

Habitat Conservation Incentives Workshop - Background Papers

June 2-3, 2004

Washington, D.C.

Session 1A – Farm Bill Incentive Programs

Frank Casey (Defenders of Wildlife)
George Boody (Land Stewardship Project)
Craig Cox (Soil and Water Conservation Society)

FARM BILL PROGRAMS

Background: Why are Farm Bill Programs Important

Farm Bill conservation programs have the potential to proactively restore and conserve wildlife habitat and species, both for species already listed, but more importantly, to prevent additional listings. Farm Bill conservation incentives programs are applicable to all ecosystem types where farming, ranching and forestry still take place. Current programs target about 75% of the rural landscape, thus a multitude of ecosystem types can be addressed. Additionally, the amount of funding authorized in the 2002 Farm Bill for resource conservation is over \$5 billion a year, which dwarfs any other item in the federal budget for resource conservation. A portion of this funding is directly aimed at wildlife habitat or species restoration and conservation activities. Lastly, Farm Bill incentive programs are voluntary and preventative in nature, thereby having the potential to supplement a more regulatory approach.

Although most are aimed at improving water quality and stemming soil erosion, Farm Bill conservation programs may have indirect beneficial impacts for wildlife habitat. The Wildlife Habitat Incentives Program, the Wetland Reserve Program, and in some places the Conservation Reserve Enhancement Program, are directed at wildlife habitat for both listed and non-listed species at risk. The primary problem with determining the impacts of Farm Bill programs that address habitat conservation is that there is no effective monitoring or evaluation of program or project impacts. A recent report by the Wildlife Habitat Management Institute (USDA 2000b) concluded that there is little direct evidence thus far on the impacts of Farm Bill wildlife habitat or species recovery, with the possible exception of the Conservation Reserve Program.

There is some indirect evidence of beneficial, but limited, application of Wildlife Habitat Incentives Program projects on habitats for listed or at-risk species. In 1999, 10 percent of the total area enrolled in this program (about 72,000 acres) was aimed at habitats of species listed as threatened and endangered (NRCS 2000). Although the area for listed species increased to 15

percent in 2001, total acreage was less at 31,000 acres (NRCS 2004). In some states, threatened and endangered species and their habitats have been prioritized for program assistance¹.

Barriers to Increased Effectiveness and Efficiency

There is a lack of targeted state-level conservation strategies for native at-risk wildlife habitat and biodiversity that exist on private lands, including those under agricultural ownership and production. With the exception of the State of Florida, Farm Bill wildlife conservation funds have not been directed at areas identified in any planning process that have been determined to be strategically important for conservation purposes. This may be due to the strictly voluntary nature of these programs and evaluation criteria that do not take into account the relative risks to some habitats and species over others. There is a need for well articulated targeted strategies that guide all federal habitat conservation programs.

The technical service infrastructure to deliver state-of-the-art and science-based advice to private landowners concerning species or habitat conservation and recovery is fragmentary and absent in large stretches of the country. Technical services lack sufficient numbers of wildlife biologists to help with conservation planning and implementation. Furthermore, those traditional partners that assist U.S. Department of Agriculture in implementation of resource conservation projects have not had a high degree of interest in biodiversity or addressing endangered species issues. Federal funding for technical assistance to deliver conservation programs, and for the research and development of new conservation technologies, has actually declined over the last ten years.

There are numerous Farm Bill programs that impact wildlife habitat, either directly or indirectly, each with its own set of rules and incentive measures to encourage participation. While this situation may have some advantages in terms of the types of resource problems that are addressed and the incentive mechanisms available to producers, it can cause landowners to incur substantial search and transactions costs that discourage participation. The numerous, and sometimes redundant, conservation programs are complex and difficult to understand because each has multiple information, eligibility, and technical assistance requirements. The fragmentation and complexity of conservation programs contribute to administrative and implementation costs.

The Farm Bill habitat conservation programs, as well as other soil and water programs, have been “practice-based” as opposed to “outcome-based.” With the exception of the impacts of Conservation Reserve Program on bird populations, there has been no comprehensive system for monitoring and evaluating the impacts of resource conservation practices on native plant and animal species, nor the economic incentives employed to attain resource conservation goals. Program performance has been traditionally monitored and evaluated by the numbers of acres, participants, types of practices installed and dollars spent. There is a need to measure the biological performance of habitat and species conservation programs in order to achieve the most technically efficient and cost-effective means of accomplishing desired goals.

¹ States that have indicated that their primary goal is improving conditions for threatened and endangered species include Arizona, Colorado, Kentucky, Maine, Maryland, Montana, New Jersey, Nevada, and New Mexico (Burke 1999).

Related to the point above, a major barrier in Farm Bill conservation programs is the lack of concrete, stated priorities for what we want these programs to achieve. Instead, programs like the Environmental Quality Incentives Program, the Conservation Security Program, the Conservation Reserve Program, and even the Wildlife Habitat Incentives Program are guided by eligibility criteria and/or some sort of largely un-weighted ranking criteria. Those criteria allow for multiple objectives ranging from soil conservation to endangered species habitat to water quality improvement. The lack of stated objectives also leads directly to the practice-based versus outcome-based approach.

The increasingly fragmented nature of land tenure in agricultural landscapes is a real barrier to all conservation efforts on agricultural land, but it may be more serious for biodiversity conservation, especially if we are seeking more permanent change in land use. Another set of barriers is related to support mechanisms for maximizing production of low value commodity crops on as broad a scale as possible. Commodity support programs targeted to maximum production of selected row crops can work at cross purposes to habitat conservation programs and act as a disincentive to habitat preservation or enhancement. Similarly, marketing and research programs that focus on increasing yields or sales of a few commodities also can cause significant barriers.

Policy Recommendations

Scope

Targeting essential habitats for protection and restoration efforts requires that these habitats first be identified. State-based planning efforts are now under way to identify essential native habitats that should be permanently protected and/or restored, including those habitats under agricultural ownership. Federal funding for additional state-based habitat plans is authorized through Title VIII of the 2001 Interior Appropriations Act and Title IX of the 2001 Commerce, Justice, State Appropriations Act, and state plans must be developed by 2005. When these plans are completed, effective ways must be developed to link Farm Bill programs to these strategies.

Approaches need to be developed for linking Farm Bill programs to state habitat conservation efforts. A mechanism or institution is required to develop links to state habitat plans and make the necessary compromises in allocation among state habitat, water quality, air quality, water conservation and other plans.

The U.S. Department of Agriculture's experience with conservation programs indicates that there are potentially significant cost savings in designing programs to protect or enhance natural resources on agricultural lands if those programs target lands with the highest conservation potential. The ability to target valuable habitat areas for protection requires that conservation programs be flexible enough to account for different species, habitats, and activities in different parts of the country (Lewandrowski and Ingram 1999).

For landowners within a target area, a three-tiered strategy could be implemented. The first tier would target protection of intact remnant habitats that still exist on agricultural lands. The second

tier would support targeted restoration and landowner management of essential habitats. The third tier, which most current programs are aimed at, would support implementing beneficial wildlife habitat management practices on those lands that remain in agricultural production.

For each tier of participation, agricultural landowners could adopt a farm- or ranch-level habitat protection and/or restoration plan that is consistent with a statewide habitat conservation strategy. The farm-level plan could be developed with the assistance of federal or state wildlife biologists, or certified private wildlife biologists. The farm-level plan would define desired environmental and ecological outcomes and include a monitoring program to determine whether those outcomes had been achieved.

Many environmental concerns have been identified, including Total Maximum Daily Load, hypoxia and greenhouse gases. Farmers manage lands, especially if they are seeking diversified production, in a holistic way and to achieve multiple agro-ecological outcomes. It is critical that ways be found to “nest” environmental habitat conservation goals and benefits at a local, regional and larger scale, but in ways comprehensible at the field and watershed scale.

Structure

Recommendations for the structure of Farm Bill programs would stress (1) flexibility in producer choice of conservation management practices and incentives that best fit the individual physical and financial situation, and (2) increased financial support for research, development, and technical assistance programs to facilitate habitat conservation and management. A flexible approach to incentives recognizes that the social and economic factors which influence decisions with respect to habitat conservation are not the same for all landowners, or in all parts of the country. What will motivate a small woodlot owner in the Southeast to conserve long-leaf pine forest will not necessarily motivate a Midwestern farmer to conserve native grassland habitat.

The new Conservation Security Program, as written in the legislation, should be implemented. Under the Conservation Security Program, income support payments could be based on a contract and linked to the adoption and maintenance of habitat conservation practices. The Conservation Security Program could be a vehicle for longer term and sustained conservation activity by agricultural landowners.

Whether set by administrative agencies or by mutual agreement by interested parties, natural resource management programs and projects should specify clear environmental outcomes to be achieved. For example, a wildlife habitat project goal may be to increase habitat for an at-risk species by “x” percent over a specific time period. Outcome measurement should not only address the technical effectiveness of recommended management practices, but also the cost-effectiveness of incentive instruments selected by producers. However, agreement on the need to determine environmental outcomes does not make this difficult task any easier or less expensive to implement. The U.S. Department of Agriculture is currently investigating various “outcome” indicators under its Conservation Effects Assessment Program that could serve as the basis for evaluating habitat conservation efforts for technical effectiveness. The Conservation Planning Tool, developed by the U.S. Geological Survey, for use in predicting changes in species abundance based on changes in landscape management, is another promising development. This

effort should be fully supported over the long term and resources for developing and testing other evaluation methods should be increased.

A project rather than a program focus is one solution to meet environmental performance criteria. Moving from program-based to project-based implementation is the only way to tie current conservation programs to performance and outcomes.

There needs to be a strategic direction on where Farm Bill programs should fit in the larger context of biodiversity conservation programs across the federal government. For example, what is the comparative advantage of Farm Bill programs given their largely voluntary and largely short term nature? To respond to this question it is necessary to know what the biodiversity conservation potential is for various agricultural landscapes so that we can focus attention on those opportunities that are ecologically important, economically feasible for landowners/operators, and socially acceptable in rural communities.

Administration

Administrative recommendations include developing alternative habitat conservation practices and streamlining existing wildlife habitat resource conservation programs. With respect to conservation management practices, agricultural producers should have the flexibility to design, test, and implement (with the assistance of qualified government technical agencies, third party nonprofit groups, and/or certified private consultants) new habitat conservation practices that are appropriate to local environmental and economic conditions. Producers should be allowed to modify existing management practices to meet habitat or species resource conservation goals. Producers could also submit one application for a habitat conservation effort and then the appropriate program(s) would be applied. The technical and administrative capacity of federal conservation agencies to plan, administer and effectively monitor native wildlife habitat and species protection and conservation projects needs to be increased.

References

Burke, V. "Assessing the Establishment and Early Impacts of the Wildlife Habitat Incentives Program." Mimeo. School of Natural Resources. College of Agriculture, Food and Natural Resources. University of Missouri. Columbia, Missouri. 1999.

Lewandowski, J. and K. Ingram. "Policy Considerations for Increasing Compatibilities between Agriculture and Wildlife." *Natural Res. J.* 39(Spring 1999):229-269.

United States Department of Agriculture, Natural Resources Conservation Service. "Commodity Credit Corporation (CCC) Wildlife Habitat Incentives Program. 1999 Status of Program." United States Department of Agriculture, Natural Resources Conservation Service. Washington D.C. 2000a.

United States Department of Agriculture, Natural Resources Conservation Service/Wildlife Habitat Management Institute. "A Comprehensive Review of Farm Bill Contributions to Wildlife Conservation: 1985-2000. United States Department of Agriculture, Natural Resources Conservation Service. Washington D.C. 2000b.

United States Department of Agriculture, Natural Resources Conservation Service. "Commodity Credit Corporation (CCC) Wildlife Habitat Incentives Program. 2001 Status of Program." United States Department of Agriculture, Natural Resources Conservation Service. Washington D.C. 2004.