

if we have to bulldoze away half the pulp production of an area known as a State or national forest.

Again, let me hasten to point out that I am not advocating that we always cater to the whims of the largest number. Administrators must carefully weigh various conflicting recreation uses—hunting and birdwatching, fishing and water skiing, hiking and horseback riding, etc. They must also weigh man's other requirements. Few would advocate exposing a valley to serious flooding by using flood storage capacity of a reservoir to provide better fishing. Timber production, hydro-electric power, irrigation water, cattle forage, flood prevention, and potable water are all legitimate end products of various types of resource management. Often one or more will be most important and other possible uses or products must suffer. But let us not compartmentalize our thinking. Because we call a tract a forest and it is administered by foresters does not necessarily mean that board feet of wood is the most important crop. A wildlife refuge or a public hunting ground may possess something more precious than ducks or deer; it may even be best suited to pulp production. Recreation opportunity can well be the most important contribution of a Corps of Engineer reservoir that was originally built for some other purpose.

Outdoor Recreation deals with people and their needs—only indirectly with the resources that provide this recreation. For this reason it can cut across many of the fetishes and mores that have grown up around resource management. It can encourage a broader and more honest multiple use approach.

The key which can accomplish this is planning, followed by fast action before it is too late. We are attempting to do just that. The Bureau of Outdoor Recreation has a small, but, we at least believe, a highly qualified staff. We are reviewing the outdoor legislation submitted to Congress this past session, which for various reasons was not passed.

In the light of last session's testimony and the ORRRC recommendations, we are particularly studying Federal land acquisition requirements, planning funds for the States, and, as emphasized by ORRRC, State and local requirements for acquisition and development grants with matching Federal funds. This naturally entails a study of sources of revenue.

Director Crafts wants this legislative Program to incorporate the best thinking of all conservation agencies. He has asked a representative group of State Conservation Administrators, including some here today, to meet with him and go over the needs and methods of meeting them. We must have the broad viewpoint which you as a group can furnish as well as the grassroots feelings with which you are also familiar.

Outdoor Recreation in all its ramifications and the new Bureau of the same name should and will be a rallying point for natural resources managers in shaping a program for the future and in implementing that program. Working together we can put the capital "C" back into conservation; we can make multiple use truly a magic concept!

REMARKS BY D. H. JANZEN

I owe the Southeastern Association an apology in that this is my first attendance at one of your annual meetings. I have had a problem with conflicting dates in the past. I'm looking forward to getting some first-hand information on your problems and accomplishments during the next several days. Your Association has quite a number of unique accomplishments to brag about—such as the initiation of the cooperative wildlife disease project and the major dove research and management study program, but it is not my assignment to talk about happenings in the Southeast about which each of you are better acquainted than I.

When your President, Jim Webb, told me last spring that you were going to meet in Charleston this year and that he expected me to be present and appear on the program, I asked him what I should talk about. He said: "Pick your own subject," so this morning I'm going to take about 20 minutes of

your time and talk a little about some of our mutual problems—we have plenty of them—and give you a report about what happened in Washington during the past year.

I might as well start with the wetlands preservation program—the biggest program our Bureau has yet tackled. You will recollect that about 5 years ago the conclusion was generally reached by the fish and wildlife profession, both in and out of Government, that unless we could stop the steady loss of wetlands in this Nation our migratory waterfowl would slowly dwindle in numbers and eventually reach the point where some species would no longer be huntable.

As a result, Congress several years ago raised the cost of the duck stamp from \$2 to \$3 and earmarked all of the receipts for wetland preservation through either purchase or lease. It was soon realized that while this earmarking would result in a substantial program, our wetlands would still disappear at a much faster rate than they could be acquired, even with all of the duck stamp monies available to us.

Someone came up with the idea that Congress should loan the Service \$150 million for a 10-year program, with the requirement that after this period the loan would be paid back from duck stamp receipts. To make a long story short, within a year Congress passed a bill authorizing a \$105 million loan fund for a 7-year period, which together with current duck stamp receipts of \$5 million a year should make about \$140 million available for the program.

The program is well under way. We have been concentrating on the waterfowl production areas of North Dakota, South Dakota, and Minnesota, where both the States and our Service agree the most pressing problems lie.

This brings me to two important pieces of legislation affecting this program which Congress has been considering this session. First, as many of you know, since World War II the Federal Farm Program has subsidized agricultural drainage, which has been particularly serious in the waterfowl production areas of the North Central prairies. Gradually, over the years drainage criteria have been revised to the point where the more permanent water areas were generally no longer eligible for Federal Aid, but considerable production habitat in the form of intermittent water areas were still being drained with Federal subsidy. This year after much effort on the part of the National conservation organizations Congress passed an act which provides that the Department of Interior (which in this case means our Service) shall inspect all drainage projects proposed for Federal Aid in North Dakota, South Dakota, and Minnesota, and federal aid, either technical or financial, shall be withheld if the Department determines that drainage will adversely affect waterfowl habitat. Congress did impose some conditions. The Service must make the farmer involved an offer to buy or lease his wetlands within one year's time. If the Service doesn't do so, the Department of Agriculture is free to offer drainage assistance to the farmer.

We are hopeful that Congress will now provide us enough money to fully carry on this inspection program.

The other piece of legislation involving our wetlands preservation program has to do with the taxes counties lose when the lands become federally owned. Under existing law the county gets 25 percent of receipts from a refuge—this includes receipts from grazing, haying, timber, oil, fur, etc. This has resulted in a very inequitable distribution. A few counties get much more than they would if the lands were in private ownership while most get *much* less. The legislation we proposed would provide that three-fourths of 1 percent of adjusted cost of the land would be paid each year to the county in which the refuge is located. This formula was satisfactory to almost all States, but the legislation got caught in the Congressional adjournment jam and we will have to start all over again next session. Meanwhile, it appears our acquisition work in the waterfowl production States of North Dakota, South Dakota, and Minnesota will be pretty much at a standstill until this legislation is passed.

Another important piece of legislation passed by Congress authorizes recreation on our National Wildlife Refuges. Many of you may not have known this, but until now the only authority we had to do any recreational development or maintenance—such as picnic grounds, nature trails, roads for visitors,

public sanitation facilities, etc., was as a result of annual authorizations written into our budget, which gave us the right to expend money budgeted for wild-life purposes on recreation, but on a very limited and incidental basis. Now we will have the authority to put a recreation item in our budget. For example, roads to make areas accessible to hunters or fishermen, picnic areas, development and control of water activities, etc., may now be developed as long as they do not interfere with the primary purpose of the refuge. This authorization becomes all important as the wetlands preservation program brings more water areas under Federal ownership.

And while I'm still on the subject of migratory birds, I might as well finish the job and talk a little about the waterfowl hunting season this fall.

First, I might say I'm no more happy about the greatly restricted waterfowl hunting regulations this year than are you. But I also want to make it clear that to date we haven't received any evidence that the data on which these regulations are based is in error.

Everything indicates we had a mediocre breeding season, coupled with a reduced breeding population and that the duck harvest this coming year as compared with last year's kill would have to be further reduced in the Mississippi and Central Flyways if we were not to further reduce our basic breeding duck population. Only this time will tell if we were right.

I don't intend to rehash the regulations today, but I want to discuss one regulation which has potential for creating quite a problem this fall, and that is our experiment in species management which provides that two additional scaup are allowed in the daily bag limit. Pressure for this has been emanating from a number of sections of the country for years and the Bureau has been charged with being ultraconservative because it did not provide for this regulation, even though we recognized that scaup were in better shape than the other species of ducks.

We have been severely criticized in some quarters for adopting this regulation, but I'm glad we decided to try it. It will be a good exercise in hunter self discipline, and we may find out whether or not hunters are willing to exercise self control if given additional responsibility along with additional opportunity.

Most of the protests have come from those who are concerned with the fact that the hunters generally are not going to be able to distinguish between scaup and ring-necks on the wing. This is, of course, why we have been reluctant to give it a trial. However, hunters can benefit from this regulation when hunting in scaup areas without running afoul of the law if they can distinguish the birds in hand. If they can't do that they have no business being in the marsh with a gun hunting ducks.

Now, how can they benefit if you can't distinguish a ringneck from a scaup on the wing? If a hunter has a scaup in his basic bag he can shoot another duck and even if it doesn't turn out to be a scaup, he hasn't violated the law. If he has two scaup in his basic bag, he can go after two extra birds without fear. In other words, if you are hunting in the Atlantic Flyway and:

(1) If the hunter can't identify his birds in the hand his bag limit is 2 or 3 depending on the State he is in, and he should not take a chance on trying to get another bird.

(2) If a hunter can identify his birds in the hand he will know whether to try for a scaup. If he doesn't have at least one scaup in his basic bag he should quit shooting, unless he also feels confident he can identify the ducks in the air. Many experienced hunters can.

This regulation was designed to provide more recreation for hunters in areas where scaup are common or where it might happen to be the primary species. In those areas I feel sure many extra scaup can be taken by hunters without gambling with the law, providing the hunters are willing to discipline themselves. If they prove they won't, we will have no alternative but to manage ducks on the basis of the species in shortest supply unless we are willing to slowly let some species disappear. Right now we are not willing to do this. So I hope that the hunters will cooperate. Some States have indicated they will close a part or all of the State to the scaup bonus. I am all for that. In fact,

that is what we hoped many of the States would do where they felt they would have a difficult time administering the law.

I would like to repeat again I don't like our present restrictive duck hunting regulations and we put up with them only for reasons beyond our control. There is a ray of light, however. We have had much moisture in parts of the best production areas this summer, and if the soil freezes up wet, as it now appears will be the case, we'll be in a good position to fill the potholes with water next spring if we get normal snowfall this winter. Because of the hunting restrictions we should send back north a satisfactory population of breeding stock of most species next spring to take advantage of what appears to be a potentially good situation.

I might also mention that we are establishing the Great Plains Waterfowl Research Station, which we hope will find the answers on how we can reduce the effects of drouth and how we can raise two birds where only one is being raised at the present time. We are going to have to find the answers to these questions because gradually in spite of our wetlands preservation program we are going to find our wetlands becoming more and more restricted by the inroads of civilization.

Now for problems involving other than migratory waterfowl. the proposed National Mourning Dove research program (largely planned by members of this association) will be implemented just as rapidly as funds permit. It is all important when we consider that the annual harvest of doves exceeds that of ducks nationwide.

We have been working with a committee of the Association on "beefing up" the Cooperative Wildlife Disease program, which has received such a good start here in the Southeast. Again, it is a question of money and when we will be able to budget it.

Pesticide research and bird control studies are getting a great deal of attention. What to do about the over-abundant populations of certain migratory non-game birds and how to meet the problems created by the modern-day wide-spread use of all kinds of pesticides represent two of the most pressing problems facing the Bureau. We are going to have to find the answers and that means giving them priority, which we are doing.

We are now planning a wildlife research sub-station at Stuttgart, Arkansas, for research on control of rice-damaging birds in cooperation with the Rice Experiment Station of the University of Arkansas Extension Service.

I might add that Congress this year added \$100,000 to our budget for nutria research and control. Most of this work will be done in Louisiana.

It also tacked on \$30,000 for predator and rodent control work in Arkansas.

And now for the fisheries side of the picture. Federal legislation over the years has had an important impact on the Nation's sport fishing. Agricultural programs, reservoir construction, navigation structures, programs dealing directly with fisheries—all have a lot to do with the kind and amount of fishing we have or do not have today. I'd like to take a few minutes to discuss the fisheries programs administered by our Bureau which have an impact here in the Southeast.

A national survey conducted by the Bureau two years ago indicated that 20 million man days of recreational fishing were provided to at least five million persons as a result of the Bureau's farm pond fish stocking program.

Farm ponds are a part of the rural scene in the southeastern States. Almost half of the Nation's farm ponds are located in these States. Of the total of 48,000 farm ponds stocked by the Bureau in 1961, 27,000 were located in this section of the country. These ponds comprise a total of 54,000 surface acres.

To provide these fish, as you know, the Bureau has been administering a nationwide system of fish hatcheries, with the Southeast having its share.

In fiscal year 1963, Congress appropriated \$1,356,300 for additional construction at eight existing National Fish Hatcheries in the States of Alabama, Arkansas, Georgia, Mississippi, South Carolina, and Virginia. These hatcheries produce trout and warm-water fish for stocking waters in 12 States, including waters on Federal lands, State managed waters, and farm ponds open to public fishing. On completion of the development now under way, which will require additional funds in future years, these hatcheries will have a potential annual

production of 750,000 pounds of trout and approximately 15.5 million warm-water fish.

In addition, Congress appropriated \$195,000 this year to initiate construction of the cold-water Dale Hollow Dam Hatchery in Tennessee, which will have a potential annual production of more than 100,000 pounds of trout. These fish will be stocked in waters on Federal lands, including the Cherokee National Forest and the Great Smokey Mountains National Park, tributary storage reservoirs of the Tennessee Valley Authority, and suitable waters created by dams constructed by the Corps of Engineers. This station will make a major contribution to the trout fishery in waters of that area.

In connection with this fish hatchery program the Bureau conducts in-service training programs at four Federal hatcheries and the Western Fish Disease Laboratory. The general objective of the schools is to advance the knowledge and skills of selected employees in the field of fish culture in order to develop professional fish hatchery managers and fishery biologists. One is located here in the Southeast at Marion, Alabama. The training program includes actual trainee participation in hatchery management and lectures on the most recent advances in warm-water fish-cultural techniques. Fish distribution activities and the inspection of farm ponds are included in the training program. The school year runs from August to July, with about five fish culturists receiving training each year. Since the inception of formal training at this school, 51 Federal employees have satisfactorily completed the course.

Congress has given us the green light on several new fisheries research programs.

Next Sunday we are dedicating the Fish Farming Experimental Station at Stuttgart, Arkansas. Many of the applied research and pilot facilities are already completed or under construction. The Station's program takes up where laboratory experimentation in fish disease, nutrition, and methodology research leaves off, to develop usable methods of large-scale fish farming.

We are starting a new fish control research station at Warm Springs, Georgia. This station is designed to learn more about control of locally unwanted kinds of fish with emphasis on southern species. A search for more-or-less specific chemical toxicants will be the major initial effort. Limited exploratory studies and the development of experimental facilities have been started on the site of the Warm Springs National Fish Hatchery in Georgia.

The purpose of the Bureau's new reservoir research is to relate water management in reservoirs to fish populations through basic and applied ecological, life history, and population research. Fish management agencies should benefit from sustained, long-term reservoir research through application of new or improved management methods.

A Bureau reservoir research program has started in the past year with a pre-impoundment research contract with the University of Arkansas on Beaver reservoir.

This year we plan to extend warm-water fish culture research into more problem areas, including genetics and physiology. We have funds this year to develop a laboratory unit on property of the Marion, Alabama, National Fish Hatchery. This will provide better space for an all-round program at Marion in research, fish production and training of fish-culturists in warm-water fish husbandry.

Before closing, I would like to mention the new *Cooperative Fishery Units program in the Southeast*, to be located at various colleges and universities. This might be considered a twin program to the Cooperative Wildlife Units, which have been in existence for many years. In fiscal year 1962, the first cooperative fishery unit was established at Utah State University, Logan, Utah. For fiscal year 1963, the Congress approved and appropriated funds for six additional units. Of these, three are being established in the Southeast. They will be located at the University of Georgia, Louisiana State University, and North Carolina State College. In authorizing the cooperative fishery units, the Congress made available \$30,000 each for use in employment of personnel and unit operation. The units will emphasize fishery research and management and extension-type programs. One of the important objectives will be to in-

crease the number of fishery biologists available for employment with State, Federal and private agencies.

While I'm on the subject of cooperatives, I might mention that we are establishing a new Wildlife Cooperative Research Unit at Louisiana State University this year.

But to get back to fish—even all these Federal authorizations and programs in the fisheries field may not have as much effect on fishing as do the combined effect of other Federal land and water resources programs in which fish are merely a by-product or ignored.

For example, the small watersheds program, authorized by Public Law 566, as amended, is playing a significant role in the management of fish and wildlife resources in the Southeast. In this region, small watershed projects, for the most part, result in a net loss in wildlife and stream fish habitat. In a single watershed, this loss may appear relatively insignificant. One merely has to cross over the hill into the next watershed to view an undisturbed stream of similar type or wildlife habitat of similar character.

Collectively, however, these losses take on much more significance, especially when one realizes that eventually the watershed across the hill will also be authorized for planning. In this region through September 1, 1961, applications were made for watersheds involving 10 percent of the total area of the region. In Kentucky, applications had been made for 27 percent of the total State area, on 12.6 percent of the land area in Georgia, and about 10 percent in Arkansas and Tennessee. The effect of the program becomes more significant when one considers that 41 percent of the idle lands within these watersheds—the ideal wildlife lands—are taken out of wildlife production.

On the plus side of the ledger, the floodwater retarding structures have increased the pond fish type habitat. These reservoirs are very difficult, or almost impossible, to manage as a pond fishery, however, because of the ratio of drainage area to pond surface area.

Our concern for the interest of fish and wildlife resources in this program is self-evident. Through the efforts of all of us, some progress has been made. We have succeeded in getting some structural modifications in reservoirs which will improve their manageability for fish and waterfowl. Also, some watersheds can portray striking examples of wildlife habitat improvements. As is always the case, however, it is the landowner who must finally be convinced of the value of fish and wildlife resources. It is in the best interest of us all to remain active in this program, cooperating with the Department of Agriculture and the landowner to see that these values are recognized and safeguarded for the enjoyment of a public that is clamoring for more and more outdoor recreation opportunities.

I don't think I have to repeat what has been emphasized by so many other speakers in recent years—the millions of acres of new reservoirs, the agricultural program of farm pond construction, the pollution control programs, navigational development, chemical pesticide control, etc., all of which have some effect or other on the recreational sport of fishing. In most cases it is because of these Federal programs that our Bureau is involved so deeply in fisheries problems and programs. It more or less proves the point that for every action there is a reaction, and I suspect this will be a continuing process as long as man is on this earth.

In closing, I would like to add that I think we collectively can hold up the fish and wildlife end if we can work together. Communication channels must be kept open. I want to assure you that as far as I am concerned our Bureau will bend over backwards in the field of cooperation. We may not always be able to agree, but in those cases all parties concerned should understand the basis for disagreement. And once disagreements are understood they often disappear. Remember I said *often*, not *always*.

Thank you for listening.