

Fisheries Management
in the
National Park Service

A
Position Paper

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Introduction

In 1979, Alfred Runte summarized a problem which plagues the natural resources in the United States National Parks. He states:

In truth the application of 'complete conservation' to both wildlife and landscapes was still largely compromised by human values and emotions. Until the evolution of that degree of detachment based on ecological understanding, allowances would continue to be made for 'desirable' as opposed to 'undesirable' features of the natural world.(10)

The Organic Act, which established the National Park Service and which sets forth the Service's mission, emphatically states, that natural objects and wildlife found within the parks are to be "conserved" in an "unimpaired" condition.(12) Despite the clarity of this portion of this legislative mandate, the National Park Service routinely allows consumptive use of fruits, berries, seashells and fish. In fact, fruit, berry, and shell gathering and fishing are the only ^{consumptive} recreational activities which are expressly condoned in Title 36 of the Code of Federal Regulations; the basic legal document which is used to protect park resources. Clearly a dichotomy exists within National Park Service policy.

Are fish "undesirable" in relation to deer and elk or are they simply more "desirable" in someone's freezer?

There currently exists unique and diverse opportunities for the use and enjoyment of aquatic resources of the National Park System. Whether the satisfaction comes from fishing, inspiration, knowledge, food or income, aquatic resources provide something for everyone. But therein also lies the dilemma.

The National Park Service is charged with preserving resources for the benefit of all the people, but sheer number and types of users has the potential of modifying or destroying the very values the NPS is mandated to preserve.(2)

Position Statement

This paper will examine, in some detail, the issue of fishing

within units of the National Park System. An historical perspective will be provided followed by a discussion outlining why the writer feels fishing is an inappropriate National Park activity.

Historical Background

It may be safely assumed that subsistence fishing occurred in many of our national parks at and shortly after their creation, just as subsistence hunting had. Early in national park history "a certain amount of living off the country was considered a legitimate part of the park experience (6)".

The earliest reference to fishing in the nation's parks is found in an act passed on May 7, 1894 in which Congress gave specific protection to birds and animals in Yellowstone National Park. But, in contradiction to the tone of this act, Congress authorized fishing by hook and line in section four of the same act. (12) One can only speculate about the origin of this divergence. Was it out of ignorance? Was there political pressure from the sport fishing lobby? Were fish not "unique" and therefore unworthy of protection?

The next major event in fisheries management within the NPS came when a fish hatchery was developed on Yellowstone Lake and white pelicans were "controlled" between 1924 and 1931 to increase recreational opportunities. (6)

In the late 1920's and early 1930's a Wildlife Division was created in the NPS Washington Office. George Wright became Division Chief and brought a new level of understanding about ecology and wildlife management to the Service. (15) In his first book titled "Fauna of the National Parks of the United States" Wright

states, "It is hoped that suitable reserves for fish will be set aside in the parks before it is too late." (17) Despite Wright's enlightened views, fish continued to be exploited in our national parks.

The impetus George Wright was building in favor of sound natural resources management within the Service came to an abrupt halt with Wright's death in an automobile accident in 1936. Pressing national concerns during the '30's, '40's, and '50's interrupted continuity in all aspects of park management including fisheries management.

Very little specific information on fishing the the national parks can be found for this time period. However, Victor Cahalane, Wright's successor, reported in 1947 that, "In some instances, native races of fish have been exterminated. In others, haphazard fish cultural practices of earlier times have resulted in unfortunate biological legacies. Stocking of alien races or closely related species produced numerous hybrids." (8) Everglades National Park was established in 1934. Undoubtedly the first concerns over commercial fishing in national parks were expressed during the authorization of Everglades. Commercial fishing at the Everglades continues to be a major concern today.

The attitude held by many both inside and outside the Service, about the management of biological resources within the parks during this timeframe, is best characterized by Garrett Smathers:

For the next 25 years the opposing school of thought, which was coming to feel that biologists were impractical, unaware that parks are for people, and a hindrance to large scale plans for park developments, increasingly prevailed. (15)

This attitude reached its zenith with the conception and implementation of the Mission 66 program in which no biological or ecological concerns were incorporated in a massive, ten year planning and development thrust.(15)

On the positive side, a position for an aquatic biologist incharge of fisheries management was created in the NPS Washington Office. This occurred in 1957. In 1960, Orthello Wallis, the individual chosen to fill that position, made the following policy statement:

Hatchery trout are released into some park waters to supplement natural reproduction and to help sustain angling for wild fish. It is not our policy to provide put-and-take fishing. The stocking of catchable trout for immediate return to the anglers is not compatible with the fundamental objectives of the National Park Service fishery management program. Plantings of this nature tend to attract fishermen who are primarily interested in fishing rather than in the overall enjoyment of basic park features. (14)

The writer quickly points out that, fish planting programs had developed as cooperative efforts between the various states and the NPS.(3,4) Despite Wallis's policy statement, there is good reason to believe that states frequently pushed for put-and-take programs to increase revenues.

Although fisheries management had finally been recognized as a legitimate activity, worthy of Washington Office representation, aquatic resources were still regarded as consumable.

During the early 1960's, a concern about wildlife in our parks grew. As a result, an Advisory Board was appointed and a famous policy document titled "The Leopold Report" was published. This report reiterated many of the concerns expressed by George Wright 25 years hence.(9) Although the overall tone of the report

espouses sound ecological thinking, a subtle omission is discernible in the report. Specifically, the report focuses exclusively on large mammals and says nothing of fisheries management within the System. Perhaps this was by design. In 1961, 2,169,385 fish were stocked in 14 parks.(3) In 1962, 2,497,871 fish were stocked in 12 parks and a large fish hatchery was being operated on Lake Mead.(4) Fishing had become big business in the National Park Service.

In 1963 Wallis became a proponent of the "Fishing for Fun" program which was supposed to emphasize fishing as a sport and to de-emphasize the catch and man's dependence on nature. The Conservation Foundation questioned this philosophy in these terms, "This idea seems so foreign to the ethics of the National Park Service as we have known it, that we wonder how it came to be used even while admitting that the intention is to protect fish populations by reducing the kill." (6)

In 1961, a definitive work on the history of the National Park Service was published under the authorship of John Ise. Ise questioned NPS policies related to fisheries management and adds a statement which reveals the root the policy inconsistency; "Even minor, well-justified restrictions proposed to conserve fish species often encounter the most determined opposition of fishermen - who are a rather numerous host." (8) Ise's criticism remained a moot issue until 1967, when the Conservation Foundation raised concerns about the inequity of treatment given to fish in our parks. The Conservation Foundation reported that they were left with the impression that the Bureau of Sport Fisheries and

Wildlife seemed to regard fishery resources at Yellowstone Lake as a commercial asset to be protected from the white pelicans.(6) The frame of mind of the late 1920's appears to have carried through until 1967.

The NPS management perspective towards fish finally began to change between 1970 and 1978. A comparison of the Administrative Policies for Natural Areas, released in 1970, and the Management Policies, released in 1978, reveals a shift in emphasis from recreational fishing to species protection, although a recent analysis of the most recent policy points out that there is still heavy emphasis on visitor use.(7,16) Additionally, the current policies are much more lengthy, perhaps indicating that more thought was given to fisheries management.

Although attitudes changed during the 1970's, fishing is still a sanctioned park use. The most recent challenge to NPS policies came in 1979 when a report from a task force established by the Assistant Secretary of the Interior for Fish, Wildlife, and Parks, was released. That report made 22 unique recommendations. One of those dealt with adoption of a new Service-wide Aquatic Resources Policy (2) which called for:

- a) management of fisheries in a manner which allows natural functions
- b) management of fisheries in a manner which allows nonconsumptive use
- c) after consideration of a and b consumptive use may be allowed
- d) reduction of exotic species

While allowing consumptive use of fishery resources, in keeping with specific legislative mandates, the prevalent concept throughout the report was that of preservation and restoration of native aquatic ecosystems. A copy of all 22 recommendations is included in the Appendix.

Sport fishing is, without question, a firmly established tradition in the National Park System. Frequently it is supported by stocking programs and in some cases those programs are of a put-and-take nature. Some NPS areas go so far as to sponsor fishing derbys and tournaments.

Although only briefly mentioned earlier, commercial fishing is an activity of significant proportion in the National Park System. As of 1979 there were 20 units which have legislation specifically permitting commercial fishing. In addition, several units allow commercial fishing even though it is not specifically authorized.(2)

Position Defense

At this point the writer wishes to turn the focus from what has transpired in the past to the presentation of an argument for change in current NPS policies related to fisheries management. Superficially sport and commercial fishing may appear to be worthy activities which should be supported by the National Park Service. There are numerous arguments however, which make these activities very undesirable. Those can be summarized into two general categories: 1) environmental impacts, and 2) associated impacts.

Environmental Impacts

Critical examination of the issue reveals that consumptive use of fishery resources has several environmental impacts which jeopardize the integrity of our parks. Foremost amongst those is the interruption of natural processes by human predation on fish. Human consumption removes fish which would otherwise be available as prey or to prey upon other organisms. (2) The removal also vacates a niche which may result in the invasion of non-native species or which may allow unnatural increases in native populations.

At one time, fishing with live bait was permitted in National Parks, thus allowing the introduction of numerous undesirable species. Although the use of live bait is now prohibited, enforcement of this regulation is inconsistent and therefore marginally successful.(2) Fishing also tends to isolate portions of populations in very remote areas of the parks. Undoubtedly this will decrease the gene pool available during reproduction, thus contributing to the development of sub-species and perhaps to reduced survivability.

Stocking programs put unnatural stress on native populations by increasing competition and by introducing alien species which may push natives out of existence.(2) Finally, the introduction of fish into otherwise barren, high mountain lakes has occurred on occasion. Obviously this practice contradicts the Service's preservation mission.(1)

Associated Impacts

Recreational and commercial fishing bring with them a certain number of associated impacts which may become rather severe under certain circumstances. The most obvious of these impacts is the deterioration of the lake and stream edges. This deterioration reveals itself in the form of trampled vegetation, litter, campfires, lost fishing tackle, and fish entrails. In the most severe cases human waste has become a significant problem although this situation is associated with many other recreational activities besides fishing.

Another associated impact is that of crowding both on and offshore. In many instances this has a direct effect on visitor satisfaction. Fishing Bridge in Yellowstone National Park typifies this

scenario. Furthermore, pollution is often associated with motorboats and coral reefs are particularly susceptible to damage by boats and anchors. Perhaps a far less obvious impact is related to concessioner provision of recreational fishing opportunities through fishing tackle sales and charter boats. These activities require more land to be developed and result in pressure to allow high density visitor use.(2)

Policy Dilemma

Disregarding all other reasons for justifying a change in NPS policy related to fisheries management, the simple fact that current policies seem to conflict with an overwhelming number of other policies and legislative mandates gives ample reason to re-examine the fisheries policy. The basic purpose of our parks - preservation of natural diversity - and consumptive use of park resources are incongruous. Should aquatic organisms not be afforded the same protection as the grizzly bear or the giant Sequoias? Admittedly, fish are generally not as impressive as redwood trees or alligators, but NPS policy provides protection for lichens and salamanders, so why not fish?

Conclusion

The combination of environmental impacts, associated impacts, and the policy dilemma makes a sound case for elimination of all fishing in NPS areas except where it has been legislatively mandated. In those cases where fishing is permitted by legislation, the writer suggests that each piece of legislation be re-examined to determine if fishing was authorized based on traditional values as it seems to have been at Yellowstone.(12).

A reiteration of the Conservation Foundation position on this issue is fitting at this point:

We would put the point of view at this juncture that the privilege of fishing in the national parks is one that needs radical reconsideration.... Fishing, surely, is one of those outworn privileges in a national park of the later 20th century, the more so as so many impoundments of water have been made in many parts of the United States and where fishing is properly encouraged.

Shooting of wild game has long been prohibited in the national parks and the idea is so firmly implanted in the public mind that the proper control of animal populations by the National Park Service has been uncritically resisted until disaster point has been reached. The killing of fish is still something quite different in the public mind, yet if scientists, moralists and esthetes were to sit down together to talk around the subject, they would find it difficult to state logical reasons for treating these various park vertebrates by such different criteria.

Our opinion is that giving sanctuary to the indigenous fish as well as to many other forms of life in the national parks would be a logical development which would have immediate beneficial effect on the ecological pressures of various kinds we have mentioned.(6)

Recommendations

Included in the Appendix are the 22 recommendations of the Fish and Wildlife Service which the writer mentioned previously. The writer concurs with each of these and strongly recommends their adoption by the National Park Service.

Recommendation #18 speaks of interpretation of aquatic resources. One applicable interpretive technique is "fish watching", which is proposed as an alternative to fishing in a recent article in National Parks magazine.(13) Undoubtedly many of our parks provide outstanding opportunities for aquatic wildlife observation.

Postscript

A portion of the text of a sign which is posted at the last remaining habitat for the endangered *Gambusia gaigei* states, "... Unique and fragile, they survive only because man wants to make it so."(11) Do we wish to allow the survival of other fish species?

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