1995 FARM BILL

Wildlife Options in Agricultural Policy

Cynthia Bishop

THE WILDLIFE SOCIETY

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1995 Farm Bill:
Wildlife Options in Agricultural Policy

The Wildlife Society
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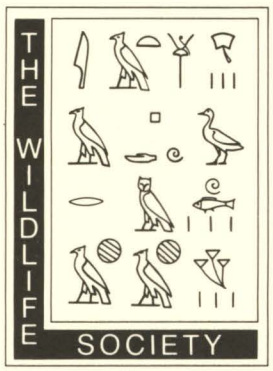

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Foreword

Presidents of The Wildlife Society occasionally appoint ad hoc committees to study and report on selected conservation issues. The reports ordinarily appear in 2 related series called either Technical Review (formerly "White Paper") or Position Statement. The review papers present technical information and the views of the appointed committee members, but not necessarily the views of their employers. Position statements are based on the review papers, and the preliminary versions ordinarily are published in **The Wildlifer** for comment by society members. Following the comment period, revision, and Council's approval, the statements are published as official positions of The Wildlife Society.

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SYNOPSIS

Federal farm policy impacts wildlife habitat on 400+ million acres of private farmland, more than any other single federal program. The 1995 Farm Bill will direct farm policy into the next century and it is imperative that this legislation balance sound fiscal programs with the Nation's need for conservation. There is no doubt that the past 2 farm bills have greatly improved soil erosion control, wetland protection, and wildlife habitat. The Wildlife Society recommends that the 1995 Farm Bill build on conservation gains of the past and eliminate programs and practices that are detrimental to wildlife.

Many of today's farm programs were a direct result of social problems of the Depression and the conservation problems of the Dust Bowl. Early programs were designed to raise the living standards of farmers, provide a cheap, abundant source of food, and protect highly erodible cropland from the destructive forces of wind and water. The centerpiece of most farm bills was a cropland retirement program where farmers received a federal payment in exchange for limiting production of certain crops. The number of idled acres varied considerably from year to year but the trend in retirement programs has continued upward over the 60 years of federal programs. These annual commodity programs continue in virtually the same form today.

Until the 1985 Farm Bill, farm policy was the domain of agricultural commodity groups and farmer-dominated agriculture committees in Congress. The 1985 Farm Bill became landmark legislation when conservation interests were able to include several provisions requiring that farmers apply minimal conservation standards in their farming operation to receive federal farm program payments. The Conservation Reserve Program also was established in that bill. This program provides an annual payment to farmers to idle highly erodible cropland and has become one of the most successful programs affecting wildlife habitat on private land. The Wetland Reserve Program was added in the 1990 Farm Bill and was designed to restore converted or farmed wetlands to their previous wetland conditions and pay landowners to permanently retire the acreage.

The Wildlife Society Recommendations

The United States Department of Agriculture (USDA) needs to be more responsive to conservation problems. Conservation traditionally has been relegated to a minor role within USDA as evidenced by the number of programs not implemented or under funded. The USDA has been reorganized to include an agency dedicated to implementation and administration of conservation programs. This reformed agency is based on the sound technical expertise of the current Soil Conservation Service (SCS) and may improve enforcement of existing laws while demonstrating USDA's commitment to conservation.

The home-rule concept enacted through the Agricultural Stabilization and Conservation Service (ASCS) County Committee system needs to be diversified. County Committees decide numerous policy issues for USDA and often to the detriment of natural resources. County Committees generally do not have any technical competence and membership in these committees is restricted to the beneficiaries of the various programs. These committees should be diversified to include natural resource professionals who can provide sound technical direction.

State Technical Committees (STCs) were established by the 1990 Farm Bill, but were never implemented. These committees were designed to provide technical input to USDA on many issues that benefit wildlife and the environment. These committees should be fully implemented. A companion National Technical Committee should be established to oversee implementation of programs at the national level.

Cropland retirement has been a focus of farm programs from their beginning. Demands for cropland have varied annually, but the long-term trend has been relatively constant while the trend in retirement programs has been upward. Cropland retirement programs should move toward long-term diversions. Short-term diversion should focus on a small portion of annually idled cropland with the remainder in multi-year set-asides of 3 to 5 years. Management of annually set-aside land often has a negative impact on wildlife populations. Poor cover and frequent disturbance are the main problems that could be addressed by longer term set-asides. All cropland retired through government programs should be seeded to a cover crop to benefit wildlife and reduce erosion and be managed accordingly.

The Conservation Reserve Program (CRP) has dramatically improved farmland wildlife habitat, particularly in the Midwest and Plain States. This long-term program should continue in some form. Changes need to be made to make this program more cost-effective. These changes include permanent easements and targeting critical areas for enrollment. Since 1933, the USDA has paid to idle each acre of cropland in the United States 4 times. A voluntary permanent easement program on critical areas could break this expensive cycle. A targeted program based on regional natural resource needs would help increase the benefits received for the funds expended. This land should be managed to maximize public natural resource benefits.

Most of the historical loss of wetlands was caused by agriculture. Wetland protection and enhancement should be an integral part of farm policy. A combination of compensation and regulation is needed. The Wetland Reserve Program (WRP) pays farmers to permanently retire either prior-converted wetlands or farmed wetlands and enhance wetland values. This program should continue and be expanded to all states. The Swampbuster provision of the farm bill denies federal farm program benefits to farmers who drain or convert wetlands. This provision should continue and should be strengthened through better enforcement and accurate inventories.

Other conservation requirements for federal farm program benefits include sodbuster and conservation compliance. These provisions require that new, highly erodible land cannot be brought into production without a conservation plan and currently farmed, highly erodible land must follow a conservation plan. These provisions should be strengthened to require that conservation plans be written to control erosion to the "T" level. The "T" standard is the level of erosion that a soil can tolerate with no long-term productivity loss. Use of Alternative Conservation Systems, which allowed much higher erosion rates, should be discontinued.

The Forestry subtitle of the farm bill should be maintained. Private nonindustrial forests provide important wildlife habitat. The 1990 Farm Bill created the Forest Stewardship Program that recognized that role and provided funds for management of these forests for broader natural resource benefits.

INTRODUCTION

The federal farm bill sets domestic farm policy for a 5 year period; the bill and its resultant rules and regulations determine the fate of dairy and commodity supports, conservation programs, and crop retirement programs. Past bills were dominated by agricultural concerns and lobbyists until the 1985 Farm Bill when public sentiment combined with environmental organizations to form a coalition strong enough to integrate, explicitly, conservation programs into agricultural policy.

The farm bill is one of the most important pieces of federal legislation affecting wildlife habitat on private lands in the United States. Soil-loss control, supply-control, agricultural export, and marketing programs, as well as the Agricultural Conservation Program and water quality initiatives, all affect land use, and thus, wildlife habitat.

As a result, the farm bill has become the focus of many national, state, and conservation organizations as a means of positively affecting wildlife habitat on the 400+ million acres of farmland across the country. The Wildlife Society has actively participated in the formulation and implementation of previous farm bills. It is generally accepted by many in the conservation community that the past 2 farm bills were well-designed and only minor adjustments are needed in policy and implementation. Establishment of a 10-year land retirement program (i.e., Conservation Reserve Program) and long-term protection of wetlands (i.e., Swampbuster and Wetland Reserve Program) were some of the most notable programs to benefit wildlife that resulted from the past 2 farm bills.

This paper summarizes the effect of farm policy on wildlife and makes recommendations for improving the 1995 Farm Bill.

Background

Most of today's farm programs are direct descendants of ideas and programs from the 1920s and 1930s. Farmers of this era were economically disadvantaged and farm foreclosures were common (Cochrane and Runge 1992). The Agricultural Adjustment Act of 1933, drawn from a proposal known as the "Voluntary Domestic Allotment Plan," was designed to restore

agricultural purchasing power to the 1909-14 level (Harmon 1980). This act provided for a price-support guarantee and established acreage reduction and nonrecourse loan programs still in place today. As a result, farm commodity prices were determined by farmer-dominated, Congressional Agriculture Committees. The act established what many feel was a social contract between society and farmers, trading a guaranteed price for important farm products for a cheap, abundant food supply (Cochrane and Runge 1992). The contract became "supported by society, yet governed by farmers" (Cochrane and Runge 1992). The passage of the landmark 1985 Food Security Act expanded that social contract to include environmental responsibility. Land retirement, while still of great importance to wildlife, was complemented by water quality and wetland protection as well as other conservation initiatives. The 1990 Food, Agriculture, Conservation, Trade and Tariff Act reaffirmed that commitment by becoming the first farm bill to mention conservation in the title and adding additional programs that enhanced wildlife habitat.

Many programs throughout the years were designed to reward farmers in some manner for idling previously planted acres. The process began in 1934 with 20.5 million acres being idled and peaked in 1983 with the Payment-in-Kind (PIK) program idling nearly 80 million acres. From 1934 to 1958, an average of 15.1 million acres were idled (Berner 1984). That average increased to 34 million acres during the next 25 years and has swelled to 62 million acres since the inception of the CRP in 1986. In 1993, 56.4 million acres were idle d through the CRP and commodity programs. The USDA announced that cotton was the only commodity crop with a required set-aside for the 1994 growing season. Cotton set-aside averaged about 1 million acres the past few years. These acres and 36.5 million acres in the CRP were all of the land idled through federal government intervention in 1994.

Farm demographics have changed dramatically since the first farm bill in 1933. Fewer people are involved in agriculture today, yet each tillable acre is considerably more productive because of technological advances in farm mechanization, agricultural chemicals (e.g., fertilizers, pesticides, and herbicides), and crop genetics. In 1991, the largest 15% of all farms (about 325,000 farms) accounted for nearly 80% of all cash receipts and received over half of all farm program payments (U.S. Dep. Agric. 1993). The trend in agriculture has been specialization and concentration. Although many may feel that farming is a way of life, economics drive decisions in today's production agriculture and this must be recognized by farm policy. Redistribution of income to the farm sector may no longer be a valid goal for farm policy now that the per capita real income of farmers normally exceeds that of nonfarmers (Tweeten 1994). Economic problems still exist on many of today's farms; however, farm income compares much more favorably with nonfarm income today than during the Depression (Tweeten 1994).

The 1995 Farm Bill will have a significantly different mission than the Agricultural Adjustment Act of 1933. Cheap food, soil erosion control, and income support still will be in the forefront, but a myriad of environmental issues will be included. Balancing farmer concerns, environmental issues, and economic reality will require flexibility, organization, and hard work. It is generally assumed that there will be considerable efforts to reduce farm program outlays in the next farm bill. The challenge will be to ensure that, as a shift in spending priorities occurs, conservation-related gains of the last 10 years are not eroded. Farm subsidy programs essentially involve the redistribution of wealth from general tax revenues to the farm community in exchange for the stated purposes of farm policy. The purposes of redistribution need to be reconsidered to strengthen conservation features that serve the public interest. Given the need for better land stewardship in America and significant changes over time in agriculture, a shift in the direction of farm program dollars away from direct support for commodity control to conservation-related programs should begin with the 1995 Farm Bill. Farm policy needs to look at longer term planning horizons provided by sound conservation programs and make decisions that may cause short-term discomfort, but are prudent long-term policy positions.

Current Status - 1985 and 1990 Farm Bills

The 1985 Farm Bill was landmark legislation in that it integrated conservation features into the fabric of agricultural policy for the first time. The Sodbuster, Swampbuster, and Conservation Compliance sections of the bill were designed to send the message that the federal government would no longer subsidize poor environmental practices on the farm. The CRP was added as an incentive to remove highly erodible lands from production for at least 10 years. Several improvements were made in the 1990 Farm Bill. These included broadening the CRP to address more environmental issues and establishing WRP, STCs to advise USDA on conservation programs, a forestry subtitle that included

the Forest Stewardship Incentive Program, and new water quality incentive programs.

Annual Set-aside Programs--Annual set-aside programs (i.e., commodity programs) are essentially the same programs established in 1933 that tied income support to cropland diversion for supply control. Although current law requires farmers to protect set-aside acres "from weeds and wind and water erosion," (7 U.S.C.A. §1444 d.[e]4), implementation and enforcement varies dramatically among states and counties. As a rule across the country, annual set-aside acres provide negligible or even negative benefits to wildlife (Harmon and Nelson 1973, Edwards 1985, Berner 1994). The 1990 bill provided for several economic uses of idled acreage as a tool to allow farmers to adjust to market conditions. For example, haying and grazing are permitted for a 7-month period set by the ASCS State Committee. In the case of natural disasters, unlimited haying and grazing of set-aside acres may occur. The Secretary of Agriculture generally opens set-aside lands in some part of the country for haying and grazing every year. While every farm bill since 1972 has had some provision for a multi-year set-aside program that could provide substantial benefits for wildlife, this option has never been effectively implemented by USDA.

For controlled, or program, crops, USDA determines the acreage needed to bring predicted production close to anticipated demand. In return for a guaranteed price for those commodities, a producer must agree to idle a certain percentage of his/her base acreage if USDA determines it is necessary for that crop year. In recent years, that percentage has varied from 0-20%. Base acreage is the average number of acres planted to a program crop over the past 5 years. Loan and target rates for program crops are set by USDA. Farmers then receive a payment, known as a deficiency payment, for each bushel produced that amounts to the difference between the average market price and the target price. The loan rate sets the floor for payment so that if the market price falls below the loan rate the government will only guarantee the difference between target and loan rates. For example, if the loan rate is $1.70 per bushel and the target price is $2.60 per bushel, then the government will pay a maximum of $0.90 per bushel per acre for the number of planted acres. If the market price climbs above $2.60 per bushel, then no payments are made since the farmer has made a profit in the marketplace. If the price of that crop falls below $1.70 per bushel, the government will still only pay $0.90 per bushel per acre. Other variations of this scenario including paid diversions and the PIK program have occurred over the years, but the intent has always been to reduce production, raise crop prices, and provide income to farmers.

In recent years, participation in commodity programs known as 0/85 and 50/85 has increased substantially. These complex programs allow producers to plant none or half, respectively, of their program crop base and receive 85% of their deficiency payments. A variety of management options are available for acreage idled under these programs. Most of this acreage can be planted to minor oilseed crops such as sunflowers or canola. In some cases, soybeans also may be planted as a double crop, giving a producer 2 cash crops in addition to a subsidy payment for a given acreage. A portion of the idled acreage must be placed in a conserving use under the same restrictions as annual set-aside.

Annual set-aside programs, while designed to control crop production and stabilize commodity prices, have resulted in few wildlife benefits. Management guidelines for these acres result in idled land with poor vegetative cover and frequent disturbance.

Conservation Reserve Program--The CRP is one of the most significant wildlife habitat programs to come out of any farm bill since its inception. The CRP established a goal of retiring 40-45 million acres of highly erodible cropland from production by paying farmers for a 10- to 15-year period to convert these lands to a less intensive use. Most acreage retired through this program was planted to grasses, but a significant portion of the enrollment in the Southeast was planted to pine (*Pinus* spp.) trees. The USDA established a system where farmers offered a bid per acre to take all or a portion of their farm out of production and maintain an acceptable conservation practice for 10 years. Contracts for 15 years later were made available only to farmers who established trees on their idled acreage. Haying or grazing has been permitted on CRP lands when USDA determines that emergency conditions, such as drought, have occurred somewhere in the United States. This has been the case in 7 of the first 8 years that the CRP has been in existence. The 1990 Farm Bill broadened the purpose of the CRP to increase emphasis on water quality, tree planting, wildlife habitat, and numerous other conservation concerns. Over 36 million acres have been enrolled to date.

Swampbuster--Section 1221 of the 1985 Farm Bill denied most federal farm program payments to any person who produced an agricultural commodity on a wetland converted after 23 December 1985. This pro-

vision became known as Swampbuster. In the rule-making process this provision was interpreted to deny all federal farm program payments to farmers who drained wetlands and later planted an annually tilled crop. Wetlands still could be drained and planted to perennial grasses and legumes for forage production, planted to trees, or drained and left unplanted. The 1990 Farm Bill strengthened this provision by changing the trigger of a Swampbuster violation from planting an annual crop on drained wetlands to the act of draining to make the land suitable for farming. It also permitted the USDA to grant graduated penalties to farmers who restored wetlands that they drained in "good faith" and allowed drainage of wetlands where such action would result in a "minimal effect" on the resources in the area.

Sodbuster--Section 1211 of the 1985 Farm Bill contained the Sodbuster provision for highly erodible cropland. Sodbuster works similar to Swampbuster in that it denies the same federal payments to farmers who bring highly erodible land, that was not farmed during the period 1981-85, into crop production without an approved conservation plan. Sodbusted land can still be farmed without the loss of USDA payments if the producer farms it under an approved conservation plan.

Conservation Compliance--Section 1212 of the 1985 Farm Bill contains one of the more significant new conservation features that is often overlooked by wildlife professionals. The Conservation Compliance provision required that any farmer producing crops on highly erodible land must, by 1995, fully implement a conservation plan written by the SCS to qualify for farm program payments. In essence, this provision meant that any farmer with highly erodible land must follow SCS recommendations on rotations and crops to keep soil erosion below the soil loss tolerance "T" value. The "T" value is the estimated maximum allowable erosion rate that a soil can undergo and still maintain its long-term productivity. In 1988, the SCS amended the implementation policy to allow farmers to follow a compliance plan that incorporated less restrictive Alternative Conservation Systems if the farmer determined that implementation of a conservation plan would significantly affect his/her income. Unfortunately, such alternative systems allowed highly erodible cropland to erode at rates significantly higher than "T" and often endorsed current farming practices rather than requiring the use of practical, proven conservation practices. The 1990 Farm Bill made no major modifications to this provision.

Wetland Reserve Program--A new feature added to the 1990 Farm Bill was the WRP. This program was designed to protect and restore wetlands on farmlands by purchasing easements. These easements were to be for 30 years, permanent, or as long as permitted by state law. Cost-sharing was available for restoration and a payment was made to protect the wetland for the duration of the easement. Initially, the WRP was implemented in only 9 states and only permanent easements were offered. A new sign-up occurred in March 1994 and was expanded to include 11 additional states. The USDA goal is to enroll 330,000 acres by the end of 1995.

Other Conservation Features--The 1990 Farm Bill was the first farm bill to refer to conservation in the title. This cosmetic change was supported by some significant conservation attributes, many of which were never implemented. A STC was legislated that would have provided a formal setting for wildlife biologists and other natural resource professionals to influence implementation of the CRP, the WRP, and annual commodity programs. This committee would have provided technical guidance to USDA on wetland and wildlife habitat protection, CRP bids, Swampbuster exemptions, and set-aside management; however, this provision was not implemented.

The USDA also administers several forestry programs of significance to wildlife. The Forest Stewardship Program provided cost-sharing for technical assistance and forest improvement. Money spent through this program is designed to encourage an ecosystem approach to private, nonindustrial forest management instead of a focus on timber production.

A Water Quality Program was established to provide cost-sharing for water quality improvements including wetland and wildlife management. Although implemented, this program has been small and its potential has not been realized fully.

Finally, the Farmers' Home Administration (FmHA) was given a more prominent conservation role in the past 2 farm bills. The FmHA was designed as a lender of last resort to financially distressed farmers, and, as such, it carries a portfolio of higher risk farms and farm operations. When farmland comes into federal ownership through foreclosure, the FmHA was directed to protect important natural resources via easements or fee title transfers to qualified conservation agencies. Authority also was given to restructure farm loans and reduce total debt in exchange for conservation ease-

ments. As of early 1994, nearly 138,000 acres of permanent conservation easements had been recorded and over 95,000 acres were approved for fee title transfer.

Summary of Wildlife Research: the Conservation Reserve Program

Programs that take cropland out of production have the most direct impact on wildlife, particularly upland wildlife. Over the past 50 years, land retirement programs that resulted in the establishment of grass and legume cover at the expense of commodity production have directly benefited grassland wildlife populations. This is evidenced perhaps most by the boom and bust of ring-necked pheasant (*Phasianus colchicus*) populations throughout the Midwest (Edwards 1984, Berner 1988). Evaluations of the wildlife potential of the CRP show that, when properly implemented, this program is no exception.

Recognizing the potential value of the CRP as a large-scale land retirement program, state wildlife agencies, the International Association of Fish and Wildlife Agencies, and the U.S. Fish and Wildlife Service (FWS) began a national monitoring program in 1987 to document vegetational characteristics of fields enrolled in the CRP and relate these to the availability and quality of wildlife habitat (Farmer et al. 1988). Data from the 1988 (Hays et al. 1989) and 1989 (Hays and Farmer 1990) samples were summarized; a final report on this project is due in 1994. While there have been obvious wildlife benefits, results to date suggest that emergency haying and frequent maintenance mowing have reduced substantially the potential wildlife cover value of grassland conservation practices in some parts of the country. Extensive tree planting (primarily pines) in the Southeast actually may have reduced overall habitat quality for wildlife, especially bobwhite quail (*Colinus virginianus*), compared to the prior use (Hays and Farmer 1990, Allen 1993).

A retrospective study using Breeding Bird Survey data and county agricultural statistics showed a significant population response by western meadowlarks (*Sturnella neglecta*), ring-necked pheasants, brown-headed cowbirds (*Molothrus ater*), and bobwhite quail to the geographic distribution of CRP acreage (Lauber 1991). More localized population responses by pheasants to CRP lands were noted in Iowa (Riley 1993), Minnesota (Kimmel et al. 1992), and Texas (Berthelsen et al. 1989, Berthelsen et al. 1990). Pheasant increases occurred because CRP lands provided additional secure, high-quality nesting cover. In evaluating the population response by pheasants in Iowa to CRP acreage, Riley (1993) noted the greatest increase when about 4% of an area dominated by agriculture (i.e., 65-70% cropland) was converted to grassland cover types. Luttschwager and Higgins (1992) suggested that the CRP failed to measure up to its full wildlife potential in the Great Plains region due to severe drought conditions during cover establishment and emergency haying; however, they found CRP lands attractive to a variety of wildlife, including pheasants. It should be noted, however, that CRP lands can become ecological traps for grassland breeding birds if these areas are disturbed during the peak of the nesting season.

Bobwhite quail also are expected to benefit from the conversion of cropland to grassland cover types. For example, in Piedmont Virginia, conversion of approximately 9-17% of the cropland to introduced grasses was expected to result in higher quail densities; however, pine plantings ultimately led to overall declines in habitat quality (Stauffer et al. 1990). Native grass plantings supported the majority of the quail nests found in an Illinois study (Meseke 1992). In Missouri, Burger et al. (1990) noted that native grass plantings and wildlife habitat practices were less likely to be disturbed by emergency haying and maintenance mowing; thus, these areas provided greater potential as winter roosting sites and nesting cover for quail. Disturbance of CRP fields was the primary factor limiting the potential value of these areas for quail and other wildlife. About half of the fields in the Missouri sample were disturbed during the study; a similar percentage (50%) of the fields in an Ohio study of the wildlife benefits of the CRP were disturbed in June and July (Oh. Div.Wildl., unpubl. data). Grey partridge (*Perdix perdix*), on the other hand, showed no immediate population response in Minnesota presumably because of limited mobility (Kimmel et al. 1992).

Uncut strip cover that resulted from emergency haying in South Dakota had higher nest densities of waterfowl, but lower nesting success the following year compared to hayed areas on CRP lands (Luttschwager 1991). Blocks of uncut grass resulted in greater nest success for ducks the following year compared to strip cover because of lower predation rates. Berthelsen et al. (1989) noted the importance of CRP fields near wet-

lands to nesting waterfowl in Texas. Upland nests of waterfowl in CRP fields in North Dakota and Minnesota had significantly greater hatching success than similar nests in Waterfowl Production Area fields (Kantrud 1993). These studies strongly suggest the value of undisturbed grassland acreage to nesting waterfowl in the prairie pothole region.

A variety of other upland-nesting birds have been reported to use CRP fields for breeding (e.g., Luttschwager and Higgins 1992, Johnson and Schwartz 1993, Koford 1993, Patterson and Best 1993, Reynolds et al. 1994). Many grassland-dependent birds, such as the grasshopper sparrow (*Ammodramus savannarum*), that have shown long-term population declines, breed at higher densities and with greater success in CRP fields compared to cropland and other grassland habitats like those found on Waterfowl Production Areas (Johnson and Schwartz 1993, Koford 1993). Nesting ecology of nonpasserine, grassland birds in the northern Great Plains has been studied by FWS biologists at Northern Prairie Wildlife Research Center for the past 30 years; their results suggest that CRP fields provide similar habitat to native grassland areas used by raptors and upland game birds for nesting (Kantrud and Higgins 1992). They noted that avian diversity and abundance could be maintained or enhanced by periodic disturbance in large grassland complexes.

Carefully controlled grazing such as twice-over rotation, short duration, and switchback grazing systems have been shown to improve livestock production without impacting waterfowl or game bird production on the same lands (Sedivec et al. 1990). These data support the position of those who advocate that some economic use (e.g., limited haying or grazing) of CRP lands is compatible with wildlife goals and may result in these lands remaining in herbaceous cover after contracts expire. Harmon (1988), however, argued strongly against haying and grazing on CRP lands based on the deteriorated condition of most nonfederal rangelands and present economic conditions of communities where these practices are dominant land uses.

Meadowlarks (*Sturnella* spp.) were 1 of several species selected for evaluating the CRP in the Midwest region of the national study (Farmer et al. 1988). Granfors (1992) evaluated and tested the FWSs habitat suitability index (HSI) model for the eastern meadowlark (*S. magna*) in Kansas. Meadowlark nests in CRP fields had lower rates of parasitism, greater clutch size, and greater hatching success compared to nests in pastures or rangeland; however, the HSI model was a poor predictor of meadowlark density in these fields. Early results from the national evaluation suggest that limited maintenance mowing can improve the quality and quantity of grass in CRP fields and habitat suitability for meadowlarks (Hays and Farmer 1990); undoubtedly, the final report from the national evaluation will incorporate the results of, and recommendations made by, Granfors (1992). In another study, meadowlarks in Minnesota showed an immediate population response to increases in the amount of CRP acreage (Kimmel et al. 1992).

Mammals also have benefited from additional grassland acreage. Greater small mammal diversity was noted on CRP fields in Michigan compared to surrounding cropland (Furrow et al. 1993). Use of CRP fields by white-tailed deer (*Odocoileus virginianus*) and mule deer (*O. hemionus*) has been documented in South Dakota (Gould 1991, Luttschwager and Higgins 1992, Gould and Jenkins 1993) and Idaho (Thomas and Irby 1991), respectively. Significant use by white-tailed deer of CRP fields for feeding in spring, fawn-rearing in summer, and bedding in fall was recorded; however, no population response was expected for this species in the agricultural Midwest as a result of the CRP (Gould and Jenkins 1993). Mule deer used winter wheat and CRP fields during winter for feeding if the fields were located within 225-300 m of native cover types. Use shifted in late winter and early spring to wheat fields.

Aquatic ecosystems also benefit from the CRP. Whitworth and Martin (1990) reported that first and second order streams with CRP filter strips in Indiana and North Carolina had significantly greater fish species richness and diversity compared to similar streams without filter strips. This EPA study demonstrates the potential of the CRP to directly affect water quality and associated aquatic organisms.

Langner (1989), focusing primarily on small game, estimated the impact of the CRP on participation rates by hunters. Although her estimates indicated that the CRP added few new hunters, the additional grassland habitat available was projected to increase the number of hunting days annually for current participants. Based on her estimates, the total consumer surplus value of small game hunting as a result of the CRP was 3.8 billion dollars; the majority of this benefit was anticipated to occur in the Lake States and Corn Belt regions.

Miller and Bromley (1989) and Kurzejeski et al. (1992) surveyed CRP participants in Virginia and Missouri, respectively. Landowners in both states expressed an

interest in improving wildlife habitat on their land; however, wildlife habitat practices often were not considered due to a lack of information on all available options and cost-shares. Improved communication and contact with both potential program participants and administrative staff were recommended as ways to increase awareness of, and enrollment in, conservation practices beneficial to wildlife. Landowners in Missouri indicated that about 50% of the enrolled acreage would be returned to cropland when the contracts expired. A similar percentage (49%) of CRP land in North Dakota is expected to return to commodity production after 10 years (Mortensen et al. 1989). Mowing entire fields for weed control was practiced by 47% of Virginia landowners; mowing was often completed before August. These survey results should challenge wildlife professionals to work more closely with potential participants and USDA staff in any federal land retirement program to ensure maximum wildlife benefits and properly informed landowners.

Current Implementation and Recommendations for the 1995 Farm Bill

PROGRAM ADMINISTRATION

USDA should be reorganized to form a Natural Resources Conservation Service to place higher priority on conservation issues.

Most conservation organizations agree that refinement, rather than retooling, is necessary for the 1995 Farm Bill. Programs established in the past 2 bills have made significant progress in controlling erosion, establishing wildlife habitat, and improving water quality. What may need retooling, however, is the structure of the delivery system within the USDA. Recent reorganization has created a new agency whose mission is to serve all citizens and protect America's resource base, and could serve to elevate conservation to a top priority within the USDA. Farm programs and much of the USDA were established during the Depression and Dust Bowl to deal with problems of that era. Social, economic, and resource problems facing the 21st century are, and will continue to be, much different than those of the 1930s. The general public not only expects, but demands, more environmental responsibility from the USDA and the agricultural community. The guiding government agencies within the USDA must recognize that society has shown a willingness to pay for conservation.

A historical problem between wildlife professionals and the USDA has been the low priority wildlife habitat and other conservation issues received within federal farm programs. Establishment of the new Natural Resources Conservation Service (NRCS) to include the current SCS and conservation programs of the ASCS and other USDA agencies may emphasize the USDA's resolve to improve its environmental record. This new agency will place technical issues in the hands of technical experts and must operate on par with other USDA agencies. The SCS had an excellent reputation for its technical capabilities and the Emergency Wetland Reserve Program established to assist farmers in coping with severe flooding in 1993 demonstrated the SCS's administrative ability. This new agency has technical and administrative responsibility for all conservation programs, including the CRP and WRP, within the USDA and should not be unduly biased by production agriculture.

The identity of the Cooperative Extension Service should be maintained under reorganization.

Reorganization of the USDA also should preserve the identity of the Cooperative Extension Service (CES). Wildlife experts within the CES have developed a credibility with farmers unavailable to wildlife biologists in state and federal wildlife agencies. The natural resource education delivery system established by the CES should maintain its own identity either within a NRCS or as its own agency.

The ASCS county committee system must be redesigned to allow for adequate input from wildlife professionals.

Reorganization of the USDA has occurred prior to passage of the 1995 Farm Bill; however, the form and potential impact on administration and implementation of current USDA programs are unknown. Administration of farm bill conservation-related programs still remains disbursed throughout several USDA agencies, so administrative changes are necessary. Current administration of conservation programs is confusing to many landowners and often to agency employees themselves. Programs such as the CRP, the Agricultural Conservation Program, and annual set-aside are implemented differently from state to state and significant differences often occur from one county to the next. These differences make it extremely difficult for wildlife biologists

to influence habitat on a regional or landscape scale. At the heart of this system is the ASCS County Committee. The county committee system was designed to provide local input for the USDA. These 3-member committees are locally elected by farmers and have become a very strong political force. By definition, only agricultural producers can be elected and, thus, are potential beneficiaries of their own decisions. With no natural resource conservation representation on local committees, many decisions are production- or compliance-oriented and natural resources often receive low priority. Management guidelines for annual set-aside and the CRP provide a classic example of low priority afforded natural resources when weed control becomes the highest priority to the ASCS county committees and millions of acres of wildlife habitat are destroyed.

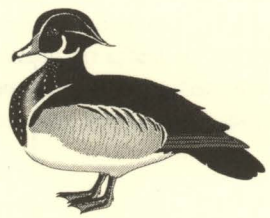
County committees are not accountable to the general public for their decisions that affect the economic well-being of themselves and their neighbors. Further, these committees often have little interest or technical expertise in issues not related to production agriculture. It is inappropriate for nontechnical persons to make technical decisions about such issues as management of CRP acreage. County committees do have a role in USDA policy, but that role should not include prioritization of conservation issues. Although everyone is affected by their decisions, less than 3% of the general populace can vote for committee members. It is in the best interests of the USDA, agricultural interests, and taxpayers to diversify the makeup of the county committee so that conservation issues are adequately addressed. Additional members of the county committee should come from conservation-related agencies or organizations and technical decisions should be made within guidelines provided by technical agencies and the STCs. The outmoded county committee system may survive reorganization but its role should be limited to administrative decisions.

Better enforcement of current laws and voluntary conservation efforts must work together to meet environmental demands.

Most farmers recognize that they represent a small segment of today's society and desire to farm in a manner that conserves natural resources and maintains the long-term productivity of the land. This land stewardship concept is absolutely necessary to ensure continued public support and funding. Agricultural commodity programs, changing technology and voluntary conservation programs of the past 60 years have resulted in fencerow to fencerow production, high soil erosion rates, degradation of riparian systems, and dramatic declines in many farmland wildlife populations. Programs that link agricultural conservation practices to direct payments to farmers or regulations, however, have generally improved overall erosion control, wildlife habitat, and rural quality of life. To minimize regulation, agriculture must actively work toward being environmentally responsible. Additional environmental regulations will undoubtedly originate in arenas and departments less farmer friendly than the USDA and Congressional Agriculture Committees. Confrontation on issues such as the Clean Water Act can be avoided if agriculture is seen as making significant progress toward farming practices that do not degrade natural resources.

State Technical Committees should be established as required by the 1990 Farm Bill.

There are several important portions of the 1985 and 1990 Farm Bills that, if implemented, could have had a significant positive impact on wildlife. One of the more significant changes in the 1990 Farm Bill was the establishment of STCs; however, they have yet to be implemented. Now that reorganization has occurred, STCs should be fully implemented. The STC was given a very specific charge and would have provided fish and wildlife agencies an opportunity to affect programs as never before. The STC was legislated to provide technical assistance to the USDA on wetland protection, restoration and mitigation requirements, guidelines for haying or grazing, and the control of weeds on set-aside acreage and other wildlife issues. Implementation may require specifically exempting STCs from the Federal Advisory Committee Act. The USDA has argued that the Federal Advisory Committee Act, which requires funding for all advisory committees, prevented implementation. This tactic has served only to make wildlife professionals doubt the USDA's commitment to conservation. The makeup of the STCs would be primarily, if not entirely, other government employees and, thus, no funding would be necessary. Implementation of STCs would add further credibility to the USDA's technical responsibility and would allow input from other natural resource professionals in areas such as wildlife habitat, wetland management, forestry, and water quality as intended in the 1990 legislation.



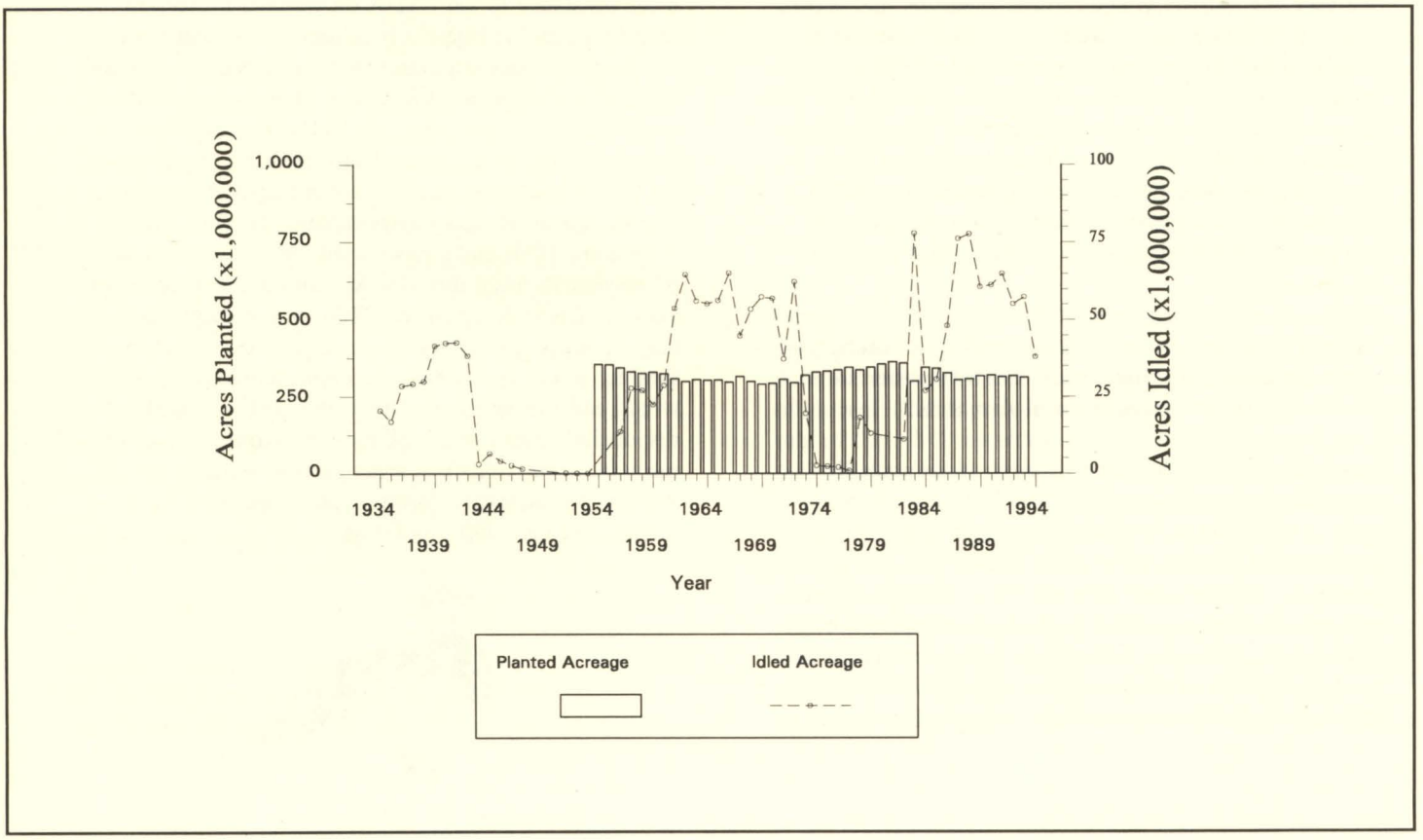
A National Technical Committee should be established to ensure that farm bill conservation programs are implemented.

Other provisions that should be implemented from the 1990 bill of importance to wildlife include multi-year set-asides and cover requirements on land enrolled in the Agricultural Conservation Reserve (ACR). Implementation problems have occurred in water quality initiatives and FmHA fee title transfers and conservation easements. An oversight process needs to be established to ensure that the USDA implements programs as legislated. The 1995 Farm Bill should establish a National Technical Committee to serve as an oversight body for the conservation subtitle and conservation requirements of the commodity subtitle. Representation on this body should be similar to that of STCs and should include state fish and wildlife agencies, experts in wetland management and water quality, and other experts as needed. The National Technical Committee should have significant authority to influence program implementation and should be adequately funded.

Commodity programs should move toward long-term retirements.

The 1995 Farm Bill will need to address several other issues of paramount importance to wildlife in light of an increasing federal budget deficit. A key element to the farm policy debate that has the most obvious impact on wildlife is how to deal with the excess production capacity of America's farmland. Estimates vary from 20 to 120 million acres of excess cropland with supply and demand increasing at about the same pace (O'Brien 1993). The North American Free Trade Agreement and the Global Agreement on Trade and Tariffs are expected to affect agricultural exports and, therefore, demand, but their impact is unknown at this time. The supply/demand issue was further clouded by the USDA's decision to require no annual set-aside (except cotton) in 1994 for deficiency payments. The USDA paid to idle nearly 60 million acres in the 1993 growing season with the CRP and annual set-aside. Crop diversion programs have soared up and down for 60 years, but the trend has been upward over time while the long-term trend for acres planted to major crops is relatively flat with minor annual variation (Fig. 1).

Figure 1. U.S. Agriculture planted vs. idled acreage.



The USDA has consistently resisted longer term retirement programs to maintain the flexibility to annually adjust production. In 1994, more land will be in crop production than has been the case since 1985 (U.S. Dep. Agric. 1994). A decent crop year and record production in 1985 significantly influenced legislators to ensure passage of the CRP, but also created expensive annual retirement programs in the 1985 Farm Bill. It is anticipated that favorable weather conditions in 1994 will result in about a 42% increase in corn production (Mercier 1994). This boom in production has lowered corn prices and brought demands for large, expensive annual retirement programs. Ironically, this occurs at a time when some are arguing for elimination of the CRP.

Federal farm policy should strive to discontinue or greatly minimize the acreage enrolled in annual set-asides by enticing more producers to enroll in either the multi-year set-aside program or long-term land retirement programs. The shift away from annual set-asides could be accomplished by making annual set-aside management requirements much more stringent and multi-year options more tempting. Initially, the farm bill needs to limit the acreage enrolled into annual cropland set-asides to <15 million acres or 15% of whatever is determined necessary to match supply and demand.

For the joint purpose of bringing supply and demand in line and conserving soil and water quality, nearly 100 million acres of cropland may need to be idled. If this acreage figure is not supported by new data about America's excess production capacity, most set-aside recommendations contained herein should be considered as a percentage of total idled acres. As a general philosophy, The Wildlife Society recommends a general and gradual shift away from short-term retirements toward longer term and permanent solutions. This can be accomplished by combining some form of permanent and long-term retirements with a smaller portion of total idled acres available for short-term supply control.

Common sense adjustments should be made to eliminate repetitive payments on land that should not be farmed.

Each year, a farmland disaster will occur in some portion of the country. Payments commonly are made for drought or flood on the same tract of land year after year. Many of these lands should never have been brought into crop production and it makes even less sense for taxpayers to continue to support production on such marginal lands. A common sense approach to sound fiscal policy dictates that land with a history of disaster loan payments should be offered an opportunity to enroll in a permanent conservation easement program when appropriate resources can be protected.

Green ticket conservation payments should be decoupled from production controls.

The relationship between the regulatory portion of the Conservation Subtitle and commodity programs needs examination. The 1985 bill was considered significant, in part, because of the linkage between conservation and commodity control programs. This linkage meant that society demanded minimal conservation standards from those receiving public dollars to support their farm operation and that philosophy should continue in future farm bills. As commodity programs become less attractive financially, some farmers may begin to decline participation and regulatory programs such as Swampbuster lose their only disincentive. Farmers that grow only noncontrolled crops or simply choose not to participate currently have no incentive to stop ecologically destructive farming techniques. Lastly, farm conservation dollars always have benefited those whose farming practices were already causing problems. Thus, these programs rewarded farmers who tended to be poor stewards of the land while punishing those who were good land stewards. To that end, separation of commodity control and conservation should begin in the 1995 Farm Bill. This may take the form of so-called "green ticket" programs, which involve some type of payment to farmers in exchange for environmentally sound practices. Funding that is currently spent on commodity control should be spent on conservation programs such as continuation of long-term retirement programs like the CRP and WRP.

Wildlife habitat improvement should become an objective of federal farm policy.

Some changes in farm policy may seem cosmetic, but could have far reaching effects. Farm programs are supported by all taxpayers and nearly 80% of Americans have an interest in wildlife (U.S. Dep. Inter. 1988). Wildlife benefits need to be legislated as a stated purpose of farm programs. This change would allow wildlife professionals in the field to argue for minor changes in implementation that greatly benefit wildlife while having no effect on the production aspects of these programs. State fish and wildlife agencies, in addition to the FWS, need specific identification

in farm bill legislation relating to implementation of programs that involve habitat issues.

ANNUAL AND MULTI-YEAR SET-ASIDE PROGRAMS

Annual set-aside programs are inefficient vehicles for controlling commodity supply (Cochrane and Runge 1992). Ideally, commodity supply control would be obtained through a free-market agricultural system whereby land would be cropped only to the extent that agricultural production was profitable, without profit-obscuring subsidies. However, annual set-aside programs likely will continue for at least the short term, and changes must be made in management of these acres.

Wildlife biologists have long decried the management of annual set-aside lands. While many of the following recommendations could be accomplished through changes in rules, regulations, or policy, such changes probably will not occur without specific language inserted into the 1995 Farm Bill.

Annually retired land should be protected from erosion and provide wildlife habitat.

Cover beneficial to wildlife, water quality, and soil protection needs to be established on all annually set-aside land. This would replace the current 50% cover requirement. Beneficial cover could be volunteer or planted species, but it must be established at the same time that such cover crops normally would be planted for harvest. The STC should establish planting deadlines and approve all cover types. Exemption from cover requirements for arid areas should apply only to individual farms that normally maintain fields in summer fallow rather than blanket exemptions for entire counties or states. Further, arid designations should be made at the county level, rather than the state level, in transitional zones such as in North Dakota and other states.

Cover requirements to protect nesting wildlife should be mandated legislatively.

Changes in annual set-aside management could have immediate positive impacts on wildlife populations. Berner (1994) reported that long-term trends in Minnesota's pheasant population revealed that pheasant numbers declined when annual set-aside acres dominated agricultural land retirement programs. These data indicate that annual set-aside management actually has had a negative impact on pheasant population dynamics. A vegetative analysis of idled acreage in Ohio found that only 30% of annual set-aside had sufficient cover to provide potential nesting habitat and $<12\%$ provided the dense, undisturbed grass cover preferred by upland wildlife for nesting (Oh. Div. Wildl., unpubl. data). These problems are indicative of ASCS guidelines on set-aside management. The 1990 Farm Bill required that a cover crop be seeded on 50% of set-aside acreage, but seeding dates are unusually late in the year and allowed seed mixtures do not provide much habitat. In addition, weed control becomes an obsession with many ASCS county committees and mowing requirements are strict. Tillage for weed control, commonly referred to as clean tillage, is still permitted in many areas. The opportunity to positively influence annual set-aside management has existed for many years, but changes will not occur unless legislatively directed. All references to "weeds" should be changed to "noxious weeds" in the Acreage Reduction subsection of each commodity title, especially within the "Protection From Weeds and Erosion" paragraph. This change will remove ASCS's latitude to require producers to control weeds beyond the standards set by state and federal noxious weed laws and should reduce destructive mowing practices.

Mowing, burning, and disking of set-aside cover should be discontinued.

Disturbances to set-aside cover need to be reduced. Currently, a restricted period is established in each state that prohibits haying and grazing unless an emergency condition is declared by the Secretary of Agriculture. The STC, rather than the ASCS State Committee, should have the authority to set the 5-month restricted period in each state within federal guidelines. These restricted period guidelines should be shifted from 1 April through 30 October to 1 March through 30 September for the express purpose of optimizing benefits to nesting wildlife. Vegetative cover should be required to remain undisturbed (i.e., no disking, mowing, haying, grazing, manure spreading, etc.) for the duration of the restricted period, except for spot control of woody vegetation and legally designated noxious weeds.

Emergency haying and grazing have been problems in many areas. Strict technical guidelines need to be established to determine when ACR land can be released for emergencies.

Wildlife habitat on idled land should be encouraged.

Producers who desire to provide wildlife habitat on set-aside lands should be encouraged. The ASCS should be prohibited from charging inspection fees to producers who wish to leave program crops or small grains to mature for wildlife habitat. Also, producers should be permitted to enroll portions of fields in annual set-aside (e.g., field borders or filter strips) rather than whole fields or 5-acre blocks as is required currently.

USDA should be accountable for management of set-aside acreage.

Federal law from past farm bills states that idled land must be placed in a conserving use. Few data are available on the conservation status of set-aside land. The ASCS should be required to compile data and report annually on the actual conservation uses of all set-aside lands.

Base acreage calculation should reflect land capabilities.

Calculation and disposition of base acres also needs to be adjusted. Most farm program payments are calculated from bases that are the key to subsidy amounts. Bases are calculated on a moving 5-year average. In any year that a producer does not participate in an annual set-aside, additional program crops may be planted to increase their base for subsequent participation. These acres can also violate other conservation provisions, such as conservation compliance, as long as the producer does not receive any other USDA benefits. If the producer chooses to participate at a later date, the farming operation must again return to compliance with USDA program requirements. These procedures promote increased production and agricultural program outlays at the expense of supply control and conservation and should stop. Bases should either be calculated on the capability of the land and a historical average or should be frozen at current levels. Participation in future conservation programs should require producers to permanently retire part of their base in order to receive payments.

Multi-year set-asides should be fully implemented.

Multi-year set-asides, where a producer would agree to leave the same acreage idled for 3-5 years in exchange for guaranteed benefits, have great potential to benefit both producers and wildlife. A longer term set-aside would allow time for adequate cover to establish and provide a longer planning horizon for the producer. Given the volatility of crop markets, establishment of a guaranteed price for 3-5 years should provide incentive to many farmers. This would function very similarly to the futures' market, but with less risk to the farmer. Additional incentives could include increasing the federal cost-share rates to 50% if the acreage is hayed outside the 5-month restricted period for the length of the contract, 75% if grazed outside the restricted period, and 100% if not hayed or grazed at all during the contract period.

Producers should also be allowed to accept additional incentive payments from state wildlife agencies or private organizations. Further, producers should be allowed to enroll all of their required set-aside into the multi-year program.

Cover requirements of multi-year set-aside programs should provide wildlife benefits.

Cover requirements should be the same as those outlined above for annual set-asides. In addition, the requirement that "perennial cover" be established should be changed to a "self-sustaining cover" to allow natural vegetation or mixtures of planted annuals and perennials to qualify. Existing approved covers should be eligible to qualify for enrollment in the multi-year program, with reimbursement of accepted establishment costs, at the cost-share rates listed above. This change would provide an additional year of wildlife habitat since the cover is established already.

0/85 and 50/85 programs should be used to provide wildlife benefits.

Because enrollment in the 0/85 and 50/85 provisions of annual set-aside has increased, and in some years has exceeded annual set-aside enrollment, it is important that these provisions be addressed. These set-aside provisions could be used to provide wildlife habitat with minor changes. Participants in 0/85 and 50/85 should be offered incentives to enroll in multi-year set-aside and provide cover on all idled acreage. In exchange for either of these options, benefits could be restored to 100%, making these a 0/100 option with wildlife management features. Finally, under current regulations, all or none of the land idled through 0/85 could provide wildlife habitat. The USDA should be required to annually report to Congress on the disposition and management of acreage enrolled in these programs.

CONSERVATION RESERVE PROGRAM

A long-term cropland retirement program should form the cornerstone of USDA retirement programs.

The CRP has had major positive impacts on the environment through preserving soil productivity and improving water quality and wildlife habitat. Soil erosion has been reduced by nearly 700 million tons per year, a 22% decrease in erosion on U.S. cropland compared to pre-CRP conditions (Osborn 1994). There is no doubt that wildlife benefits of the CRP are significant. Habitat created by the CRP has boosted wildlife populations, especially in areas like the Midwest where significant enrollment has occurred. For example, ring-necked pheasant numbers in Minnesota have tripled since the CRP began in 1986, and greater prairie chickens (*Tympanuchus cupido*) were estimated to have increased fourfold since 1988 (Midwest Private Land Wildlife Management Working Group 1993). These examples and others highlighted earlier provide testimony to the potential that the CRP has for benefiting a diversity of wildlife species. Although there have been problems associated with administration and implementation of the CRP, it has been the most effective federal agricultural program since the Soil Bank of the 1950s and 1960s in terms of wildlife conservation and environmental benefits.

Contracts signed in 1986 will begin to expire at the end of the 1995 growing season; thus, decisions about the future of these idled areas must be made now. Those decisions should be based on long-term needs. Contracts will expire on approximately 2 million acres of CRP land at the end of 1995, followed by over 22 million acres in 1996 and 1997. A national survey of CRP participants found that nearly 42% of respondents planned to return their CRP acres to production agriculture while only 7% planned to maintain their land in wildlife habitat (Nowak et al. 1990). Other studies indicate that around half of the current CRP participants intend to return land back into production with economic factors by far the most important deciding issue (Mortensen et al. 1989, Kurzejeski et al. 1992). Recent research indicates an even higher rate of return to agricultural production may be expected now that contracts are closer to expiration. For example, about 74% of respondents in a recent study said they would return their CRP land to crop production if commodity prices were 20% higher (Osborn 1994).

Land coming out of the CRP should be farmed within conservation compliance without the use of alternative conservation systems.

Significant acreage returned to row-crop production will erode the wildlife gains made over the previous 10 years. Taxpayers have a significant investment in the environmental benefits gradually achieved over the life of each CRP contract; allowing a return to production agriculture would negate most of these benefits. This would reduce the CRP to another expensive temporary solution to long-term problems. After each CRP contract expires, there is no assurance that these lands will be adequately protected. For example, Conservation Compliance provisions will only apply to CRP lands that are classified as highly erodible. Further, the allowance for use of Alternative Conservation Systems weakens the effect that Conservation Compliance could have in protecting soil and water quality on these highly erodible lands once they return to commodity production.

The U.S. has enormous capacity to overproduce and land should be idled to provide wide conservation benefits.

Acreage idled by the CRP must be maintained in some long-term conserving use because there is no need, either from an agricultural production or conservation perspective, to bring these 36 million acres back into row-crop production. The CRP idled some of America's most vulnerable, marginal, and fragile cropland. If CRP land is brought back into row-crop production, additional and expensive short-term set-asides quickly will resurface. Since 1985, an average of 62 million acres, nearly twice the total CRP acreage, has been idled through all government set-aside programs (McKenzie 1993). Acreage idled under USDA land retirement programs has fluctuated considerably over time, but the trend has been upward while the long-term trend for planted acres is relatively constant (Fig. 1).

CRP costs should be discounted against expenditures in commodity programs to provide a cost-effective method of retiring vulnerable cropland.

The CRP is probably most vulnerable because of costs attributed to this program. A particular problem exists with the budget rules of the Congressional Budget Office. All federal expenditures are considered either discretionary or mandatory. The CRP is considered a discretionary program with declining costs over time as contracts expire. Funding for any extension of the CRP

will be considered new spending and will have to be accompanied by a similar cut in another discretionary program. Commodity programs are mandatory; therefore, costs can rise exponentially without any budget reconciliation required. Likewise, any savings in federal outlays by reductions in commodity programs cannot be credited to the CRP. Young et al. (1994) reported that an annual reduction in commodity payments of $2.0 billion could be maintained if the CRP continued at its current level and annual set-asides are held at 0%. This cost reduction is nearly equal to the annual cost of the CRP (Young et al. 1994) but these savings are ignored under the current budget rules.

A General Accounting Office (GAO) report critical of program costs admitted that the environmental benefits could not be measured precisely (Gen. Account. Off. 1992). This same GAO report suggested that Conservation Compliance, the Agricultural Conservation Program, Great Plains Conservation Program, and Small Watershed Program were more efficient means of achieving conservation goals. Voluntary programs, such as those mentioned, have been in place for years. Yet, when the price of soybeans approached $12 per bushel in the early 1970s, voluntary conservation achievements of the previous 40 years were destroyed readily with encouragement from the USDA. Long-term programs may be initially expensive, but they provide better solutions to environmentally sensitive land problems and are cost-effective to the public over time. The GAO report failed to recognize the long-term criticism of the Agricultural Conservation Program, the effect of Alternative Conservation Systems on Conservation Compliance, and conservation problems on nonparticipating farms. The report also ignored the cost of annual crop retirement programs that have formed the backbone of agricultural policy since the 1930s. About half the acreage enrolled in the CRP reduced crop bases on participating farms and resulted in a reduction of deficiency payments under annual commodity programs.

CRP provides economic benefits well beyond its cost and should be continued in some form.

Economic values of wildlife and other environmental benefits of the CRP are difficult to measure. Wildlife biologists, traditionally, have been reluctant to assign monetary values to wildlife resources; this is especially true for aesthetic values and other quality of life benefits. These values of the CRP do exist and certainly add to the program's societal value. As part of a CRP monitoring and evaluation study, Allen (1994) found that the CRP provided at least $8.6 billion in wildlife benefits. Other economic benefits of the CRP include a $2 billion savings in commodity programs mentioned earlier, $1.6 billion savings from on-site soil erosion control, $3.7 billion savings from reductions in off-site damages caused by soil erosion and $0.5 billion savings from prevention of off-farm wind erosion damages (Young and Osborn 1990). When these data are combined with other environmental and wildlife benefits, which may be immeasurable but are certainly worth billions, it is clear that the CRP is a cost-effective program.

State Technical Committees should be established and should have significant authority as defined by the 1990 Farm Bill.

The role of the STC could have a profound impact on the future of the CRP. The STCs, as mandated by the 1990 Farm Bill, must be formulated and fully implemented in each state. State and federal natural resource professionals should be included in STC membership, and any reorganization of the USDA should give STCs oversight over ASCS county committees or their successors with respect to their involvement in any conservation program. This would ensure consistency among counties in administration of the CRP and other conservation programs. Targeting for extensions and new enrollments in the CRP, developing haying and grazing guidelines, and protecting regional wildlife interests are some of the responsibilities that lie with STCs. In fact, the establishment of STCs would go far in resolving many of the shortcomings that have become apparent in our attempts to foster sound management of agricultural lands.

CRP contracts should shift toward long-term protection of critical lands.

A general shift from short-term cropland retirement programs to longer term and perpetual easements should begin with the 1995 Farm Bill. The CRP should be continued in a revised form and would provide an excellent vehicle to carry this shift towards more permanent solutions to farmland problems that have existed since the 1930s. Periodic payments to farmers are band-aid approaches in government attempts to resolve soil erosion, water quality, and wildlife habitat concerns. A system encompassing a combination of 10-year contracts, 20-year easements, and perpetual easements is proposed. Priority needs to be placed on establishing perpetual easements on the most critical areas. The high interest in permanent easements of-

fered through the WRP indicates a general landowner interest in a permanent solution when reasonable terms are offered. Small, part-time farmers are less dependent on production agriculture to maintain their income and would be more likely to accept easements than agribusinessmen. Over half of U.S. farmers account for only 4% of total cash receipts; these small operations likely would be persuaded to stop farming fragile land. A gradual shift toward perpetual easements would spread costs over a longer period and allow for better evaluation of production needs into the 21st century. Such a shift could progress over time and still complement annual crop diversion programs (Table 1).

CRP contracts should be based on the actual value of the land taken out of production and the value to society.

The Emergency WRP demonstrated the attractiveness of a flat-rate payment as opposed to the bidding system currently used in the CRP. Future CRP payments should be based on the fair market value of the land, and the bid system should be abandoned. Payments for CRP lands often exceeded rental rates and many landowners will receive total payments over the life of the contract that exceed the value of the land. A fair market appraisal, like the one used in the WRP, would be more equitable to both participants and taxpayers.

Crop bases must be removed from retired cropland.

Expiring CRP contracts regain crop bases that were forfeited during the last 10 years. If commodity programs are not significantly changed, these bases must be removed permanently by purchase or other incentive. Commodity programs often foster poor management to maintain these bases. Farmers could retain their bases in exchange for easements that permit only less intensive, conserving uses of these lands.

Partial field enrollments would improve cost-effectiveness of the CRP.

Changes also must be made to allow for partial field enrollment, even in smaller fields. Many acres currently enrolled in the CRP are not highly erodible, but were incorporated as part of a highly erodible field for administrative convenience or simply because the farmer did not want to bother with an odd-shaped field. This practice, however, is not the best use of conservation dollars. Partial enrollment within these fields will provide for a more cost-effective program by allowing land that poses no environmental threat to remain in production.

Table 1. The Wildlife Society recommendations for agricultural land retirement acreage (millions of acres) in the 1995 Farm Bill.

Land Retirement Recommendations

Agricultural land retirement program options	Current Enrollment	Year 2000	Year 2005	Year 2010
WRP, Permanent easement	<1	1	3	5
CRP, Permanent easement	<1	20	25	30
CRP, 20-year contract	0	20	20	20
CRP, 10-year contract	36.5	20	15	10
Multi-year set-aside (3- to 5-year contract)	<1	15	15	15
Annual set-aside	19.9	15	15	15
Total acreage retired:	56.4	91	93	95

Long-term retirement programs should be targeted to critical resources.

Targeting future long-term retirements at cropland acres that would provide the greatest environmental benefits is the most logical step for future conservation programs within farm policy. Targeting needs to be identified at national, regional, and state levels. The focus of land retirement programs should be conservation of fragile land and critical resources. As contracts expire, targeting criteria could be used to determine whether an easement or extended contract would be offered. The most critical areas should receive consideration for permanent easements only. The USDA made some attempt at this in the last few CRP signups and that direction needs to be encouraged. Targeting priorities as well as specific criteria need to be identified legislatively. Highly erodible land, restored and restorable wetlands, riparian areas, vegetative filter strips, and restoration of critical habitats such as bottomland forests and native vegetation (e.g., prairies) need to be legislated targets. Refinement and application of these criteria should be based on input from STCs. Current CRP contracts with lesser environmental benefits and those unlikely to be returned to production agriculture should be allowed to expire. Continuation of many CRP contracts may not be desirable. Contracts establishing economically viable softwood plantings in the Southeast should not be renewed. Nearly 2 million acres in 13 southeastern states were established in monoculture pine plantations (Allen 1993). These contracts do not provide significant wildlife benefits, and producers are very unlikely to return these acres to agricultural production when contracts expire. Favorable softwood timber prices and the high cost of land clearing to restore fields to tillable conditions virtually assure that this acreage will remain in the contracted cover for the long term. It would be a poor use of taxpayer dollars to extend these contracts; thus, these contracts should be allowed to adjust to the free market.

Haying and grazing of CRP lands should not be allowed.

Haying and grazing of CRP lands have been proposed as management tools to improve cover quality and wildlife habitat values, but they often disturb the developing ecosystems. Current CRP management and management of proposed easements should be flexible but conservation benefits should not be compromised as is often the case when haying and grazing are allowed. In the advance notice of a proposed rule to allow haying and grazing, many restrictions and options were discussed that would appear to maintain the conservation integrity of the land while permitting economic use. The major problem will be the administration of such options. In some parts of the country, minimal wildlife benefits may result with complicated restrictions and put wildlife agencies and the ASCS at odds. If restrictions are too complex, enforcement will be difficult and this could easily deteriorate into a subsidized livestock program. Haying and grazing have the potential to be less intensive, conserving uses of fragile land, but many factors make these options unattractive. Thus, they should only be considered as part of a compromise to permanently retire cropland and crop bases with minimal budget outlays.

Long-term retirement programs must have flexibility to allow for wildlife management.

Landowners must continue to have management responsibility for eased lands. Long-term easements could be allowed to revert to the ecological climax for the region. As a result, CRP acreage in the eastern U.S. will revert to woodlands and CRP acreage in the Great Plains will remain mostly grasses, although more intense efforts would be needed to establish native vegetation. More than 87% of the acreage enrolled in the CRP is in grass cover with over half planted to introduced grasses. Active management could occur under guidelines provided by local wildlife professionals and the STC in accordance with landowner objectives. In many areas of the country, it would be desirable to increase vegetative, and thus biological diversity. Periodic strip tilling or burning of native vegetation could be permitted to improve habitat for target species. Conservation plans of operation need to be developed with a team approach that ensures conservation goals are met and landowners are willing partners in management. If no management is desired by the current landowner, provisions must be made to allow subsequent landowners the opportunity to actively manage the land within easement guidelines.

Emergency use of CRP should lands be based on approved scientific standards.

Emergency haying and grazing have been a constant problem for the CRP. Although provisions for use of retired lands in times of disaster are necessary, the public investment must be protected so that this is not abused. Such provisions were exercised in 7 of the first 8 years that the CRP was in existence. There are 2 easy mechanisms to alleviate this problem. First, better management of annually idled acres is needed. A

multi-year set-aside combined with a required cover crop on all annually idled acres could effectively establish a strategic forage reserve that could provide for most, if not all, emergencies. Annual set-asides are open to grazing every year, but a lack of cover means they provide little forage in many areas. Secondly, any release of idled land should be based on a recognized scientific standard such as the Palmer Drought Severity Index. This could effectively reduce politically motivated use of lands retired for conservation purposes.

WETLAND RESERVE PROGRAM

The Wetland Reserve Program must be fully funded.

The WRP was authorized to reestablish wetlands on cropland. Rule changes for the current signup changed the procedure to pay fair market value as opposed to using the bid system employed for the first WRP signup and all CRP signups. This program is only offered in 20 states. The major problem with the WRP is the lack of adequate funding. Although funding is outside the purview of the farm bill, the WRP can only function as intended if it is fully funded and offered in all states.

WRP enrollment should be targeted to national, state and local wetland goals.

Targeting must also be a part of the WRP. National targeting should complement the goals of the North American Waterfowl Management Plan and the Partners in Flight initiatives. The 1994 WRP enabled State Conservation Review Groups and State ASCS Committees to develop State Selection Plans to give priority to such things as specific wetland types, locations, and sizes. This approach should be continued and expanded to allow input from the STC. The 1994 program also allowed riparian areas meeting very strict criteria to be enrolled; however, very few areas are expected to meet those criteria. Eligibility requirements for riparian lands should be relaxed somewhat to allow enrollment of most perennial streams provided adjacent buffer strips are of adequate width (e.g., 100-foot minimum). Such eligibility criteria should be developed by the STC. The STC also should have a strong role in establishing management plans and easement restrictions in the WRP.

SWAMPBUSTER

The Swampbuster wetland protection provision originated in Section 1221 of the 1985 Farm Bill and denied federal payments to those who produced an agricultural commodity on a wetland converted after 23 December 1985. The effectiveness of Swampbuster is difficult to assess. The rate of wetland conversion has slowed since 1985, but economic conditions may have influenced that reduction. Also, many wetlands have been lost due to implementation problems and misidentification. Considerable confusion about the rules and jurisdiction of various USDA agencies made Swampbuster one of the most controversial features of the 1985 Farm Bill. Wetland definitions and delineations came under immediate fire and spawned several rule and policy changes before the 1990 Farm Bill. Although the 1990 Farm Bill made several changes to Swampbuster, more work still needs to be done.

Wetland definitions must be based on sound science.

Effective wetland protection features in farm policy must be fair to landowners and be based on sound science. Identification of wetlands and subsequent notification of landowners should receive a high priority in the 1995 Farm Bill. Only farmers who receive federal farm program payments must comply with Swampbuster, but all landowners must comply with Section 404 of the Clean Water Act. Differences in wetland definitions among federal agencies do not make sense and could be perceived as unfair by those negatively affected. Wetland definitions and policies must be based on accepted scientific standards when implementing regulatory programs. A recent memorandum of agreement among the Departments of Agriculture, Army, and Interior and the Environmental Protection Agency has endorsed this concept and may help implementation of Swampbuster; however, its effectiveness is unknown at this time and may actually cloud jurisdictional issues.

A third party appeal process should be established to protect wetlands.

Identifying and mapping wetland boundaries on individual farms may result in appeals by the landowner. Negative determinations will receive no appeals. An appeal process exists for errors in wetland determinations, but the process is heavily skewed in favor of the landowner. The FWS is the only resource agency involved in some appeals, and most appeals involve landowners disputing a portion of their land being determined a wetland. There is no formalized appeal process in favor of the wetland resource, although some changes are made through the Converted Wetland Technical Error procedure; however, this is usually after the

fact with the wetland already converted. This decision is made when the SCS determines that a field error was made and a converted area previously called nonwetland was actually wetland. The landowner is penalized slightly in that the area may be relinquished for future crop production, but the wetland is not restored. A formalized appeal process needs to be established to include participation of state natural resource agencies or their designees, and the process must allow for appeals where areas are determined to be nonwetland, artificial wetland, or prior converted cropland when evidence suggests the contrary. Inclusion of this third party appeal process for the resource would demonstrate that the USDA is concerned about a public trust resource while being fair to their traditional clientele.

Wetland maps should be developed as soon as possible.

Changes in USDA policy outside the rule-making venue during the past 6 years have resulted in inconsistent implementation of the Swampbuster provision. The decision to stop preparing wetland determinations unless requested by a landowner leaves a void in designations. This lack of information can cause the short-term destruction of wetlands, require large amounts of agency time and effort, and often frustrate the landowner. In the worst-case scenario, wetlands that should have been identified simply fall through the cracks of an overloaded system. The USDA should expedite the determination and mapping process and allow for landowners and agencies to appeal as necessary. This is even more important as the SCS increases its responsibility for Section 404 wetland determinations on agricultural lands. Areas considered prior-converted cropland under the farm bill do not receive Section 404 protection. The 1987 Wetlands Delineation Manual is adequate as a guideline for determinations until an accurate scientific document is produced from the current National Academy of Sciences initiative.

Resource professionals outside the USDA should participate in quality control procedures.

Quality control methods used by the USDA at the present time do not allow for input or review by other resource agencies. Integrity of the process is critical because enforcement efforts often rely on self-incrimination by producers. Annually, producers are required to complete a form asking if they have drained a wetland on their land in the past year. Farmers often do not report transgressions because the penalty for withholding information is minimal. Therefore, a quality control process needs to be adopted that includes participation by STC members including state natural resource agencies or their designees. No further wetland exemption categories should be allowed in the 1995 Farm Bill.

Landowners should be allowed to mitigate lower quality wetlands, but high quality wetlands should not be mitigated.

The ability to fully mitigate wetland losses is an area of professional disagreement. This is compounded by the fact that most wetlands in agricultural areas have been degraded to some extent and their functions and values are difficult to assess. Current regulations allow "minimal effects" to be determined on certain degraded wetlands with or without mitigation depending upon the situation. Mitigation for wetlands whose conversion would result in minimal effects "on the functional hydrological and biological value of the wetland, including value to waterfowl and wildlife" is allowed under current rules. Mitigation for wetlands lost under the minimal effects provision should continue. Conversion of wetlands that still provide the majority of their functional values should not be permitted under minimal effects. Wetland degradation should be determined by wetland scientists or wildlife biologists from a resource agency other than the USDA prior to conversion.

Technical training is needed for USDA field staff implementing Swampbuster.

The lack of trained wetland scientists in the USDA seriously limits the effectiveness of Swampbuster. Although the SCS does have wildlife biologists on staff, most of their personnel are trained as agronomists and, as such, lack formalized training in wetland identification. The SCS State Biologists often are responsible for a wide variety of wetland issues on a statewide basis and cannot be expected to adequately address the needs of field staff on the technical aspects of Swampbuster. Cooperative efforts with state and federal wildlife agencies using their wetland expertise should be encouraged.

Staff levels must be adequate to implement Swampbuster.

Although it will be determined in an appropriation bill rather than the farm bill, it is imperative that agencies implementing Swampbuster be funded at adequate levels. Wetland mapping, field determinations, appeals, and notification of landowners require significant resources from the USDA. Well-written farm policy

legislation can easily be undermined when staff time and training are inadequate and decisions are made hastily with inadequate information. Many state agencies have a vested interest in wetland resources and opportunities exist for cooperative wetland mapping efforts. The 1995 Farm Bill should encourage such initiatives.

SODBUSTER AND CONSERVATION COMPLIANCE

Conservation plans should be written to keep soil loss at or below "T".

Conservation Compliance and Sodbuster are discussed together because the effectiveness of Sodbuster is closely linked to Conservation Compliance. Both provisions apply only to highly erodible land and its use. New highly erodible land can be brought into production if it can be farmed under an approved conservation plan. The weakening of Conservation Compliance by the adoption of Alternative Conservation Systems limits the value of Sodbuster. The 1995 Farm Bill should be more specific in its erosion control goals and should strive for "T" standards for all conservation plans under Conservation Compliance, thereby applying that level of conservation to Sodbuster.

Alternative conservation systems should be abolished.

The use of Alternative Conservation Systems should be prohibited. Alternative Conservation Systems were developed for farmers who could not meet traditional conservation plan standards without economic hardship. Economic hardships were not defined and many so-called compliance plans were simply an endorsement of current farming practices. The adoption of Alternative Conservation Systems in 1988 allowed erosion rates that greatly exceeded soil loss tolerance levels, and could be used if a farmer claimed that any change would cause economic distress. Compliance plans should be designed to keep soil erosion rates below the soil loss tolerance level. Farmers who cannot meet these standards should be given the option of enrolling in the CRP or its successor in a permanent easement program.

Reorganization, state technical committees, and site specific management plans would improve the effectiveness of conservation plans.

Administrative changes such as implementation of STCs and establishment of a new NRCS also would improve implementation of these programs. Another option for improving the effectiveness of these programs would be to provide funding to implement a state/federal agency team approach to farmland conservation plan writing similar to the Forest Stewardship Program. This option could mirror that of HR1440 introduced in 1993. This bill provided for Site-Specific Management Plans that would have allowed "1-stop shopping" for USDA-required farm management plans and could provide more comprehensive natural resource management.

OTHER FARM BILL TITLES

Forestry -- The Forest Stewardship and Stewardship Incentive Programs have fostered a closer working relationship between wildlife biologists and foresters, resulting in greater environmental benefits from tree planting and management programs. All programs under the current legislation should be retained and fully funded.

Water Quality Initiatives -- This program was designed to provide incentives to landowners for natural resource management practices that improve water quality. Wildlife habitat and wetland management options were specifically identified in the 1990 Farm Bill, but were never implemented. These practices should be part of the 1995 Farm Bill and effectively implemented by the USDA.

Farmers' Home Administration -- The FmHA conservation easement program should continue as written. The FmHA should be directed to make the farm debt restructuring process more available to landowners who want to participate in the write-down provision. Congress also should provide clearer direction on fee title transfers. Foreclosed tracts made up primarily of critical environmentally sensitive areas or wetlands should either be protected by permanent easements or be transferred to a state or federal natural resource agency for perpetual protection.

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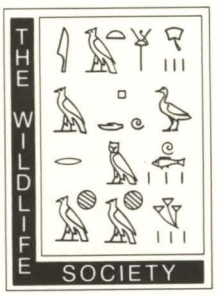

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