

COOPERATIVE WILDLIFE DISEASE PROJECT — 25th ANNIVERSARY

CHESTER F. PHELPS, Director Emeritus, Virginia Commission of Game and Inland Fisheries

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Good morning, ladies and gentlemen, my friends. And this is a good morning. A very special morning, and a very special day, for today we mark the 25th anniversary of the Southeastern Cooperative Wildlife Disease Study. Before getting into that, however, I want to brag a bit; I want to brag about you folks, in this room this morning, about other groups like you in other hotels, in other cities, in other years. The people who, through their support, their interest, and their participation, have made the Southeastern Association of Fish and Wildlife Agencies what it is today — unquestionably the most effective, the most productive, the most innovative — just the best regional fish and wildlife association in the country.

Our Southeastern Association met first in 1947 at St. Petersburg, Florida primarily to provide a time and place for wildlife professionals in the southeastern states to get together and discuss their work and to learn from each other so that all might benefit. This cooperative attitude just naturally evolved into the many cooperative projects and studies which are the mark of achievement and distinction of the Southeastern Association. There are other regional fish and wildlife associations, 3 of them in fact. But, none has the professional standing of the Southeastern Association, an achievement which has resulted primarily from cooperative efforts, supported by the directors of the southeastern states, and individuals such as you who occupy this room this morning.

To lead up better to the Wildlife Disease Study, let me relate a little background of other and some earlier cooperative projects, studies and committees. And, again, these were the result of actions by earlier directors of the southeastern states and the interests of earlier attendees at earlier conventions who supported and encouraged those who actually did the work.

The very 1st Southeastern Association Cooperative Investigation, the Cooperative Dove Project, initiated in 1948 was a cooperative project in the fullest sense of the word and the 1st of its kind in North America. Proposed by Len Foote of the Wildlife Management Institute, the late Morris Freeman, a former director of Mississippi, then ably engineered approval of the project by his fellow southeastern directors. Individuals in more than 30 states representing universities, state and federal agencies, and private organizations such as the National Audubon Society and the Wildlife Management Institute, contributed life history, population and harvest data to the hard core center — 11 identical southeastern state Pittman-Robertson projects — established with the active encouragement and approval of the then regional federal aid supervisor, the, shall I say, almost legendary Dr. C.W. Watson.

The purely research aspects of this project, such as Technical Bulletins Numbers 1 and 2, published by the Association, and the Annual Dove Status Reports of the Fish and Wildlife Service, have provided nearly 30 years of continuous data — still cooperatively assembled — upon which to draw for management decisions. But, the effects of the project were more than that, for it replaced

opinion and politics with collective professionalism in the management of this continentally distributed wildlife resource. Actually, the study may well have preserved the sport of dove hunting, when this was attacked by the Defenders of Wildlife, because the scope and volume of information from the cooperative investigation and its descendants convinced the court that doves were being managed prudently. The study really destroyed provincialism and turned our wildlife profession away from local life history research into the broader esplanades of population dynamics and functional ecology. It became the pilot for many other collaborative attacks on fish and wildlife problems too large for a single state agency or university. It brought interagency cooperation out of the committee room and into the field and broke the barriers of state boundaries, interstate funding and fiscal arrangements, interagency jealousies and prima donna program prerogatives. Perhaps though, its greatest impact is that it became the forerunner for cooperation in many fish and wildlife endeavors.

One of these was the Southeastern Cooperative Fish and Game Statistics Project, which probably owes its inception to the dove study for it was at once apparent that the study had a need for proper statistical design and analyses, to assay the precision of different census methods, evaluate band recoveries and mortalities, hunting data, sampling methods, and so forth. To accomplish this, assistance was sought from the Institute of Statistics, North Carolina University; and this link became the Southeastern Cooperative Fish and Game Statistical Project.

The Project was formed in 1959 when fish and game biologists found that A. L. Finkner was one of the few statisticians willing and able to help them. D. D. Mason replaced Finkner in 1962 and Don Hayne became the project leader in 1963. Both continued until retirement this year. And, as a personal note, I'm proud that I had the opportunity to serve as Chairman of the Steering Committee from the inception of the Project in 1959 until my retirement 20 years later.

The Project was established to meet the need for sophisticated statistical help, a need that was developing rapidly at that time. In addition to the need of the mourning dove study, fishery biologists were starting to use creel surveys as a management tool; and also at about this time, the courts decided that the formula for apportioning Federal Aid funds must be based upon numbers of licensees, not numbers of licenses sold, and presented the states with a statistical problem for which there was no standard answer. Again, the vital factor in the establishment of the Project was "Doc" Watson, who combined foresight in sensing that the states needed statistical advice with his own genius for persuading the several states that they should cooperate in supporting a statistical unit of their own.

Perhaps the principle contribution of the Statistics Project has been in providing southeastern biologists and administrators with statistical backup in the form of advice, training and research of a type that an individual agency found impossible to include within its own organization. The more spectacular examples of this help have been in cases of controversy; the more frequent services have been to the individual biologists in advice in planning, aid in computing, and discussion of results.

One important contribution of the Project in the 60's was to change the dove regulation meetings in June from a frustrating presentation of poorly understood claims to debate over substantive issues. And early in its history, the Project

provided a practical solution to the license duplication question. The Project has served several times as an operating facility, about which work could be organized, such as the statistical analysis of dove banding data and the supervision for 8 years of a telephone survey of dove hunting in the Eastern Management Unit. The Project has presented a Wildlife Statistics Workshop each winter since the 1st year, a most valuable training experience for many workers in the field. This continues to meet the need for statistical application in fish and wildlife management in such a way that southeastern fish and wildlife research is, as a whole, undoubtedly better designed than that of the other regions.

Among other major projects sponsored by the Southeastern Association is the Southeastern Cooperative Fish Parasite and Disease Project, proposed to the Southeastern directors by Drs. H. S. Swingle and Ray Allison in 1964. This has continued through the years and today is under the direction of Bill Rogers and a committee ably steered by Hudson Nichols of Tennessee. Its fame is not limited to the Southeast as it serves as the nucleus for a fish disease program that has worldwide recognition. Fish kills, in private and public waters, still occur and it is still important, for more reasons than one, to determine the cause. Determining this has logically led to the identification and control of fish pathogens. It was also discovered that many of these were new to science and this, in turn, led to descriptions of about 150 new species of parasites and several new viral and bacterial pathogens of fish. These and over 100 publications, resulting from research activities of project personnel, represent only part of a distinct contribution to fishery science everywhere — far beyond the confines of Southeastern United States.

Committees generally have a reputation for producing something like a camel, but, if so, this critter does not exist in the Southeast Region. Committees of the Southeastern Association and its satellite organizations have an enviable record of accomplishment. The Reservoir and Pollution Committee of the Southern Division American Fisheries Society, the Farm Game and Forest Game Committees of the Southeastern section of the Wildlife Society and the Endangered Species Committee of the Southeastern directors are examples.

The Reservoir Committee, organized in 1957, sponsored one of the 1st cooperative field data collection projects in the United States in 1967 when it brought 15 state fish and game agencies together at Douglas Reservoir in Tennessee to evaluate the effectiveness of cove sampling with reference to estimating fish populations. Earlier that year it had sponsored a National Reservoir Symposium at the University of Georgia and it promoted the standardization of creel census data collection. The Pollution Committee, executing a charge from Chairman Hudson Nichols, prepared a booklet on the monetary values of fish in the Southeastern states and this has evolved into a booklet on freshwater fish values for the entire United States, which should be off the press this fall.

The Farm Game Committee has made important contributions to that subject for the last 28 years, including pointing out the futility of some ongoing programs including the traditional "stocking" of pen-reared game. On the other hand, several states patterned their entire farm game programs after the best ideas gleaned from other states.

The Forest Game Committee, appointed in 1954 with "Doc" Watson as its first chairman, produced 2 excellent illustrated bulletins on deer food plants; guidelines

for wildlife considerations in Timber Stand Improvement and herbicide forest management techniques; model laws and information on landowner liability relating to public hunting, and the transactions of the First National Wild Turkey Symposium which it sponsored. The 2nd Symposium, incidentally, was sponsored jointly with the North Central Section of the Wildlife Society. This committee's efforts also produced 2 large deer-proof fenced areas in Arkansas which have made possible long-term basic research on deer carrying capacity, food utilization, effects of hunting and other basic aspects of deer management.

During 1970-74, at the suggestion of Jack Crockford and Wayne Cloward, the Southeastern Association, with 10 states and 2 federal agencies, sponsored a study of the economic aspects of wildlife recreation in the Southeastern United States. The major objective was to establish monetary values for wildlife and wildlife-oriented recreation activities to replace the values contained in Senate Document 97, Supplement #1, which had been found to be unsatisfactory in cost/benefit calculations of water and related land resource projects. This it did, particularly in cases heard by a U.S. Court in Louisiana and also it provided invaluable information to support budget requests to state legislators — particularly by demonstrating the significant favorable economic impact on a state's economy by participants in wildlife oriented recreation. It also helped to secure increased license fees as the data indicated there was little opposition to such. The study's true potential was never reached, however, possibly because of the difficulty of translating the more than 100 tables of cross-tabulated data into convincing laymen's language.

And just a word about the Endangered Species Committee. At least one of its successes has been marked as a triumph of reason, and biology, over bureaucratic labyrinths and uninformed public emotion. Alligators have been, and in some states still are, endangered. But in other areas, Louisiana and Florida in particular, their numbers have increased far beyond desirable limits. After years of frustration and work, the Committee has seen its efforts bring about a sensible relaxation of regulations that now permit some controlled harvest.

Now, it's about time for me to do what I was supposed to do in the 1st place. That is to commemorate particularly, the 25th year of that shining jewel in the Southeastern Association's crown of cooperative projects, the Wildlife Disease Study, the oldest continuous project of all.

Actually, it's beginning was something more simple, as it was 1st called the Southeastern Cooperative Deer Disease Study. Today we have an estimated 5 million white-tailed deer in the southeast. But, at the turn of the century, 1900, there were virtually none; and it was not until the late '40s that the basic restocking was largely completed, and it became clearly apparent that the effort was a tremendous success. But then problems developed. In the summer of 1949 fishermen began finding dead deer along the waterways of northern Georgia, western North Carolina, and eastern Tennessee. The mortalities spread into several other states. A 90% loss was estimated on the Black Warrior Game Management Area of Alabama. The cause of death was not determined and Fred Ruff, U.S. Forest Service Regional Biologist, suggested at the Southeastern Conference later that year, a need for research. The die-off did not hit again until 1954. But then in 1955 it struck with even greater intensity. Thousands of deer were lost throughout the Southeast. After some planning sessions, a group representing all the southeast states secured the approval of the southeast directors

in the spring of 1956 for developing a facility that would provide diagnostic services to the region. This was to be financed through annual *pro rata* funding at a location to be determined. A site selection committee, composed of "Doc" Watson, Len Foote, the late Al Hyder of Tennessee, and 2 others, picked the University of Georgia School of Veterinary Medicine and the Southeastern Cooperative Deer Disease Study was born.

It was soon recognized, however, that the unknown killer of deer was not to be the only problem. For example, cattlemen were fearful that the expanding deer herd would be a reservoir for brucellosis, a costly and serious cattle disease, and clarification and essential exoneration of deer as significant carriers represented one of the earliest endeavors of the deer disease study. Similar studies were initiated on other diseases and in 1961 the name was changed to the Southeastern Cooperative Wildlife Disease Study, more accurately descriptive, as the sponsoring state fish and wildlife agencies were then referring disease problems involving many animal species.

During the formative years of the study, the Southeastern Association of Fish and Game Commissioners, as it was known then, readily recognized the need for basic research on diseases of wild animals. As an outgrowth of this interest, Federal funds were secured in 1963 to support wildlife disease research conducted by the Southeastern Cooperative Wildlife Disease Study. A steering committee was appointed to represent the 13 participating state game and fish agencies, the Bureau of Sport Fisheries and Wildlife, the Wildlife Management Institute, and the University of Georgia. The late Jim Webb of South Carolina originally headed this committee and continued to do so for many years, being followed by Dan Cantner of West Virginia and, currently, Joe Herring of Louisiana.

Through the joint state/federal program the objectives were broadened. In addition to diagnostic services and the effects of disease and parasitism on wildlife populations, the study now attempts to define the disease interrelationships between domestic animals and livestock and the carrier status of wildlife as related to diseases transmissible to man.

Others, in other regions of the United States, became interested in diseases and parasites of deer, and in 1955 a virus from sick and dying deer in New Jersey and Michigan was isolated and the associated disease was named epizootic hemorrhagic disease. It is highly likely that this was the same undiagnosed malady that affected deer in southeastern United States in 1949, '54, and '55. Today, however, the effects and potential of this outstanding Study far transcend the original concept.

Our wildlife, livestock, and poultry are comparatively free of disease. But there are awesome implications to many foreign livestock and poultry diseases which would affect wildlife as well. Bluetongue, brucellosis, and foot-and-mouth disease are only 3 which pose a real threat to our domestic and wild animal resources. In fact, authorities no longer think in terms of *if* foot-and-mouth disease is introduced into this country, but *when*. And, when this does happen, white-tailed deer would be involved and the inevitable losses of these animals would be staggering. Early detection, followed by immediate eradication, constitutes the only recourse for minimizing the consequences.

There are probably 30 foreign diseases capable of devastating our domestic livestock and poultry and many would involve game animals and other wildlife and

poultry and many would involve game animals and other wildlife in a national disease eradication program. This has already happened, fortunately on a fairly small scale. Over 20,000 deer were killed in Florida, under protest, as a questionable part of the national fever tick eradication program. All of us of the Southeastern Association have good cause to be proud of fostering the disease study and of Dr. Frank Hayes, who has so ably directed it for so many years. He has received the highest honor the Southeastern Association can bestow, the C. W. Watson Award; and as a part of national recognition, the U.S. Department of Agriculture gave him a Superior Service Award, principally for his work with the state/federal Exotic Newcastle Eradication Task Forces in California, Florida, and Texas in the early '70s. The control of this disease necessitated killing over 10 million chickens at a cost of over \$50 million. And it did pose a threat to pheasants, quail and wild turkeys. Similarly, an outbreak of fowl cholera among waterfowl in Virginia and North Carolina a few years ago resulted in the killing of at least 25,000 birds, mostly coots, but the control eliminated a threat that could have decimated all the waterfowl in the Atlantic Flyway — and maybe more.

Actually, with the threats facing our domestic livestock, poultry, and wildlife we should remember that that pork chop, that steak, that fried chicken, that deer in your gunshots, has a better chance of continuing to be an enjoyable part of our future because of the work of Frank Hayes and his associates and the Southeastern Cooperative Wildlife Disease Study. The cooperative projects of the Southeastern Association, of which the disease study is one, are remarkable. But, they didn't just happen — one hesitates to name names because so many cannot be mentioned, but men such as "Doc" Watson, Len Foote, Frank Hayes, Joe Herring, Earle Frye, Les Glasgow, Fred Hardy, Frank Barrick, Don Hayne, John Newsom, Harold Warvel, Jim Webb, Lowell Halls, Al Finkner, Jack Crockford, to name but a few demonstrated the foresight, the initiative, the ability to identify real problems and a desire for the common good. And always, the willing support of the thousands who have attended these meetings. It is a record of which all can be proud.

Again, we commemorate and congratulate the Southeastern Cooperative Wildlife Disease Study. I am not sure whether the Southeastern Association has nurtured Frank Hayes, or Frank Hayes has nurtured the Southeastern Association; but anyway, it's been a wonderful, a most rewarding, symbiotic relationship and one that we hope continues to at least a golden anniversary.