

There are thus many knotty details, but the real basic problems in the administration of Florida's fisheries are interwoven in the three problems outlined. When those are remedied, our conservation program will be on its way to solution.

Problems Of Fishery Management In Maryland

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THE OBJECTIVE of conservation administration appears to be that of promoting human welfare, whether the subject is soil, water, mineral, forest, fish or otherwise. It seeks to do so by promoting effective practices and operations on increased quantities and volumes of fish—in the case here being considered. More specifically, conservation administration seeks to reach its objectives by stepping up the effectiveness of existing conservation agencies, whether or not they are concerned with statutory regulations, education or the gathering of factual information. All of the maritime states have regulatory agencies, while certain others have one or both of the agencies concerned with fishery research and conservation education programs. Virginia and Maryland, among others, have all three of these departmental activities, while most of the states are striving to that end.

The chief problem in fishery management generally seems to be that of relieving the administrative bodies from pressure groups as reflected in politics. There are a few states where this has been done to a marked degree, but in by far the greater number of instances there remains the element of fear and trembling as to where, when, and upon whom the politician in one size or another will descend, or when a management program will be curtailed or abolished because of the feelings and unthoughtfulness of little men. The writer speaks as a citizen from one of the states in the Union where marked progress has been made in the administration of natural resources, and where much of the political influence has been removed. It should be said, however, that the Maryland status is far from the millenium in this connection.

Natural resources belong to the people. Legislative action concerning them is an expression of the will of the people. The people, broadly speaking, want sound administration of the resources, including law enforcement. But that segment of the people directly dependent upon a resource, such as the fisheries, typically, is greatly concerned that the *status quo* be maintained rather than desirous of trying new programs and improved administrative practices. Programs and their administration in the past have not been effective in all too many cases and areas. Thus the struggle goes on in which conservationists and administrators are striving to do a better job in maintaining and rehabilitating resources, and the operators, in this case the fishermen, are concerned lest some of the conditions surrounding them be changed, such as the size of fish, season of fishing, type of gear, or other restrictions. How, then, can the quality of administration be improved? The answer appears to be found in the educative process, a slow one to be sure, and in the acquisition of facts on which to build management programs.

Recently a governor of one of the East Coast states had a county leader go to him with a delegation of watermen asking that the fishery laws of their area not be enforced. He and the watermen told the governor that enforcement would ruin his chances in the coming primary election. On the very next day another local leader, hailing from a contiguous county, led a delegation of fishermen to the same governor to advise that his defeat was certain if he did not enforce the identical laws. This situation is a characteristic one in the administration of fishery laws. There are many others less obvious, to be sure, but of types that persistently gnaw at the very vitals of successful administration.

Such situations as these are inevitable when laws and more laws are put on the books, even by well-intentioned conservationists, without information upon which to base them. Actually, many of the fishery laws of today amount to nothing more than inefficiencies imposed upon watermen, a condition that provokes scorn on their part for those charged with the administration of the fisheries. What good, for instance, comes from a regulation that forces shorter or smaller pound nets on an operator if he proceeds, in turn, to increase the number of nets he operates? A cure-all of the stove-league conservationists is to require that "rest days" be instituted or that the season of operation be contracted in order to let the fish escape. Such restrictions not only do not increase the runs, since added gears and efforts are applied to make up the deficit in the individual's catch, but the additions cost money, take time and require more gear, thus, to increase the per pound cost of production and injure both the consumer and the fisherman.

A new approach to the successful administration of the fin-fish resources in Maryland to build them up, without at the same time materially disturbing the welfare of the watermen, was instituted in 1942. The essence of the new program and the laws that implemented it rested upon the concept that the fishing effort should be controlled, especially in those fish, like the shad, that respond to an increase in the brood reserve. At that time the supply of fish in Maryland waters was at, or near, an all-time low. Many watermen had not licensed at all, especially in view of higher pay from war industry, thus only "grass roots," or all-weather fishermen continued to operate. The new law froze the catch effort, that is, limited the number of fishing license, at the low level of operators in the early forties. A comprehensive catch record system was set up. It was specified that additional units of gear could enter the fishery only when an increased supply of fish warranted same, and the criterion of sufficiency was the escapement of brood stock.

This unique system has been in operation about eight years and there is indication that the supply of shad, for years badly depleted, has increased. The escapement of brood fish has been built up in that time from 7 per cent to 26 per cent of the shad run. There is indication that a 40 per cent escapement is essential to the high yields expected from the shad fishery. Somewhat over one half of the desired run brood stock has been achieved.

Either by coincidence or by management, the striped bass, the basis of a fishery that is important in the State, and one subject to frequent and marked fluctuations, leveled off in yields during the period in question, and now is operating at a high level. The bass does not lend itself as readily to analysis in this case as does the shad, thus the passage of considerable time will be necessary to evaluate this situation in the administrative effort. It can be said, however, that not only the striped bass but the other fish limited to the confines

of the State have shown less severe fluctuations in abundance in recent years than formerly, and there is indication, if not marked promise, that the administration of the Maryland Fishery Management Plan is working. Certainly the statistical program is demonstrating its value both economically and biologically, while the administrators have, in the overall, greater cooperation and a more marked interest on the part of the fishermen, who like the principle and practices employed in an effort to improve their lot through increasing the yields.

The Maryland Fishery Management Plan, and other administrative efforts to maintain and expand the fisheries, are working, as far as plans, laws, enforcement and the like are concerned, and regardless of the degree of success that can be established as resulting from them. We submit to you the type of organization employed in Maryland to indicate the progress that has been made in freeing fishery administration from political obstructions. That State no longer is involved in controversies as to what principles and practices should go into administrative work on fin-fish. Such problems as do exist are at the non-professional or appointive level and exert no influence of movement on the effectuation of the program outlined. We hope to learn from developments in the fin-fishery a way to reduce the administrative difficulties with oyster and crab resources where some improvement has been made, but much is yet desired.