10	3.21	3.47	3.31	3.15
Easiest way to meet conservation compliance	3.55	3.14	3.09	3.23	3.20	3.05	3.21	3.11	3.34
Able to reduce labor/increase time for other activities	2.32	2.41	2.92	2.81	2.47	2.66	2.69	2.76	2.77
Able to retire/semi-retire	2.06	2.03	2.34	2.18	1.85	2.31	2.19	2.31	2.28
Made tree planting affordable	1.57	1.59	1.48	1.37	1.53	1.47	1.40	1.43	1.55

\*Mean values based on scale: 1=Not Important to 5=Very Important

Table 14. Crop Planted on CRP Acres during Growing Season Prior to Enrollment

<u>Crop</u>	<u>Percent of respondents*</u>	<u>Crop</u>	<u>Percent of respondents*</u>
Wheat	81.2	Corn	5.1
Sorghum	57.3	Oats	4.7
Soybeans	13.1	Barley	2.2
Alfalfa	6.9	Grass	1.9

\*Total respondents = 2,096

Table 15. Crop Planted on CRP Acres during Growing Season Prior to Enrollment by Crop Reporting Districts

<u>Crop</u>	<u>Percent of respondents</u>								
	<u>North- west</u>	<u>West- central</u>	<u>South- west</u>	<u>North- central</u>	<u>Central</u>	<u>South- central</u>	<u>North- east</u>	<u>East- central</u>	<u>South east</u>
Wheat	86.1	91.5	87.2	83.1	87.3	92.4	61.6	54.4	66.7
Sorghum	42.2	48.0	58.1	69.2	55.7	50.3	75.35	72.5	46.8
Soybeans	-	-	1.0	6.8	2.5	2.1	37.7	47.2	50.0
Alfalfa	4.8	2.3	2.2	9.0	9.2	8.8	13.0	6.2	6.5
Corn	3.6	5.1	4.5	1.9	1.6	.9	18.5	14.0	5.4
Oats	2.4	1.7	2.6	4.9	5.1	2.1	12.3	9.3	6.5
Barley	2.4	5.6	6.7	2.6	1.3	.3	-	-	-
Grass	1.2	1.7	1.3	1.1	.9	2.4	2.1	1.0	6.5
None	1.2	-	.3	-	.3	.3	-	2.1	2.2

Table 16. CRP Treatments of Sampled Contracts

<u>Treatment</u>	<u>Percent of respondents*</u>	<u>Treatment</u>	<u>Percent of respondents*</u>
CP-1	14.1	CP-8	0.4
CP-2	84.7	CP-9	0.0
CP-3	0.3	CP-10	1.8
CP-4	1.1	CP-11	0.0
CP-5	0.2	CP-12	0.05
CP-6	0.3	CP-13	0.2
CP-7	0.0	CP-14	0.1

\*Total respondents = 2,141



Table 17. Improvements Currently on CRP Acres

<u>Improvement</u>	<u>Percent of respondents*</u>
Terraces	50.7
Waterways	32.7
Fences	31.7
Livestock watering sources	15.5
Livestock handling facilities	5.0
None	27.7

\*Total respondents = 2,125

Table 18. Management Practice Done on CRP Acres in the Past 2-3 Years

<u>Management Practice</u>	<u>Percent of respondents*</u>
Mowing	81.2
Weed Control	78.4
Prescribed burning	24.2
No active management	3.9

\*Total respondents = 2,128

Table 19. Plans for CRP Acres after the Contract Expires

<u>Plans</u>	<u>Percent of respondents*</u>	<u>Mean (acres)</u>
No plans/uncertain	36.6	47.4
Keep in grass for livestock grazing	36.2	29.3
Return to annual crop production under conservation compliance provisions	23.6	44.0
Keep in grass for erosion control	22.9	16.0
Keep in grass for hay production	17.6	8.3
Keep in grass and/or trees for wildlife habitat	10.2	7.4
Return to annual crop production without conservation compliance provisions	4.9	6.4
Sell the land	2.6	4.1
Keep in trees for erosion control	1.8	0.5
Keep in trees for timber production	0.5	0.1

\*Total respondents = 2,034

Table 20. Plans for CRP Acres after Contract Expires by Crop Reporting District

<u>Reason</u>	<u>Percent of respondents</u>								
	<u>North- west</u>	<u>West- central</u>	<u>South- west</u>	<u>North- central</u>	<u>Central</u>	<u>South- central</u>	<u>North- east</u>	<u>East- central</u>	<u>South east</u>
No plans/uncertain	33.5	34.3	41.0	26.9	40.1	42.0	33.6	41.6	30.8
Keep in grass for livestock grazing	41.6	32.0	26.2	48.1	36.8	37.2	32.9	32.6	39.6
Return to annual crop production under cons. compliance provisions	24.2	32.0	34.1	24.2	18.2	23.7	12.1	17.4	20.3
Keep in grass for erosion control	32.3	19.8	16.7	23.8	22.5	22.1	23.6	25.3	26.4
Keep in grass for hay production	10.6	8.1	2.3	24.6	22.1	13.5	32.1	24.7	29.7
Keep in grass and/or trees for wildlife habitat	9.9	9.9	7.9	7.3	9.8	13.1	15.7	11.1	9.3
Return to annual crop production without conservation compliance provisions	3.1	2.9	5.2	3.8	4.2	2.6	10.0	5.8	9.9
Sell the land	.6	1.7	1.3	3.1	4.2	2.2	3.6	4.7	2.2
Keep in trees for erosion control	1.2	.6	.7	1.2	2.0	3.8	4.3	1.1	1.1
Keep in trees for timber production	.6	-	-	.8	.3	1.0	.7	-	1.1



Table 21. Practices and/or Structures Required before CRP Acres Can Be Returned to Crop Production under Conservation Compliance Provisions\*

<u>Construction or practice</u>	<u>Percent of respondents**</u>	<u>Mean (acres)</u>
Uncertain	49.0	71.6
No conservation practices/ construction required	22.5	29.2
Conservation tillage or residue management	22.1	43.9
Terraces	19.6	23.1
Waterways	7.5	4.0
No-till	2.7	3.8
Crop rotations that include grass or legume pasture	2.7	2.4
Contours without terraces	2.5	3.4
Ridge-till	1.1	1.5

\*Total respondents = 883

\*\*Includes only those respondents who plan to return some acres to crop production under conservation compliance provisions

Table 22. Construction Required before CRP Acres Can Be Returned to Grazing\*

<u>Construction</u>	<u>Percent of respondents**</u>	<u>Mean (acres)</u>
Fencing	56.8	51.6
Uncertain	33.7	41.5
Livestock water development	21.9	20.8
No construction required	14.0	8.6
Livestock handling facilities	12.1	10.9

\*Includes only those respondents who plan to return some acres to grazing

\*\*Total respondents = 1,179

Table 23. Importance of Likely Influences on the Decision of What to Do when CRP Contracts Expire

<u>Influences</u>	<u>Percent of respondents</u>					<u>Mean*</u>
	Not Important <u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	Very Important <u>5</u>	
Market prices for crops/livestock that could be produced on the CRP contract acres after the contract expires	13.2	5.8	16.0	19.6	45.5	3.8
Availability of cost-sharing for fencing and livestock water development that may be required before CRP acres can be returned to livestock grazing	24.7	9.4	15.9	15.8	34.3	3.3
Expected costs of planting, growing, and harvesting crops that could be grown on the CRP acres after the contract expires	23.6	9.9	19.2	19.3	28.0	3.2
Government price supports for crops that could be grown on the CRP acres after the contract expires	24.3	10.6	18.5	16.6	30.0	3.2
Availability of cost-sharing for soil conservation practices that may be required before CRP acres can be returned to annual crop production	29.0	10.4	16.4	16.2	28.0	3.0
Cost of soil conservation practices that may be required before CRP acres can be returned to production	28.5	11.6	16.5	15.3	28.2	3.0
Expected price the land will sell for after the CRP contract expires	36.0	11.3	16.1	12.6	24.0	2.8
Availability of cost-sharing for establishing or improving wildlife habitat	41.0	14.8	17.6	10.3	16.4	2.5

\*Mean values based on the scale 1=Not Important to 5=Very Important

Table 24. Importance of Likely Influences on the Decision of What to Do when CRP Contracts Expire by Crop Reporting District

<u>Reason</u>	<u>Mean value*</u>								
	<u>North-west</u>	<u>West-central</u>	<u>South-west</u>	<u>North-central</u>	<u>Central</u>	<u>South-central</u>	<u>North-east</u>	<u>East-central</u>	<u>South east</u>
Market prices for crops/livestock	3.76	3.88	4.02	3.70	3.54	3.96	3.84	3.43	3.82
Availability of cost-sharing for fencing and livestock water development	3.56	3.15	3.07	3.44	3.36	3.46	3.08	2.87	2.97
Expected costs of planting, growing, and harvesting crops	3.17	3.28	3.65	2.92	2.96	3.35	3.03	2.82	3.15
Government price supports	3.11	3.50	3.68	3.00	3.04	3.34	2.92	2.63	2.83
Availability of cost-sharing for soil conservation practices	3.35	2.96	3.38	2.96	2.87	3.02	2.85	2.72	3.02
Cost of soil conservation practices	3.37	2.91	3.32	2.92	2.98	3.01	2.87	2.74	2.95
Expected price the land	2.97	2.77	2.91	2.72	2.79	2.82	2.60	2.51	2.39
Availability of cost-sharing for wildlife habitat	2.65	2.35	2.50	2.39	2.42	2.55	2.32	2.44	2.42

\*Mean values based on the scale 1=Not Important to 5=Very Important

Table 25. Current CRP Payments of Respondents (\$/acre/year)

<u>N</u>	<u>Mean</u>	<u>S.E.</u>	<u>Median</u>	<u>Mode</u>	<u>Range</u>	
					<u>Minimum</u>	<u>Maximum</u>
2141	54.49	0.12	55.00	55.00	25.00	70.00

Of respondents that would extend their CRP contract for 5 years,  
percentage bidding:

(n=1714)

	<u>Percent of respondents</u>
Bids equal to current rate	42.1
Bids less than current rate	30.4
Bids greater than current rate	27.5

Of respondents that would extend their CRP contract for 10 years,  
percentage bidding:

(n=1626)

	<u>Percent of respondents</u>
Bids equal to current rate	37.9
Bids less than current rate	31.5
Bids greater than current rate	30.6

Note: Based on ASCS information and survey responses.

Table 26. Annual Rental Payment (\$/acre/year) Required to Extend CRP Contract for an Additional 5 Years Subject to Specified Conditions

<u>Condition</u>	<u>Mean</u>	<u>N</u>
Able to harvest grass seed from CRP land	43.92	1168
Able to graze CRP land only after mid-July when most wildlife species have finished nesting	40.40	1317
Able to hay CRP land only until mid-July, and then had to quit haying until spring to allow adequate wildlife cover to develop late in the growing season	40.29	1255
Able to graze CRP land only until mid-July and then had to remove livestock until spring to allow adequate wildlife cover to develop late in the growing season	40.27	1300
Able to hay CRP land only after mid-July when most wildlife species have finished nesting	40.11	1291
Able to hay CRP land at a level less than that at which similar grassland is hayed	37.88	1283
Able to graze CRP land at a level less than that at which similar grassland is grazed	37.31	1410



Table 27. Respondents Believing that an Increase in Wildlife Species Has Taken Place on Their Farm Because of Enrollment in CRP

<u>Wildlife species</u>	<u>Percent of respondents*</u>	<u>Wildlife species</u>	<u>Percent respondents*</u>
Deer	68.0	Dove	25.3
Pheasant	67.8	Turkey	25.1
Quail	60.8	Prairie chicken	17.0
Coyote	49.0	Songbirds	16.8
Rabbit	40.5	Squirrel	7.2
		Wildlife in general	37.8

\*Total respondents = 2,092



Table 28. Respondents Believing that an Increase in Wildlife Species Has Taken Place on Their Farm because of Enrollment in CRP by Crop Reporting District

<u>Wildlife Species</u>	<u>Percent of respondents</u>								
	<u>North-west</u>	<u>West-central</u>	<u>South-west</u>	<u>North-central</u>	<u>Central</u>	<u>South-central</u>	<u>North-east</u>	<u>East-central</u>	<u>South-east</u>
deer	71.8	80.2	72.3	67.7	69.7	76.3	62.5	72.5	73.5
pheasant	82.7	80.8	80.0	87.3	83.8	83.9	80.9	29.8	9.0
quail	34.0	16.8	51.7	80.9	72.7	82.0	79.4	73.6	70.5
coyote	54.5	54.5	70.3	51.8	56.2	60.6	29.4	26.4	35.5
rabbit	37.2	44.3	43.3	42.2	42.4	45.1	50.0	38.2	42.8
dove	16.7	22.8	26.7	32.3	31.3	32.5	23.5	20.2	24.1
turkey	27.6	12.0	7.7	37.1	29.3	30.9	28.7	32.6	38.6
prairie chicken	19.2	6.6	15.0	37.8	18.9	7.3	17.6	23.6	17.5
songbirds	12.2	15.6	12.3	18.3	16.5	20.8	22.1	23.6	21.7
squirrel	1.9	4.2	.7	8.0	5.1	8.2	17.6	14.6	16.3
wildlife in general	32.1	40.1	33.0	41.4	41.1	41.6	46.3	47.8	39.8

Table 29. Respondents Allowing Recreational Access to Specified Group and Average Number of People in Specified Group who Use CRP Acres during an Average Year

<u>Group</u>	<u>Percent of respondents*</u>	<u>Mean number of people</u>
Friends/neighbors	63.2	13.0
Immediate family	57.5	5.5
Anyone who asks permission	40.8	21.4
Extended family	30.9	7.9
Lessees	10.3	8.8
Anyone	4.3	47.4
No one	13.8	

\*Total respondents = 2,043

Table 30. Recreation Activity Allowed on CRP Land

<u>Activity</u>	<u>Percent of respondents<sup>1</sup></u>	<u>Fee charged for activity (\$)</u>	<u>Percent of "Yes" respondents</u>
Hunting	76.4	0	96.4
		>0	3.6
Other recreation	15.6	0	98.6
		>0	1.4
None	23.5		

<sup>1</sup>Total respondents = 2,001

Table 31. Reasons for Not Allowing Recreational Access to CRP Land

<u>Reason</u>	<u>Percent of respondents</u>					<u>Mean</u>
	Not Important <u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	Very Important <u>5</u>	
Liability concerns	5.7	0.0	9.7	12.5	72.2	4.5
Trespassing	6.9	2.3	12.1	16.8	61.8	4.2
Vandalism	8.3	4.1	10.7	14.8	62.1	4.2
Litter/Trash	8.6	4.3	9.9	19.1	58.0	4.1
Retain privacy	13.6	7.4	16.7	12.3	50.0	3.8
Noise	45.5	13.6	13.6	9.7	17.5	2.4

Table 32. Attributes of a State-Sponsored Recreational Access Program

<u>Attribute</u>	<u>Percent of respondents</u>					<u>Mean</u>
	Not Important <u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	Very Important <u>5</u>	
Amount of lease payment	1.1	0.9	6.8	14.2	77.0	4.6
Types of recreation allowed	2.9	1.3	9.2	22.7	63.9	4.4
Walk-in only/No vehicle access	3.9	4.0	13.4	18.1	60.6	4.3
Limits on numbers of users	7.1	3.6	15.0	22.7	51.6	4.1
Control over times for access	7.3	6.1	11.1	22.6	52.9	4.1
Technical assistance for habitat improvement	4.7	5.6	20.3	24.9	44.4	4.0
Patrolling of your property	8.2	6.2	20.8	23.8	41.1	3.8
Parking availability	23.8	14.5	24.3	13.8	23.6	3.0

Table 33. Reasons for Not Considering Participation in a State-Sponsored Recreational Access Program

<u>Reason</u>	<u>Percent of respondents</u>					<u>Mean</u>
	Not Important <u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	Very Important <u>5</u>	
Liability concerns	3.2	1.2	6.0	11.8	77.8	4.6
Trash/Litter	4.8	2.8	9.6	16.5	66.4	4.4
Vandalism	5.8	2.7	9.2	17.1	65.2	4.3
Poor use of public funds	9.7	5.9	15.2	12.1	57.2	4.0
Concern for privacy	13.2	6.6	14.9	13.1	52.1	3.8
Noise	31.4	17.8	19.6	6.5	24.7	2.7

## APPENDIX - QUESTIONNAIRE

The Conservation Reserve Program (CRP) was established in 1985. This program pays landowners or farm operators a contracted dollar amount to stop cropping highly erodible lands for a 10-year period. Landowners are required to establish a permanent vegetative cover on the acres enrolled. CRP contracts from the first sign-up will begin expiring in 1995.

Your input is needed so that state and federal policy makers have a better idea of how CRP acres may be managed after the contracts expire. Your input will also help determine what incentives may be necessary to get land managers to extend their CRP contracts.

Please answer all of the questions. If you wish to comment on any questions or qualify your answers, please feel free to use the space in the margins. Your comments will be read and taken into account.

# *BEYOND C.R.P.:*

A STATEWIDE SURVEY OF  
CONSERVATION RESERVE PROGRAM PARTICIPANTS  
ABOUT THE FUTURE OF CRP ACREAGE IN KANSAS

Thank you very much for taking the time to complete this questionnaire!



Department of Agricultural Economics  
and  
Department of Horticulture, Forestry,  
and Recreation Resources  
215 Call Hall  
Kansas State University  
Manhattan, Kansas 66506-1602

### IMPORTANT!

The following questions ask about acres under a specific CRP contract with ASCS. The contract number is listed on the mailing label and in the cover letter accompanying this questionnaire. Please answer the following questions in relation to the acres covered by that particular contract.

1. When this CRP contract ends, who will decide how the land under contract will be used? (Check one.)  
☐ I WILL DECIDE --- GO TO QUESTION 3.  
☐ ANOTHER PERSON WILL DECIDE --- GO TO QUESTION 2.  
☐ UNCERTAIN --- GO TO QUESTION 3.
  
2. Could we please have the name and address of the person who you anticipate will decide how this land now under CRP contract will be used after the contract expires?  
NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_

Please place this questionnaire in the return envelope and send it back to us. Thank you for your time and information.

### SECTION A. Your CRP Contract

3. Please rate the importance of each of the following in your decision to enroll these particular acres in CRP? (Circle one number for each item.)

	NOT IMPORTANT	1	2	3	4	5 VERY IMPORTANT
a. Able to retire/semi-retire.		1	2	3	4	5
b. Able to reduce labor/increase time for other activities.		1	2	3	4	5
c. Concern for soil erosion.		1	2	3	4	5
d. Most profitable use of land.		1	2	3	4	5
e. Easiest way to meet conservation compliance.		1	2	3	4	5
f. Low risk associated with payments.		1	2	3	4	5
g. Provide wildlife habitat.		1	2	3	4	5
h. Made tree planting affordable.		1	2	3	4	5
i. Other: please specify _____		1	2	3	4	5

4. What improvements are currently on this CRP land? (Check all that apply to this contract.)

<input type="checkbox"/> WATERWAYS	<input type="checkbox"/> LIVESTOCK WATER SOURCES
<input type="checkbox"/> TERRACES	<input type="checkbox"/> LIVESTOCK HANDLING FACILITIES
<input type="checkbox"/> FENCES	<input type="checkbox"/> OTHER: please specify _____

5. Which of the following management practices have you applied to these CRP acres in the past 2-3 years? (Check all that apply to this contract).

<input type="checkbox"/> NO ACTIVE MANAGEMENT
<input type="checkbox"/> PRESCRIBED BURNING
<input type="checkbox"/> MOWING
<input type="checkbox"/> WEED CONTROL
<input type="checkbox"/> OTHER: please specify _____

6. Please indicate what you plan to do with the CRP acres in this contract when it expires. (Fill in the number of acres for each response that applies to this particular contract.)

a. No plans/uncertain.	_____ ACRES
b. Return to annual crop production under conservation compliance provisions.	_____ ACRES
c. Return to annual crop production without conservation compliance provisions.	_____ ACRES
d. Keep in grass for erosion control.	_____ ACRES
e. Keep in grass for hay production.	_____ ACRES
f. Keep in grass for livestock grazing.	_____ ACRES
g. Keep in trees for erosion control.	_____ ACRES
h. Keep in trees for timber production.	_____ ACRES
i. Keep in grass and/or trees for wildlife habitat.	_____ ACRES
j. Sell the land.	_____ ACRES
k. Other: please specify _____	_____ ACRES

7. Do you plan to return some acres to *crop production* under conservation compliance provisions? (Check one.)

☐ YES  
☐ NO --- GO TO QUESTION 8.

→ Please estimate the number of acres requiring the construction or implementation of the following: (Fill in the number of acres for each response that applies to this particular contract.)

- a. Uncertain \_\_\_\_\_ ACRES
- b. No conservation practices/structures required \_\_\_\_\_ ACRES
- c. Waterways \_\_\_\_\_ ACRES
- d. Terraces \_\_\_\_\_ ACRES
- e. Contour without terraces \_\_\_\_\_ ACRES
- f. Conservation tillage or residue management \_\_\_\_\_ ACRES
- g. No-till \_\_\_\_\_ ACRES
- h. Ridge-till \_\_\_\_\_ ACRES
- i. Crop rotations that include grass or legume pasture \_\_\_\_\_ ACRES
- j. Other: please specify \_\_\_\_\_  
 \_\_\_\_\_ ACRES

8. Do you plan to return some acres to *grazing*? (Check one.)

☐ YES  
☐ NO --- GO TO QUESTION 9.

→ Please estimate the number of acres requiring the construction of the following: (Fill in the number of acres for each response that applies to this particular contract.)

- a. Uncertain \_\_\_\_\_ ACRES
- b. No construction required \_\_\_\_\_ ACRES
- c. Fencing \_\_\_\_\_ ACRES
- d. Livestock water development \_\_\_\_\_ ACRES
- e. Livestock handling facilities \_\_\_\_\_ ACRES
- f. Other: please specify \_\_\_\_\_  
 \_\_\_\_\_ ACRES

9. Many considerations will likely influence what you do with your CRP acres once the 10-year contract expires. Please rate each of the following factors according to its importance to you. (Circle one number per item.)

	NOT IMPORTANT-----	VERY IMPORTANT			
a. Market prices for crops/livestock that could be produced on the CRP acres after the contract expires.	1	2	3	4	5
b. Government price supports for crops that could be grown on the CRP acres after the contract expires.	1	2	3	4	5
c. Cost of soil conservation practices that may be required before CRP acres can be returned to production.	1	2	3	4	5
d. Availability of cost-sharing for soil conservation practices that may be required before CRP acres can be returned to annual crop production.	1	2	3	4	5
e. Availability of cost-sharing for fencing and livestock water development that may be required before CRP acres can be returned to livestock grazing.	1	2	3	4	5
f. Availability of cost-sharing for establishing or improving wildlife habitat.	1	2	3	4	5
g. Expected costs of planting, growing, and harvesting crops that could be grown on the CRP acres after the contract expires.	1	2	3	4	5
h. Expected price the land will sell for after the CRP contract expires.	1	2	3	4	5
i. Other: please specify _____	1	2	3	4	5



10. IF crop prices and government commodity payments remain at 1991-92 levels, would you extend your CRP contract for *5 additional years*? (Check one.)

☐ YES  
☐ NO --- GO TO QUESTION 11.

→What annual rental payment per acre would you require to extend your current CRP contract for *an additional 5 years*? (Fill in the number.)

\$ \_\_\_\_\_ /ACRE/YEAR

11. IF crop prices and government commodity payments remain at 1991-92 levels, would you extend your CRP contract for *10 additional years*? (Check one.)

☐ YES  
☐ NO --- GO TO QUESTION 12.

→What annual rental payment per acre would you require to extend your current CRP contract for *an additional 10 years*? (Fill in the number.)

\$ \_\_\_\_\_ /ACRE/YEAR

12. What crop was planted on the CRP land during the growing season prior to it being enrolled in CRP? (Check all that apply.)

<input type="checkbox"/> NONE	<input type="checkbox"/> BARLEY	<input type="checkbox"/> SOYBEANS
<input type="checkbox"/> WHEAT	<input type="checkbox"/> OATS	<input type="checkbox"/> GRASS
<input type="checkbox"/> CORN	<input type="checkbox"/> COTTON	<input type="checkbox"/> ALFALFA
<input type="checkbox"/> SORGHUM	<input type="checkbox"/> TOBACCO	<input type="checkbox"/> OTHER: please specify _____

13. In which of the following USDA commodity programs do you currently participate? (Check all that apply.)

<input type="checkbox"/> NONE	<input type="checkbox"/> SOYBEANS	<input type="checkbox"/> COTTON
<input type="checkbox"/> WHEAT	<input type="checkbox"/> BARLEY	<input type="checkbox"/> TOBACCO
<input type="checkbox"/> CORN	<input type="checkbox"/> OATS	<input type="checkbox"/> OTHER: please specify _____
<input type="checkbox"/> SORGHUM		

14. The commodity base acres (wheat, feed grain, etc.) on land you enrolled in the CRP are protected for the 10-year period covered by the contract. Would you be willing to keep your CRP acres in permanent vegetative cover after the contract expires, *without an annual rental payment*, if those acres continued to be protected as commodity base acres and could be used for annual set-aside requirements? (Check one.)

☐ YES  
☐ NO  
☐ UNCERTAIN

15. What annual rental payment would you require to extend your current CRP contract for *an additional 5 years*,

- a. IF you could *graze* your CRP land at a level less than that at which you graze similar grassland? \$ \_\_\_\_\_ /ACRE/YEAR
- b. IF you could *hay* your CRP land at a level less than that at which you hay similar grassland? \$ \_\_\_\_\_ /ACRE/YEAR
- c. IF you could *graze* your CRP land only after mid-July when most wildlife species have finished nesting? \$ \_\_\_\_\_ /ACRE/YEAR
- d. IF you could *hay* your CRP land only after mid-July when most wildlife species have finished nesting? \$ \_\_\_\_\_ /ACRE/YEAR
- e. IF you could *graze* your CRP land only until mid-July, and then had to remove the livestock until spring to allow adequate wildlife cover to develop late in the growing season? \$ \_\_\_\_\_ /ACRE/YEAR
- f. IF you could *hay* your CRP land only until mid-July, and then had to quit haying until spring to allow adequate wildlife cover to develop late in the growing season? \$ \_\_\_\_\_ /ACRE/YEAR
- g. IF you could harvest grass seed from your CRP land? \$ \_\_\_\_\_ /ACRE/YEAR

### IMPORTANT!

The following questions relate to your participation in CRP in general, not to the specific CRP contract listed on the mailing label and in the letter.

#### SECTION B. CRP in General

16. a. How many acres of land for which you are the decision maker were *eligible* for CRP? (Fill in number.)  
\_\_\_\_\_ ACRES
- b. How many total acres did you enroll in *all your CRP contracts*? (Fill in number.)  
\_\_\_\_\_ ACRES
- c. How many of the total acres in all your CRP contracts are highly erodible? (Fill in number.)  
\_\_\_\_\_ ACRES
- d. How many CRP contracts do you have on all lands that you manage? (Fill in number.)  
\_\_\_\_\_ CRP CONTRACTS

17. Please rate the importance of each of the following reasons in your decision not to enroll some eligible land in CRP. (Circle one number for each item.)

	NOT IMPORTANT	1	2	3	4	5 VERY IMPORTANT
a. Needed crops for livestock feed.		1	2	3	4	5
b. Better able to utilize my labor and/or equipment.		1	2	3	4	5
c. Needed to keep family member or tenant in farming.		1	2	3	4	5
d. Crop production was more profitable than receiving CRP payments.		1	2	3	4	5
e. Profits from haying/grazing higher than CRP payments.		1	2	3	4	5
f. Potential for increased crop prices.		1	2	3	4	5
g. Other: please specify _____		1	2	3	4	5

18. How satisfied are you with your past decision to enroll land in the CRP? (Circle one number.)

VERY DISSATISFIED	DISSATISFIED	NEUTRAL	SATISFIED	VERY SATISFIED
1	2	3	4	5

#### SECTION C. CRP, Wildlife, and Recreation

19. Is helping wildlife an important consideration in your choice of farming practices? (Check one.)

\_\_\_\_\_ YES  
\_\_\_\_\_ NO

20. a. Which of the following wildlife species have increased on your farm due to enrollment in CRP? (Check all that apply.)

\_\_\_\_\_ DEER      \_\_\_\_\_ PRAIRIE CHICKEN      \_\_\_\_\_ COYOTE  
\_\_\_\_\_ PHEASANT      \_\_\_\_\_ TURKEY      \_\_\_\_\_ WILDLIFE IN  
\_\_\_\_\_ QUAIL      \_\_\_\_\_ RABBIT      \_\_\_\_\_ GENERAL  
\_\_\_\_\_ DOVE      \_\_\_\_\_ SQUIRREL      \_\_\_\_\_ OTHER: please  
\_\_\_\_\_ SONGBIRDS      specify \_\_\_\_\_

- b. Have any of the increases checked above been *undesirable*?

\_\_\_\_\_ YES: list species \_\_\_\_\_  
\_\_\_\_\_ NO

- c. What is your opinion regarding the following statement: Enrollment in CRP has increased the number of different kinds of wildlife on my farm. (Circle one number.)

STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE
1	2	3	4	5

21. After your CRP contracts expire, would you be willing to change some of the vegetative cover now on your CRP acres to increase wildlife *if 50% cost-sharing funds were available*? (Check one.)

\_\_\_\_\_ YES  
\_\_\_\_\_ NO  
\_\_\_\_\_ UNCERTAIN

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Estimate number of people per year:

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N/A

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NONE

\$ \_\_\_\_\_ PER  
(price)

ACRE  
PERSON  
(circle one)

FOR

YEAR  
DAY  
(circle one)

\$ \_\_\_\_\_ PER  
(price)

ACRE  
PERSON  
(circle one)

FOR

YEAR  
DAY  
(circle one)

9

NOT IMPORTANT ----- VERY IMPORTANT

1            2            3            4            5

1            2            3            4            5

1            2            3            4            5

1            2            3            4            5

1            2            3            4            5

1            2            3            4            5

1            2            3            4            5

YES --- GO TO QUESTION 26.

**NO**

→ IF you *would not* consider participating in a state-sponsored recreational access program to your CRP acres, please rate the importance of the following reasons in your decision not to participate: (Circle one number for each item.)

NOT IMPORTANT-----VERY IMPORTANT

1            2            3            4            5

1            2            3            4            5

1            2            3            4            5

1            2            3            4            5

1            2            3            4            5

1            2            3            4            5

1            2            3            4            5

**GO TO QUESTION 27.**

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26. a. IF you *would* consider participating in a state sponsored recreational access program to your CRP acres, please rate the importance of the following attributes of a program in your decision whether or not to participate: (Circle one number for each item.)

	NOT IMPORTANT	1	2	3	4	5 VERY IMPORTANT
1. Amount of lease payment	1	2	3	4	5	
2. Types of recreation allowed	1	2	3	4	5	
3. Walk-in only/No vehicle access	1	2	3	4	5	
4. Parking availability	1	2	3	4	5	
5. Limits on the number of users	1	2	3	4	5	
6. Control over times for access	1	2	3	4	5	
7. Patrolling of your property	1	2	3	4	5	
8. Technical assistance for habitat improvement	1	2	3	4	5	
9. Other: please specify _____	1	2	3	4	5	

- b. What annual payment per acre would you require to participate in a state sponsored recreational access program on your CRP acres?

\$ \_\_\_\_\_ /ACRE/YEAR

#### SECTION D. General Characteristics

The following questions will help us learn more about CRP participants in Kansas. *All of your answers are strictly confidential and cannot be associated with you personally.*

27. Are you a Kansas resident? (Check one.)

\_\_\_\_\_ YES  
\_\_\_\_\_ NO

28. Which of the following best describes your legal relationship to the CRP acres covered by the contract specified in the letter accompanying your questionnaire? (Check one.)

\_\_\_\_\_ OWNER AND OPERATOR  
\_\_\_\_\_ RENTER AND OPERATOR  
\_\_\_\_\_ OWNER BUT NON-OPERATOR (ABSENTEE LANDOWNER)  
\_\_\_\_\_ OTHER: PLEASE SPECIFY \_\_\_\_\_

29. What is the total number of acres that you manage? (Fill in number.)

\_\_\_\_\_ ACRES

30. What is your gender? (Check one.)

\_\_\_\_\_ FEMALE  
\_\_\_\_\_ MALE

31. What is your age? (Fill in number.)

\_\_\_\_\_ YEARS

32. IF you are 65 years old or older,

- a. How many more years do you plan to continue farming? (Fill in number.)

\_\_\_\_\_ YEARS

- b. Which of the following best describes what will happen to your land when you retire? (Check one.)

\_\_\_\_\_ I WILL SELL THE LAND  
\_\_\_\_\_ I WILL LEASE OUT THE LAND, BUT WILL CONTINUE TO MAKE MANAGEMENT DECISIONS ABOUT THE LAND  
\_\_\_\_\_ I WILL LEASE OUT THE LAND, AND NOT MAKE ANY MANAGEMENT DECISIONS ABOUT THE LAND  
\_\_\_\_\_ A RELATIVE WILL MANAGE/INHERIT THE LAND  
\_\_\_\_\_ OTHER: PLEASE SPECIFY \_\_\_\_\_

33. What is the highest level of education you have obtained? (Check one.)

- |   |   |
|---|---|
| <input type="checkbox"/> SOME ELEMENTARY SCHOOL           | <input type="checkbox"/> VOCATIONAL OR TECHNICAL SCHOOL |
| <input type="checkbox"/> SOME HIGH SCHOOL                 | <input type="checkbox"/> BACHELORS DEGREE               |
| <input type="checkbox"/> HIGH SCHOOL DIPLOMA              | <input type="checkbox"/> GRADUATE DEGREE                |
| <input type="checkbox"/> SOME COLLEGE OR POST HIGH SCHOOL |   |

34. Which of the following best describes your total annual income *from agricultural sources*? (Check one.)

- |   |  |
|---|--|
| <input type="checkbox"/> LESS THAN \$10,000 | <input type="checkbox"/> \$30,000-\$49,000 |
| <input type="checkbox"/> \$10,000-\$19,999  | <input type="checkbox"/> \$50,000-\$74,999 |
| <input type="checkbox"/> \$20,000-\$24,999  | <input type="checkbox"/> \$75,000 or more  |
| <input type="checkbox"/> \$25,000-\$29,999  |  |

35. Which of the following best describes your total annual income *from non-agricultural sources*? (Check one.)

- |   |  |
|---|--|
| <input type="checkbox"/> LESS THAN \$10,000 | <input type="checkbox"/> \$30,000-\$49,000 |
| <input type="checkbox"/> \$10,000-\$19,999  | <input type="checkbox"/> \$50,000-\$74,999 |
| <input type="checkbox"/> \$20,000-\$24,999  | <input type="checkbox"/> \$75,000 or more  |
| <input type="checkbox"/> \$25,000-\$29,999  |  |

36. Which of the following best describes your total annual income *from all sources*? (Check one.)

- |   |  |
|---|--|
| <input type="checkbox"/> LESS THAN \$10,000 | <input type="checkbox"/> \$30,000-\$49,000 |
| <input type="checkbox"/> \$10,000-\$19,999  | <input type="checkbox"/> \$50,000-\$74,999 |
| <input type="checkbox"/> \$20,000-\$24,999  | <input type="checkbox"/> \$75,000 or more  |
| <input type="checkbox"/> \$25,000-\$29,999  |  |

37. Which of the following best describes the value of your farm's land and buildings? (Check one.)

- |  |  |
|--|--|
| <input type="checkbox"/> LESS THAN \$40,000  | <input type="checkbox"/> \$150,000-\$199,999 |
| <input type="checkbox"/> \$40,000-\$69,999   | <input type="checkbox"/> \$200,000-\$499,999 |
| <input type="checkbox"/> \$70,000-\$99,999   | <input type="checkbox"/> \$500,000-\$999,999 |
| <input type="checkbox"/> \$100,000-\$149,999 | <input type="checkbox"/> \$1,000,000 or more |

38. Which of the following best describes the value of your farm's machinery and equipment? (Check one.)

- |   |  |
|---|--|
| <input type="checkbox"/> LESS THAN \$10,000 | <input type="checkbox"/> \$100,000-\$199,999 |
| <input type="checkbox"/> \$10,000-\$29,999  | <input type="checkbox"/> \$200,000-\$499,999 |
| <input type="checkbox"/> \$30,000-\$49,999  | <input type="checkbox"/> \$500,000-\$999,999 |
| <input type="checkbox"/> \$50,000-\$99,999  | <input type="checkbox"/> \$1,000,000 or more |

39. What percent of your farm assets are owned, debt free?

\_\_\_\_\_ PERCENT

---

Is there is anything else you would like to tell us about the CRP or this survey? If so, please use this space for that purpose.

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Your contribution to this effort is greatly appreciated. If you would like a summary of the results, please print your name, address, and "Results Requested" on the back of the return envelope (NOT on the questionnaire so that we can assure your anonymity). We will see that you get it.

**THANK YOU!**

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Agricultural Experiment Station, Kansas State University, Manhattan 66506-4008

Report of Progress 690 *Reprint*

November 1993

Kansas State University is committed to a policy of non-discrimination on the basis of race, sex, national origin, disability, religion, age, sexual orientation, or other non-merit reasons, in admissions, educational programs or activities, and employment, all as required by applicable laws and regulations. Responsibility for coordination of compliance efforts and receipt of inquiries, including those concerning Title IX of the Education Amendments of 1972 and Section 5504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act, has been delegated to Jane D. Rowlett, Ph.D., Director, Unclassified Affairs and University Compliance, 214 Anderson Hall, Kansas State University, Manhattan, KS 66506-0124 (913/532-4392). 5M

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## HOUSE BILL No. 3023

By Committee on Agriculture

2-15

8 AN ACT concerning weights and measures; relating to standards and  
9 enforcement for point-of-sale systems; amending K.S.A. 83-201  
10 and 83-219 and K.S.A. 1993 Supp. 83-206 and 83-207 and re-  
11 pealing the existing sections.

12  
13 *Be it enacted by the Legislature of the State of Kansas:*

14 Section 1. K.S.A. 83-201 is hereby amended to read as follows:  
15 83-201. As used in this act:

16 (a) "Weights and measures" means all weights and measures of  
17 every kind, instruments and devices for weighing and measuring,  
18 and any appliance and accessories associated with any or all such  
19 instruments and devices *and any point-of-sale system*.

20 (b) "Weight" as used in connection with any commodity means  
21 net weight, except if the label declares that the product is sold by  
22 drained weight, the term means net drained weight.

23 (c) "Correct" as used in connection with weights and measures  
24 means conformance to all applicable requirements of this act.

25 (d) "Primary standards" means the physical standards of the state  
26 which serve as the legal reference from which all other standards  
27 and weights and measures are derived.

28 (e) "Secondary standards" means the physical standards which  
29 are traceable to the primary standards through comparisons, using  
30 acceptable laboratory procedures, and used in the enforcement of  
31 weights and measures laws and rules and regulations.

32 (f) "Person" means individuals, partnerships, corporations, com-  
33 panies, societies and associations.

34 (g) "Sale from bulk" means the sale of commodities when the  
35 quantity is determined at the time of sale.

36 (h) "Package" means any commodity put up or packaged in any  
37 manner in advance of sale in units suitable for either wholesale or  
38 retail sale.

39 (i) "Drained weight" means the weight of the solid or semisolid  
40 product representing the contents of a package or container obtained  
41 after a prescribed method for excluding the liquid has been em-  
42 ployed.

43 (j) "Secretary" means the secretary of the state board of agri-

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Attachment #3

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1 being made correct.

2 (h) Weigh, measure or inspect packaged commodities kept, of-  
3 fered or exposed for sale, sold, or in the process of delivery, to  
4 determine whether they contain the amounts represented and  
5 whether they are kept, offered or exposed for sale in accordance  
6 with this act or rules and regulations promulgated pursuant thereto.  
7 In carrying out the provisions of this section, the secretary shall  
8 employ recognized sampling procedures as ~~are~~ designated in the  
9 national institute of standards and technology handbook 130, as pub-  
10 lished on January 1, 1991, *unless a later addition is adopted by rules*  
11 *and regulations promulgated pursuant to article 2 of chapter 83 of*  
12 *the Kansas Statutes Annotated, and amendments thereto*.

adopted by rules and regulations by  
incorporating applicable procedures

13 (i) Allow reasonable variations from the stated quantity of con-  
14 tents, which shall include those caused by loss or gain of moisture  
15 during the course of good distribution practice.

16 (j) Perform such other duties as may be necessary to carry out  
17 the provisions of this act or as may be otherwise authorized by law.

18 Sec. 3. K.S.A. 1993 Supp. 83-207 is hereby amended to read as  
19 follows: 83-207. The state board of agriculture may adopt rules and  
20 regulations necessary for the administration and enforcement of the  
21 provisions of ~~this act~~ *article 2 of chapter 83 of the Kansas Statutes*  
22 *Annotated, and amendments thereto*. As a part of such rules and  
23 regulations, the state board of agriculture shall adopt standards set-  
24 ting forth specifications, tolerances and other technical requirements  
25 for all weights, measures and weighing and measuring devices, *and*  
26 *point-of-sale systems*. These specifications, tolerances and other tech-  
27 nical requirements shall conform, insofar as practicable, to the spec-  
28 ifications, tolerances and other technical requirements for weights,  
29 measures and weighing and measuring devices established by the  
30 national institute of standards and technology. The state board of  
31 agriculture shall prescribe by rule and regulation the appropriate  
32 term or unit of weight or measure to be used whenever the secretary  
33 determines in the case of a specific commodity that an existing  
34 practice of declaring the quantity by weight, measure, numerical  
35 count, or combination thereof, does not facilitate value comparisons  
36 by consumers, or that such practice offers an opportunity for con-  
37 sumer confusion.

38 Sec. 4. K.S.A. 83-219 is hereby amended to read as follows: 83-  
39 219. (a) It shall be unlawful for any person:

40 (1) To offer or expose for sale, or to sell or otherwise dispose of  
41 any weight, measure or weighing or measuring device that is false  
42 or which has been rejected except under written authorization of  
43 the secretary or an authorized inspector;

handbooks