I could talk all day about Save Our Streams but let me just conclude by saying it helps answer the need to get back to the land. We have two more programs in the works to get underway when Save Our Streams is properly funded, running smoothly—and when we are damn sure we are ready for more.

One project deals with wildlife habitat improvement—something our members have been into for many years—and the other will concentrate on our estuaries. All will involve people—actively involve them.

The Izaak Walton League was once the only game in town—in the conservation movement—citizen division. Keep an eye on us we are coming back.

I'm going to let Leopold close for me. He best sums up our conservation priorities as we head for our 200th birthday:

"Conservation is a state of harmony between men and land."

Harmony only comes with understanding. And you can't understand something unless you know it. Our greatest challenge is to bring about this harmony. We can if we get back to the land and take a lot of folks with us.

## A NEW DIMENSION FOR FUNDING CONSERVATION PROGRAMS

## by LAURENCE R. JAHN AND JAMES B. TREFETHEN<sup>1</sup>

Fish and wildlife administrators are facing growing public pressures to broaden existing programs. Many management efforts are under severe challenge. This is a natural expansion of the ground swell of environmental concern that first became apparent about a decade ago. It has gained strength and momentum ever since.

The fact that some calls for change are unrealistic is beside the point. Expansion of fish and wildlife programs is mandated by recent federal and state legislation. And under the Endangered Species Act of 1973, state agencies must expand programs to retain authority over important segments of their fish and nonmigratory wildlife resources.

Reactions of state fish and wildlife administrators have been mixed. Some resent the intrusion of federal authority into spheres of interest and activity that in the past have been exclusively theirs. Others see it as a challenge to broaden their services to the public. But no matter what reaction, the laws are on the books and there is little chance they will be repealed. If anything, they will be tightened further.

Fish and wildlife professionals must realize and accept the public's concern over the future of fish, wildlife, and their habitats. Our profession must acknowledge and respond to this demand or the public will look elsewhere for leadership. Make no mistake on that.

It was largely with a view toward assisting in developing broader programs to meet this public demand that the Wildlife Management Institute accepted, late in 1974, the invitation of the Council on Environmental Quality and the U. S. Fish and Wildlife Service to conduct a comprehensive study of funding and programs for nongame species in the United States.

The task was complicated by the imposition of a deadline of only a few weeks and the fact that nongame species in one way or another occupy the attention of hundreds of agencies, organizations, and institutions. Further, their programs, efforts and funding for nongame species are not clearly separated or defined. The conservation officer on patrol, for example, can no more account for his time spent in enforcing nongame species laws than can the officer on the beat say what proportion of his time is spent preventing burglaries or auto theft. Similarly, wildlife habitat created or maintained for game species benefits a broad spectrum of nongame fish and wildlife.

With these hurdles recognized, WMI launched the survey through seven questionnaires designed to ferret out program information for the diverse groups that had to be contacted. One or more of the questionnaires were sent to state conservation organizations, federal agencies, colleges and universities, the Cooperative Extension Service in each state, the District of Columbia, Guam, Puerto Rico, and the Virgin Islands, and the 25 Cooperative Fishery Research Units and 20 Cooperative Wildlife Research Units.

Considering the short time for assembling data, there was a fine response. Useful information was received from 36 state and territorial fish and wildlife agencies, 13 federal agencies, 98 colleges and universities, 30 State Cooperative Extension Services, 22 Cooperative Fishery Units, and 19

Cooperative Wildlife Research Units. Thirteen of 47 private conservation organizations also replied to the questionnaire.

I will not bore you with the study's statistics. They are readily available in our report released by the Council on Environmental Quality and the Fish and Wildlife Service last spring (Wildlife Management Institute, 1975). Suffice it to say that the study revealed a rather substantial and growing interest and investment in nongame programs by all respondents. For example, 36 states and one territory invested almost \$3.5 million in 1974-75 for nongame and endangered fish and wildlife.

Expanding public interest in species not of immediate interest to sportsmen also was reflected in a number of other accumulated facts. Nearly one half of the responding colleges and universities reported increasing their emphasis on nongame species in existing courses on wildlife and fisheries management, 12 offered one or more courses in nongame fish and wildlife management, and 12 more were planning to initiate such special courses within the next two years. Thirty-eight reported 367 research theses projects dealing with nongame fish and wildlife underway at the time of the survey, compared to an annual average of approximately 70 over the previous ten years.

One of the most important phases of the study of primary interest to you is the potential new sources of funding for nongame fish and wildlife programs.

The expanded program of nongame research, management, and enforcement demanded by society will require substantial investments of additional funds. State fish and wildlife programs presently are financed largely from hunting and fishing license receipts and the federal excise (user) taxes levied on sportsmen under the Federal Aid in Wildlife and Fish Restoration Acts. In its 1973 national survey of state fish and wildlife funding WMI found that 51 state agencies received 77 percent of their income from hunters and anglers, with an additional 4 percent from general fund appropriations and 1 percent from earmarked taxes paid by the public at large (Wildlife Management Institute, 1973).

A considerable portion of these sportsmen's dollars has been used to acquire state fish and wildlife management areas that yield benefits to a variety of wildlife and the general public. The 38.5 million acres of land acquired for wildlife between 1937 and 1972 by the 50 states supported 162 species of nongame birds, ten times the number of species of ducks involved. Seventy-two percent of the use on 40 such areas in 13 states was of a nonconsumptive nature (U. S. Bureau of Sport Fisheries and Wildlife, 1972). Popular habitat dependent activities included bird watching, nature study, field trials, and berry, nut and mushroom gathering. These figures emphasize the need for broader conservation program funding.

Although several state agencies have tapped nonsportsmen sources of revenue, most state nongame activities are financed from traditional sources. While hunters and anglers benefit aesthetically and spiritually from the presence of nongame species when afield, these same benefits accrue to the nonhunting, nonangling tourist, hiker, camper, and nature observer. In the states, hunters and sport fishermen are paying a far greater share than the rest of society for the protection and maintenance of fish and wildlife resources.

In the Institute's nongame survey, each state fish and wildlife agency was asked to estimate the additional money needed to launch a comprehensive program that would include full consideration for all forms of animal life. Their quick estimates varied from a few thousand dollars to more than \$3 million above existing annual budgets. The Missouri Department of Conservation which, through its Design for Conservation, has refined its program needs, estimates the cost at \$20 million annually—well over double its fish and wildlife 1971 budget of \$8 million (Missouri Department of Conservation, 1975).

In view of this, the Institute believes estimates provided by most state agency respondents are highly conservative. For this and other reasons we projected an initial annual need by the states of \$40 million over their present combined budgets. Keep in mind that this is phase-one start up money. More would be required in ensuing years.

To administer nongame programs at state levels, WMI recognized two possible alternatives. One was the creation in each state of a separate agency charged narrowly with responsibility for nongame species; the second was an expansion of existing administrative fish and wildlife programs to embrace all species of fish and wildlife. The first alternative was given no more than passing consideration. Such an unwise approach would lead to gross duplication of effort and would cost far more than expansion of existing multiple-benefit programs.

As a means of financing these new programs, all potential sources for generating additional funds were considered. Most are not new. Some already are being used with varying success by one or more state agencies.

As we all know, adequate funding is the seed bed for fish and wildlife programs. But the sources vary in dependability for sustained income. Attempts to tap public funds through voluntary programs have been disappointing. A few states, including Ohio, Colorado, and Mississippi, have used the special stamp-sale approach to finance nongame fish and wildlife programs but returns to date have been disappointing and inadequate. The U. S. Fish and Wildlife Service had similar experiences in 1959 and 1960 in its attempts to sell duck stamps to the nonhunting public. In spite of an intensive publicity campaign, it sold only 1,153 stamps. A second effort, launched last year, is floundering as badly. It is romanticism at best to presume that hundreds of thousands of people in this great land of ours will voluntarily ante up the funds needed for this work. There is no substitute whatsoever for providing society with a well designed opportunity to contribute its full and fair share for this necessary work.

Since nongame fish and wildlife programs benefit all citizens, the use of general funds is obvious. But neither Congress nor many state legislatures have any great eagerness to appropriate funds for fish and wildlife purposes. Few federal laws dealing with fish and wildlife have been funded anywhere near their authorized limits. The Endangered Species Act of 1973 has been woefully shortchanged. Most state agencies also have been unsuccessful in obtaining general fund support.

For this reason the Institute recommended an approach to expand state funding patterned after the time-tested models available in the Federal Aid in Fish and Wildlife Restoration Acts. A small earmarked excise tax on selected outdoor recreation equipment, could yield adequate funding to

assist the states to strengthen nongame programs.

Through this funding plan necessary funds for nongame programs would be raised from those who benefit most directly—the millions of recreationists whose enjoyment is based on the out-of-doors. These include, among others, hikers, campers, picnickers, bird watchers and nature photographers. It is proposed that funds be raised by levying an excise tax on commodities used by this segment of the public. Examples are tents, camp stoves, sleeping bags, air mattresses, fuel-fed or battery-powered lanterns, camping and travel trailers, bird houses and feeders, packaged bird foods, binoculars, and certain cameras, film, and flash guns and bulbs.

As with the existing federal aid acts, the fund would be administered by the U. S. Fish and Wildlife Service and monies allocated to the states on a 75-25 matching grant basis. As a condition to participation, each state would be required to enact enabling legislation based on the model Nongame and Endangered Species Conservation Act drafted by the International Association of Game, Fish and Conservation Commissioners, The Wildlife Society, and the U. S. Fish and Wildlife Service. It was distributed to the states in April 1974.

Following completion of the Institute's report and its submission to CEQ and the Fish and Wildlife Service, it was referred to appropriate congressional committees. Draft legislation following the recommendations almost to the letter has been completed by the staff of the Senate Subcommittee on the Environment. That draft now is under review and may be introduced shortly.

The proposal calls for authorizing an initial one-time appropriation of \$5 million by the Congress with additional manpower authorizations to the Fish and Wildlife Service to enable it to gear up and move the program forward without delay.

Apportionments to the states and territorities would be based on total area and population, with some extra weight given to population. Each participating state's annual apportionment would be available for expenditure or obligation for two fiscal years. But unlike the existing Federal Aid Wildlife Restoration Act, unexpended and unobligated apportionments would be credited to a special Secretary of the Interior discretionary fund at the close of the second fiscal year. This money would be available for two additional years for states whose nongame program costs exceed their regular apportionments. In view of the pressing need for information on the status and distribution of populations and habitats of many individual fish and wildlife species, we believe any remaining unclaimed, reverted funds ultimately should go for research, such as that carried out through the Cooperative Fish and Wildlife Research Units. They have the dual purpose of acquiring needed information and expanding the supply of workers having adequate training.

The draft act also proposes a limit of 25 percent on the cost of a state nongame fish and wildlife program that may be drawn from hunting and fishing license revenues. The Institute recognizes the difficulties that many state fish and wildlife agencies have in maintaining existing programs in these days of skyrocketing inflation. Without such a safeguard, there is danger that political pressure could force diversion of substantial funds from traditional sources into nongame programs.

The proposal would make such activities as law enforcement, extension services, and information and education, which are ineligible under the Federal Aid in Fish and Wildlife Restoration Acts,

eligible to a certain extent for funding under the proposed nongame law. The basic need in any workable nongame program, however, is for fundamental research and management. Because of this a 25 percent ceiling is recommended for a state's apportionment that can be applied to these three previously ineligible activities.

Acceptance of these recommendations should strengthen federal-state cooperation. As with the Fish and Wildlife Restoration Acts, the U. S. Fish and Wildlife Service would assume leadership of the program at the national level. It would help coordinate efforts by the state fish and wildlife agencies and those federal agencies whose programs involve or affect fish and wildlife and their habitats.

The reluctance of legislators, both federal and state, to adequately fund fish and wildlife programs undoubtedly stems from the inability and impossibility of resource administrators translating recreational and aesthetic benefits to the public in terms of dollars and cents. Economists and auditors who draw up federal and state budgets unfortunately have been notoriously blind to values beyond dollar expression.

WMI hopes that its study report will help correct this situation and lead to the establishment of a stronger fish and wildlife program in every state and in each of the appropriate federal agencies. Implementation of the recommendations, we believe, would do much to improve the public image and the level of service of the fish and wildlife profession. It would also provide a unique opportunity for the more vociferous critics of fish and wildlife management to strengthen the overall effort, should they decide to work for this necessary and constructive expansion of our profession's scope of interest and concern.

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<sup>&</sup>lt;sup>1</sup> Vice President and Director of Publications, respectively, Wildlife Management Institute, 1000 Vermont Avenue, N. W., Washington, D. C. 20005. Presented at the 29th Annual Conference of Southeastern Association of Game and Fish Commissioners, 13 October 1975, St. Louis, Missouri.