

Dan Cantners and others around the country, and the kinds of things that they must do may sometimes puzzle me and my people. If we stop and measure it all against the idea that whatever we are trying to do is in the best interest of the resource, together we will overcome our differences. We must recognize and accommodate each other's problems. We'll have to realize that we won't always agree, and that we will agree to disagree on many occasions, but whatever we do we must do collectively on behalf of the fish and wildlife of this country.

I was privileged last evening to be at supper with several young men on Dan Cantner's staff. They had no idea—and I didn't tell them—who I was, and they talked freely. I was impressed by the professionalism of these men and their ready acceptance that the world is changing. Their discussion around the table was about things that affected us all when we were young men coming up in this profession: how much money they made, what kind of per diem they were going to get, the complications of the Administrative Section. But fundamentally, they talked about fish and wildlife and the environment, the things that are their bag, disregarding all the other trouble that is engendered in this happy, sometimes confusing, sometimes frustrating business.

The key to future successes for all of us are these kinds of people, the many committed men and women in the field of fish and wildlife management. There are times when we who are administrators take these people for granted, we who sit in corner offices and watch the world go by on a narrow front. But we should never forget what it's like to be in the field. I was forcefully reminded of that less than two months ago when three young, eager, and aggressive Fish and Wildlife Service employees, accompanied by a skilled pilot lost their lives in the conduct of fish and wildlife management in Alaska. They went out to do a thing that is unimportant to a great many people—to inventory sea birds—and none of them returned. They did a thing that all of us have done at one time or another. They laid their lives on the line without perhaps really realizing that they were doing so. They were simply doing a job, flying over the open ocean in a small airplane in behalf of something about which they felt very strongly. They were committed.

As an administrator who feels a rapport with his employees, because I was one of those kinds of people a long time ago, I was not only sorrowed by the loss of these professionals, but I was buoyed up by knowing that there are people who are so committed that they will lay their lives on the line, as your employees do every day.

These are the key to the future—our dedicated people, who are ready to accept the idea that we must be committed collectively to the stewardship and perpetuation of fish and wildlife values throughout the United States. I think we can bring it off. I know that whenever I come into the midst of people like you and surroundings like this, I always go away saying that we're going to make it. I'm confident that in the long-term future we will have championed our responsibilities adequately.

Ladies and gentlemen, thank you. It is a pleasure to be at the Southeastern. I have enjoyed my morning immeasurably, and I intend to spend as many more hours with you as I possibly can. Thank you for your patience and for giving me a chance to tell you about the things I see ahead for all of us. Thank you once again.

GOVERNOR'S ADDRESS

by

*Honorable Arch A. Moore, Jr.
Governor of West Virginia*

President Cantner, Director Latimer, Mrs. Cone, Dr. Mathews, Director Greenwalt, Honored Guests, Ladies and Gentlemen—

It is a distinct pleasure, as Governor of West Virginia, to personally welcome you to our magnificent Mountain State.

It is a great honor and privilege for West Virginia to host this 28th Annual Convention of the Southeastern Association of Game and Fish Commissioners. I do hope your stay with us will be memorable and pleasant.

This morning, I want to share with you a few thoughts concerning this matter of natural resources conservation and West Virginia's important role as a national leader in facing the ever mounting environmental issues at stake throughout the world. The Mountain State has been blessed with an abundance of natural resources, and the magnificent beauty associated with their occurrence.

Recognizing this, and in the interest of all our citizens—It has always been my policy to develop action programs following multiple use concepts of natural resource management. It is not an easy task—Especially in view of our country's ever increasing energy problems.

West Virginia, with a land area of 15 million acres, is not a large state. But, its geologic structure and geography are significant. Seventy-four percent of our land area is covered with forests—And, because of its rugged mountainous terrain, community development has had to take place on the less than five million remaining acres. This has exerted a strong influence on economic development and presents an administrative challenge in carrying forth progressive natural resource management programs—To insure a good standard of living and a quality environment—Now and for the future.

Our many and varied natural resources are the backbone of West Virginia: High-quality coal, Appalachian hardwood forests, A more than adequate supply of fresh water, Natural gas, Oil, Limestone, A bounty of fish and wildlife resources, And an abundance of aesthetic wonderment.

However, our state's greatest resource is its people. Present West Virginians are the recipients of a rich heritage and are a proud, productive people. We have produced statesmen, coal miners, timbermen, and lovely, hard-working women. We have also produced our share of talented football and basketball players. The availability of mineral resources, quantities of fresh water and a high quality labor force in a good labor climate—Have encouraged the development and growth of heavy industry in our major valleys. This has been a major factor in the development of our state.

It is meaningful that one out of every 10 acres in West Virginia is in public domain—Such as our state forests, public hunting and fishing areas, beautiful parks and national forests. This assures an outdoor type of recreation for hunting, fishing, boating, camping and hiking—Activities which are an asset in encouraging people to locate and remain in West Virginia.

An analysis of the development of our state and the reasons that have influenced or caused this development—Exemplify the pressures that have been overcome to produce a stable economy in the best interests of our people. In view of the interdependence of the components of today's society—It is important that we work together toward a full understanding of what we are trying to do and why we are doing it. We must involve local governmental subdivisions, planning units, and the people as an integral part of statewide planning—To assure total input at all levels of concern. The development of all projects that exerts strong influence on groups of people—Should be planned with emphasis on the multiple uses of the natural resources involved.

The multiple-use concept of natural resource management must prevail in the best interests of society. We, therefore, must clarify points that may be unclear and must amplify those that need emphasis. We must recognize that a healthy atmosphere of growth, that will assure a productive economy—Requires environmental considerations as an integral component of planning. It follows that an awareness of ecological principles should be a consideration of development—With sufficient regulation or enforcement to assure that good management will be achieved. Planning, development, and management are the operating keys that will assure adequate environmental assessment—With minimum regulation and preserve individual rights and our free enterprise system.

In this spirit, we must face issues such as land-use planning, the continuing energy problem, and the need for copious quantities of food—In order to support and sustain the good quality of life demanded by today's society.

To meet the challenge of present demands on our natural resources, and in recognition of potential population growth and industrial development—The Department of Natural Resources is developing a nationally recognized wildlife resources plan. West Virginia has in progress an accelerated highway construction program. We are strongly encouraging and soliciting industrial development, and—Our education system is rapidly being upgraded at the secondary and higher levels. We are very proud of our accomplishments in meeting ever increasing environmental responsibilities: West Virginia has one of the strongest, most progressive surface mining reclamation laws in the country—And for the past six years—We have led the nation in acres reclaimed. Each year, more land has been reclaimed than has been disturbed. Recently, my office supported regulatory controls for gob piles and impoundments associated with the deep mining coal industry—To assure the safety and welfare of the citizens. These new regulations became law in July of this year.

In the wildlife resource field, our Department of Natural Resources has provided leadership in the management of wild turkey and white-tailed deer. Our concern over wilderness-type wildlife is reflected in the initiation of a black bear research program and stricter regulations concerning nuisance bear damage. The black bear is symbolic of the freedom mountaineers cherish and,—With proper land-use planning,—The state animal will continue to provide recreational pleasure and aesthetic values for future West Virginians.

We are extremely proud of the Department's development of the Centennial Golden Trout. The production of this uniquely colored rainbow trout has reached proportions enabling us to stock our streams with 70 to 90 thousand Goldens annually. One of the goals of our fisheries program is to have a sizeable trout stocking program—To provide maximum fishing opportunity on our many miles of beautiful fast-water streams. This goal is rapidly becoming a reality—Since the state's trout fishermen supported legislation this year to finance hatchery production through a special trout fishing license. The abundance of swift, mountain streams is also being promoted for the development of all forms of white-water recreation. One benefit derived from the abatement of water pollution in the Ohio River is the expanding sport and commercial fishery along our western border. The Ohio River is again attracting sportsmen from throughout the country for its fabulous bass fishing.

My office has supported the designation of wilderness areas in our state to include the unique Dolly Sods, remote Cranberry Back Country, and primitive Otter Creek sites.

Since West Virginia is located within 500 miles of 55 percent of the country's population—It is considered to be the potential recreation mecca of the east. To help meet this public demand—The state has established, with expansion potential, one of the finest park systems in the nation. Under management of the Department of Natural Resources—The Division of Parks and Recreation administers 34 areas, five golf courses, one ski resort, and believe it or not, a railroad.

We also publish a natural resource magazine, *Wonderful West Virginia*—That is considered one of the finest publications of its kind in the country.

Through my office, we sponsor a summer youth conservation program—Which directs its efforts at stream improvement, beautification, and maintenance of public facilities and state highways. However, the main goal of this program is to make each youth who participates aware of the individual's responsibility to the environment—And to provide West Virginia with better citizens for tomorrow.

In conclusion, we must be cognizant that mankind is in the process of developing an environmental ethic and concern for the future of Mother Earth. He is well aware that his own existence may be threatened by noxious air and polluted water. He is also aware that listening to ear-splitting noises and viewing graceless landscapes are a degradation of his environment. Because of this growing public concern,—The decision-makers must be able to devote a considerable amount of time and energy in planning the future use of our natural resources.

To defer this responsibility to the next generation will be depriving posterity of the

legacy of plenty that was left to us by our forefathers.

We would be foolish if we didn't admit that planning for the future is a risky venture. We will probably make mistakes, but by recognizing that our natural resources are finite—I have confidence that we can succeed by utilizing the mistakes of the past to accomplish the goals of the future.

We look forward to the benefits which West Virginia will derive from your pooled knowledge and skills.

With these thoughts, let me wish you success with your deliberations to achieve the goals of this important conference.

STRIPED BASS CULTURE AND MANAGEMENT THEME SESSION MODERATOR'S OPENING COMMENTS

by

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Our purpose today will be to trace the history of striped bass culture and management from its early beginning in the last century, through its major developmental period during the past 15 years, and to try to make realistic comments upon the current state of the art and the direction of the program in the near future. For the record, let me say that in 1966 at the 20th Annual Conference, Southeastern Association of Game and Fish Commissioners, we held the Striped Bass Symposium which helped set the stage for the ensuing striped bass program in the southeast. This session, therefore, is not the first presentation of its kind and, hopefully, it will not be the last.

In-as-much as the program has primarily been devoted to the establishment of striped bass populations in reservoirs, so also will the comments made today be primarily related to reservoir stocking. It should be noted, however, that in recent years at least four estuaries have also been stocked with cultured striped bass. The present investigation on the Hudson River is especially noteworthy. This is a very sophisticated, multi-million dollar study which is generating a data bank of information which should benefit everyone concerned with aquatic resources. A major facet of this investigation is the possibility of using cultured striped bass to mitigate losses of striped bass due to the operation of power plants. The ramifications of this program, especially to the fish culturist, is very exciting. If the stocking of cultured fish proves to be a feasible method for mitigating power plant losses and the projected 1000 new power plants are indeed built by the year 2000, then a needed boost will be given to fish culture and its practitioners.

THE USE OF CIRCULAR TANKS FOR SPAWNING STRIPED BASS (*MORONE SAXATILIS*)

by

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ABSTRACT

During the 1974 spawning season in Tennessee, 17 female striped bass were injected with chorionic gonadotropin and placed in circular tanks to spawn. One or more males, also injected with gonadotropin, were placed in 13 of the tanks with each female. In four of the tanks, treated white bass males (*M. chrysops*) were added in an attempt to produce hybrids.

All 13 of the females, where there were no white bass, successfully spawned producing an estimated 19.3 million eggs. More than 11 million fry hatched.

The four females in tanks containing white bass males ripened but had to be manually stripped.

The tank spawning method requires considerably less handling and imposes much less stress on brood fish than the conventional hormone technique.