

Foxes and Others in the Henhouse: Problem Definition and User Participation in U.S. Fisheries Management

Draft, Prepared for the Second Common Property Conference, IASCP, Winnipeg, Manitoba, September 26-29, 1991

Bonnie J. McCay
Department of Human Ecology
Cook College, Rutgers University
New Brunswick, New Jersey 08903 USA

Abstract

Canadian and American agencies charged with the task of managing marine fisheries are being criticized for being ineffective in conserving valuable fish stocks. In the U.S. this attack targets both the federal agency, the National Marine Fisheries Service (NMFS), and the workings of regional fishery management councils. In policy recommendations coming from the above critiques and court actions, instigated primarily by conservation organizations, the tendency is to take power from the regional councils, which are believed to be ineffective and "captured" by special interests, and give it to the federal agency, the National Marine Fisheries Service, which has also been dominated by the fishing industry but shows signs of increased independence. The consequences are contrary to the goals of improved user-participation or even co-management.

Foxes and Others in the Henhouse: Problem Definition and User Participation in U.S. Fisheries Management

Draft, Prepared for the Second Common Property Conference, IASCP, Winnipeg, Manitoba, September 26-29, 1991

Bonnie J. McCay
Department of Human Ecology
Cook College, Rutgers University
New Brunswick, New Jersey 08903 USA

I. The Questions:

My leading questions-not necessarily answered in this presentation- are: Does meaningful participation of resource users in the management process necessarily become "agency capture" and the warping of public policy for the private interests of resource users? Who represents the "public" interest?

II. User Participation Research

When I began researching and thinking about user participation in fisheries management, my concern was that there was not enough of the right kind. Through co-management and other structures, fishermen and others could and should be brought into the management of the "common property" resources in which they hold stakes. To this end, I recently began an applied research project, together with the director of a commercial fishermen's association, to help fishermen and other potential participants deal with the U.S. fisheries management process.¹

My topic today is suggested in the questions I ask the fishery managers, fishermen and others I interview. The first set is how people be more effective, or what do they do that makes them ineffective in achieving their goals. That question presupposes that people come with private, special interests, the foundation of pluralist politics. The second set of questions suggests something else: that people also can participate for the public good: how can people be more constructive, or how are they destructive in relation to the broader public goals of sustainable management of common property marine resources?

¹ New Jersey Sea Grant Project E/T-11, A Mid-Atlantic Handbook on Effective Participation in Fisheries Management, Bonnie J. McCay and Nils Stolpe, August 1, 1991-July 31, 1992.

III. Pluralist Politics, Foxes and Henhouses

So far none of the agency administrators whom I've interviewed have taken seriously the second set of questions even though they have been very generous in answers to the first and, for the record, appear to favor a very open, participatory management process. They take for granted, it seems to me, that the political part of management is pluralist, the competition and cooperation of special interest groups. In that scenario, everyone has a chance to push her or his cause, and it is assumed that everyone has a private agenda, even if clothed in public rhetoric. One consequence of this way of looking at things-which is, by and large, based on acute observations and very real experience as well as received wisdom and American culture - is that the idea of co-management, or of power-sharing between a government agency and some organization of stakeholders (Pinkerton 1989, 1991), leads quickly to the metaphor of Foxes in the Henhouse.

The metaphor about what happens when you let the resource exploiters share in the managing rings only too true to administrators of an agency publicly described as a case in point, if not a worst case, of "agency capture" by special interests, and to people dealing with an innovative but problematic new management system that does indeed give a great deal of decision-making power to non-professionals.

The image of foxes in the henhouse is familiar in fisheries discourse, a relative (goats in the oat bag?) found in Norway as well (Hoel, Jentoft and Mikalsen paper, this session). It has resurfaced in recent studies of the U.S. federal fisheries management system by three conservationist groups: the National Audubon Society (1988), the Center for Marine Conservation (1991), and the National Fish and Wildlife Foundation (1990). I will discuss their critiques of the system below.

Let me pause here to note that the metaphor and the critiques with which it is associated are used to help justify recommendations to re-centralize and professionalize critical decision-making power and activities, insulating them from user-group or public scrutiny and input. I also want to add that reading these critiques in preparing this paper I was, first, chagrined or embarrassed. In this context my current work on user participation looks rather silly; if we accomplished our goals, to many eyes it would worsen a situation of "foxes in the henhouse." Second I was very surprised: from my 12 years of participant-observation in the Mid-Atlantic fishery management region, I had come to think that the problem was the opposite, too much centralization and professionalization and not enough effort to develop truly regional, grass-roots, fisherman-informed management. Because of this surprise, I choose to treat the problem as one of competing definitions, and thus treat recent depictions of crises in U.S. fisheries management as cultural artifacts, or social constructions of reality. I am not sure who is right.

IV. NMFS, the Regional Councils, and "Agency Capture"

Let me start, then, with a description of the U.S. fisheries management system and the regional councils, a description that emphasizes the historically strong role of the commercial fishing industry in fisheries management. It within the context of a discussion of how conservationists deal with "agency capture" and participation by representatives of the fishing industry in fisheries management decisions.

A. NMFS, the FCMA, and the Regional Councils

Congress established the National Marine Fisheries (NMFS) in 1970. It carried on the program of the older Bureau of Commercial Fisheries, emphasizing fisheries-related research in biology, technology, and seafood product development. With the passage of the 1976 Fishery Conservation and Management Act (FCMA), the U.S.'s "200-mile limit" law, NMFS became almost entirely devoted to fisheries management. By 1987, almost two-thirds of its budget and more than half of its employees were supporting fishery management directly or indirectly; very small portions of its budget went for habitat, marine mammal, or endangered species conservation and protection, a conservationist complaint (Chandler 1988: 34). NMFS, placed within the Department of Commerce in 1970 and thereby isolated from other natural resource management agencies, has suffered neglect and severe budgetary problems while being directed by Congress to take on many tasks (Chandler 1988), particularly administering the FCMA.

The FCMA, passed by Congress in 1976 and implemented in 1977, established an exclusive fisheries zone of 3-to-200 miles.² Foreign fishing came under immediate control of the U.S. government, which was authorized to negotiate treaties with other countries about their access to fishing grounds that now came under US jurisdiction (see Bilger 1988); in 1980 the law was amended (PL 96-561, American Fisheries Promotion Act) to include a mandatory reduction of foreign fishing within 200 miles with the goal of the end of all foreign fishing by 1990.

Most innovative was the institution the FCMA created for managing both foreign and domestic fisheries: fishery management plans were to be prepared, monitored, and revised by eight "regional fishery management councils" (hereafter, "regional

²The zone was called the fishery conservation zone; more recently the U.S. Congress, following international trends, changed the claim to that of an exclusive economic zone. Note that the U.S. observes most of the new law of the sea, even though U.S. tuna fishing interests prevent the Congress from signing the treaty. Highly migratory species such as tuna are excluded from the US exclusive management zone, but there are strong pressures within the US to change this. Beyond the zone, the US claimed exclusive management authority over anadromous species and continental shelf fishery resources (Finch 1985: 172). The separate states retain jurisdiction over fisheries within the ancient 3-mile territorial sea, interacting with each other and the federal government in several ways.

councils").³ The councils were to be structured and to function in ways that would

"... enable the states, the fishing industry, consumer and environmental organizations, and other interested persons to participate in and advise on the establishment and administration of [Fishery Management Plans]" (Finch 1985: 172).

The councils would allow for participation for all interested groups and for intergovernmental and government-industry cooperation in management on a regional basis. The system is in many ways an ideal model for user participation in fisheries management.

One innovative aspect of the regional council system was its regionalization. This presaged decentralization within NMFS itself,⁴ and was seen as a way to better serve the ecological and social diversity of the nation's fisheries. Ideally, the regional council domains are comparable to ecological regimes, which seems clearly true for the North Pacific and the Gulf of Mexico areas although more obscurely so for the rest because of the overlapping distribution and migratory behaviors of fish and fishermen.

The other key innovation was the overtly participatory, cooperative nature of the councils. Here is a list of the formal ways that the public is involved in FCMA regional council management: as appointees of their state governors to the regional councils; as appointed members of industry or scientific advisory committees or panels; as attendees at meetings, using the right of public comment in the meetings as well as private conversation outside the meetings; as reviewers of draft documents and participants in public hearings during public comment periods. The process, at the regional council level, is almost completely open to the public.

Beyond the formal process set up by the FCMA (and the Environmental Impact Statement process of NEPA, the National Environmental Protection Act of 1970),

³ The eight regional councils are for the following coastal regions, moving from the northeast to the south and across to the south and north west coasts and the Pacific outliers of the US: New England, Mid-Atlantic, South Atlantic, Gulf of Mexico, Caribbean, Pacific, North Pacific (Alaska), Western Pacific (Hawaii, Guam, American Samoa).

⁴ A useful discussion of organizational issues and reorganizations in NMFS is found in Chandler (1988); reorganizations in 1983 and 1986 (under William Gordon and William Evans, respectively), decentralized many of NMFS' operations and personnel. Under Evans, the regional fisheries research centers came under the authority of regional directors.

people also can and do write, visit, or telephone the regional council staff, the NMFS regional headquarters, NMFS Washington office, politicians, lawyers, and so forth, and use the media, including publications such as National Fisherman. Commercial Fisheries News, to make their views known.

A sign of trouble with the system seems to be increasing recourse to these and other alternatives to the formal process -particularly law suits and the use of congressmen to interfere with council or agency decisions. Moreover, in recent years the U.S. Congress, in its reauthorizations of the FCMA, has become more inclined to "micro-manage" fisheries on behalf of various constituencies.

The published critiques by conservation groups cast these facts as negative. However, it seems fair to keep open the possibility that they show the existence of "checks and balances" or even remedial institutions. In a recent episode of the Mid-Atlantic Fishery Management Council concerning the instigation of "individual transferable quotas" for surf clams and ocean quahogs, members of the industry who were dissatisfied with the council recommendations and upset about being denied what they felt to be a fair hearing, were able to get two very influential congressmen to intervene in the process. One of the staff members of the council, reporting the subsequent meeting with the congressmen, said "we had a lesson in participatory democracy" (Creed, pers. comm. 9/23/91).

B. NMFS as a Captured Agency

There is a fine line between participatory democracy and the capture of public institutions for private purposes, particularly if you assume that all participators are working solely for their special interests. From the perspective of the Audubon Society and other environmentalists, this line was long ago crossed. NMFS itself was long ago "captured" by the commercial fishing industry and more recently the sports fishing industry (Chandler 1988).

1. Commentary

The evidence is flimsy. Alfred Chandler interviewed a retired NMFS veteran who said "The agency's sympathies have always been with the fishermen-not the porpoises or turtles or what have you....But that was only natural; the fishermen were our constituency. We were supposed to be on their side, not making their lives miserable" (Chandler 1988: 37-38). This sounds like nostalgia for an earlier period because today, at least in the Mid-Atlantic, fishermen are more likely to see NMFS as the source of unnecessary hassles if not misery. However, members of the surf clam industry of the Mid-Atlantic recount, with a tinge of nostalgia, the old days, through the 1960s, when the predecessor of NMFS engaged in "search-and-destroy" missions to help the industry find the clams. They also appreciate the extent to which NMFS administrators responded to their requests for help in managing surf clams through the new institutions of FCMA in the 1970s, as well as the power NMFS and, with its

encouragement, the regional council, gave to members of the industry to make quota and allocational decisions.⁵ Finally, many are intensely aware of the need to disaggregate the concept of "industry," because of their convictions that at particular times NMFS was a captive of certain firms or actors at the expense of others. This "fine" point is lost on critics who see the world as made up of conflicts between commercial, sports, and "public-minded" (i.e. environmentalist) interests, but it has made much of the difference in the timing if not the outcomes of management decision-making (McCay and Creed 1990).

C. Regional Councils as Captured Institutions

The overtly participatory, cooperative nature of the councils was also cast by conservationists as a captive institution problem. Here is the Audubon Society account: Soon after the U.S. 200-mile limit was enforced, U.S. catches began to rise. At first this was most noticeable in New England. According to the Audubon Society, the unrestrained growth in harvest was due to capture of the regional councils by the fishing industry (Chandler 1988: 43):

The major reason for this unrestrained growth in harvests was the ability of fishermen and their organizations to place their allies on the New England Fishery Management Council. The New England industry had worked hard for FCMA, and its representatives knew well the powers the law gave to regional councils. By getting sympathetic members on the body that regulated their fisheries, the industry correctly determined that it could insulate itself from NMFS scientists who might argue for lower catch levels. Seeing the success of the New England fishermen, other associations followed their lead. By 1980 no other marine-related group had greater influence on the regional councils than the seafood industry [Chandler 1988: 43].

1. Commentary:

The Audubon Society report centered on the New England situation, generalized without any attempt at justification to the rest, which casts the accuracy of its observations into doubt. The workings of the New England management council and its interactions with the fishermen and NMFS have been particularly problematic, and the badly depleted condition of groundfish stocks-cod, haddock, and other species- seems to indicate a tragedy of regional council management (see M.E. Smith

⁵ "Industry" is an unfortunate, if at times useful, gloss for a very complex situation. There were vast structural differences within this industry (McCay and Creed 1990); moreover, although one frequently heard of the extensive participation of "industry" in the management process, in fact the labor component, including even hired captains, was not represented (see McCay, Gatewood and Creed 1991).

1978, 1982, 1988, 1990; Miller and Van Maanen 1979; Foreman 1984) -although the widespread nature of the problem-throughout the North Atlantic, including Newfoundland and Scandinavia-suggests more complex ecosystemic dynamics as well (see Wilson et al. 1990).

D. Composition of the Regional Councils

But let us take seriously the question of just who is on the regional councils. Part of the voting members on the councils are federal and state fisheries agency heads or their delegates.⁶ The rest are appointed members of the private sector. Each council has a body of members, on three-year terms, who are appointed by the U.S. Secretary of Commerce from people nominated by the governors of the states of the relevant region. They are not elected. The number of these members varies.⁷ In the original act the appointed members were to be people with "knowledge or experience" in commercial or recreational fisheries. In 1986 Congress changed the act to read people with "knowledge and experience," reacting to fishing industry concern about being under-represented on some councils - a hint that the situation was not seen by everyone as a Foxes in the Henhouse one. -Or at least some of the foxes thought there should be more to do the job.

In any case, appointment is a long and very political process at both state and federal levels, open to lobbying at many points. The outcome is highly variable over

⁶ The federal voting member is the director (regional director) for the regional office of the National Marine Fisheries Service. The state voting members are the heads of the state agencies concerned with marine fisheries, or their designees. Non-voting members of the councils are the regional representatives from the U.S. Coast Guard (which shares the enforcement responsibility for fisheries management with NMFS enforcement officers and state officers), from the U.S. Department of State (concerned about international matters such as TACs or TALFFs in relation to foreign catches, joint ventures, a.s.f.), from the Department of Interior, U.S. Fish and Wildlife Service (which is concerned primarily with inland fisheries, but also with marine mammal protection), and from the region's Marine Fisheries Commission (inter-governmental bodies set up in the 1950s to coordinate state fisheries management).

⁷The number of appointed members varies from council to council. As of 1982 there were 11 for New England, 12 for Mid-Atlantic, 8 for South Atlantic, 4 for Caribbean, 11 for Gulf, 8 for Pacific, 7 for North Pacific, 7 for Western Pacific (Smith 1982: 66). The number of states per region also varies, so must the number of state fisheries agency representatives, resulting in large differences in the size of the regional management councils.

time and space. Some of the regional councils, at some points or periods of time, have been dominated by commercial interests, but others have not. The Mid-Atlantic council has gone for extended periods of time without any members who are directly involved in the fisheries, although there is usually someone engaged in the buying or processing side of the industry. Most are instead political appointees with some residual or historical interest in sports or commercial fishing.

E. NMFS and the Commercial and Sports Industries

The conservationist account continues: As commercial fishing interests became more effective vis-a-vis the councils and gathered some organizational momentum, their relationships with NMFS were strengthened. NMFS agents took notice. "Agency personnel began to court the industry to benefit from its new-found political clout. A number of scientists and administrators even resigned their positions to take up industry jobs. While NMFS never became wholly dominated by the seafood industry, its personnel did respond with increasing promptness to industry calls" (Chandler 1988:44).

It is difficult to assess the truth value of the last statement, but it does seem plausible as is the following. Led by the Sport Fishing Institute, spokesmen for the recreational fishing industry eventually found their calls promptly answered too. A sign of shifting emphasis was NMFS' participation with the Fish and Wildlife Service, the freshwater fishing agency, in designing a National Recreational Fisheries Policy in 1988 (U.S. Department of the Interior 1988). With astounding success, sports fishing groups lobbied state legislatures and governors to increase the presence of "sport fish seats" on regional councils. The picture of regional councils dominated by commercial fishing/seafood industry interests was never wholly accurate and has become less so with time. By the latter 1980s, only the membership of the North Pacific and New England councils could be viewed as sharply skewed toward the seafood industry and commercial fishing. In others members were as likely to be owners of sports fishing businesses, lawyers, businessmen or professionals who fish for sport, and academics.

V. Enter the Environmentalists

Until very recently environmental and conservation-oriented groups had not been much involved in fisheries except for highly visible, "sexy" concerns about turtles and marine mammals, e.g. the predations of high seas drift nets or the capture of sea turtles in shrimp nets.⁸ Most species of fish, with the possible exception of giant

⁸ And early 1970s concerns about porpoises caught in tuna seines, which led to the U.S. Marine Mammal Protection Act of 1972, the act that, with the Endangered Species Act of 1976,

bluefin tuna, appeared to have little interest for conservationists. It is harder to get the public to send in money to protect codfish than to support organizations in stopping the seal hunt or whaling (cf.).

As of 1988, according to the Audubon Society, "no conservation organization [had] mounted a comprehensive, sustained campaign to strengthen the fisheries conservation efforts of NMFS" (Chandler 1988: 49-50). The Audubon Society offered as a reason the apparent fact of agency capture: "This omission may result from a belief held by many in the conservation community that such an effort would be pointless. These individuals have written off NMFS as an industry service agency, uninterested in resource protection" (Chandler 1988: 49-50). The situation was ripe for change. In the 1988 report, the author, Alfred Chandler, suggested that environmentalists might follow political strategies used by commercial and sports fishermen. This seems to have happened. Two telling events: In 1991 the Conservation Law Foundation sued the New England Fishery Management Council to force it to act to halt overfishing and begin restoring depleted stocks; in the same year the head of New York State's Audubon Society became one of the appointed members of the Mid-Atlantic Fishery Management Council.

In the meantime two other reports by environmentalist critics came out (Center for Marine Conservation 1991; National Fish and Wildlife Foundation [NFWF] 1990), both threatening the participatory structure of the FCMA regional management process. One neatly blamed the composition and workings of the regional councils for the failure to create a sustainable systems of fisheries management: "The situation is essentially one in which the foxes have been appointed to guard the hen-house... The current system, wherein the councils set both the catch level and allocate the catch, is too susceptible to political manipulation" (NFWF 1990: 43).

The Foxes in the Henhouse problem is kept alive and constructed by environmentalist analyses. The National Fish and Wildlife Foundation assessment of NMFS, like the Audubon report, focused on the glaring fact that its responsibilities have multiplied at a rate far above its fiscal resources (NFWF 1990).⁹ From that observation it swiftly moved to blaming participatory management: embedded in a list of 8 related and consequent problems is "(6) The fishing industry constantly applies

remain the major focus of environmentalist activities in the marine area apart from involvement in oil and gas leasing issues here and there and from time to time.

⁹ The board of directors of this group includes one retired Brigadier General of the US Air Force (Charles Yeager, an astronaut); and 6 or 7 leaders in businesses ranging from Waste Management Inc. and Shell Oil Company to investment or real estate development firms. There is one person from a wildlife agency, the treasurer of Nevada's Department of Wildlife.

pressure on NMFS and the regional fishery management councils to increase harvest quotas despite the depleted state of some fisheries" (p.35). The pressure is direct or, through Congress, indirect, and it was usually successful because the Executive Branch of the federal government "has been reluctant to engage in protracted battles for fishery conservation." Moreover, the regional councils often select or exceed the highest NMFS-recommended catch levels, seemingly accepting fishing industry attacks on NMFS' scientific stock assessments for being in error or too conservative. The examples offered were few-King Mackerel in the South Atlantic, Groundfish in New England.

The problem is central to the report, contributing, it is alleged, to the sorry status of U.S. fisheries (14 overexploited stocks, more with population decline since 1977, and insufficient information on the status of another 29). "A major reason for the poor state of US. fisheries is the councils' tendency to set catch levels that are more attuned to the economic needs of fishermen than to the long-term conservation of the stocks." (p.5, adding another extremely important proviso, beyond the scope of this particular paper: "Another reason is that councils have not limited entry to fisheries that are overexploited."). The regional councils are said to have a built-in conflict of interest: "conservator of fisheries for sustained yield and allocator of catch levels for the economic benefit of fishermen" (p.5-6). The 1990 report thus reinforced the advice of a 1986 "blue-ribbon panel," in the so-called Calio report (U.S. Department of Commerce, 1986) to take conservation decisions away from the councils, leaving them to make only the allocation decisions. It was argued that both conservation and fish allocation "decisions can [not] be made by the same body and still assure the integrity of the [harvest ceiling] determination..." (quoted by Chandler 1988: 73).

NMFS did not make this fundamental change (having Congress to deal with), but responded by issuing new regulations (July 24, 1989) requiring councils to objectively define "overfishing" for each fishery; stocks found to be overfished must be rebuilt within a specified period of time. The new regulations also have NMFS oversee annual preparation of a Stock Assessment and Fishery Evaluation (SAFE) report for each fishery summarizing the past, present, and possible future condition of each stock.

The National Fish and Wildlife Foundation recommended that if the new regulations do not stop overfishing and help in the rebuilding of overexploited stocks, NMFS "be given sole authority to set a maximum allowable catch limit for each fishery; the regional councils would then allocate the catch among users" (NFWF 1990: 6). (Alternatively, appointees to the councils should more adequately represent the public interest -p.43). The Conservation Law Foundation suit against the New England regional council, a bill by congressman Studts to similar effect, and other pressures may realize this recommendation.

VI. Conclusion: Agency Capture and Countervailing Forces:

In a recent paper, Evelyn Pinkerton (1991) analyzes an innovation in cooperative management of fish, wildlife, and habitats in the Puget Sound region of Washington State. The process she analyzes, known as TFW [Timber/Fish/Wildlife Agreement], has been analyzed by others (Halbert and Lee 1990) as a case of pluralist politics. Halbert and Lee use the "triadic power" model of McFarland (1987), which portrays an ebb and flow between the "agency capture" situation (in which the major economic producers dominate agency policy) and a triangle of power in which "countervailing forces" (such as treaty Indian tribes and environmental groups) exert enough pressure to break agency capture by the economic producers. When "countervailing forces" are strong, the agency is able to act more professionally, independent of all sides. But as countervailing groups lessen pressure, agency capture recurs.

The model presupposes competing special interests, which may be an inaccurate descriptor of some of the groups and alliances involved (Pinkerton 1991). It is possible that some represent more than special interests, that they speak for public interests. In the marine fisheries case, the new-come environmentalists are the closest to that role, but representatives of sports fishing interests have also tried to claim it, defining themselves as public-spirited against the selfish and greedy commercial fisheries groups. Commercial fishermen and their lobbyists are hard pressed to escape that designation, although they can point to their critical role in providing food to consumers (in contrast with the sports fishery position, which would reserve access to fish to those with rod and reel) (see Lampl 19).

The appearance of a very well organized sports fishing lobby and evidence of its effects in numerous federal and state fishery management decisions in recent years suggests the end of agency capture (or the onset of agency paralysis, caught between two voracious and well-organized clients?). The Foxes have to make way for Raccoons, perhaps, in the Henhouse. "Allocation" becomes the critical question: how to allocate between sports and commercial fishermen (see Edwards 1990 for an extended discussion of the economics behind this increasingly important question).

And the sports anglers claim to be more conservationist, as part of their appeal for a greater share of limited catches. This in turn has set up the potential for alliances with environmental groups interested in becoming more involved in the question of responsible management of public resources.¹⁰ Is it too much for this presentation

¹⁰ Conservationists appear to have 'natural' allies in the sports fishing industry, in that both groups are concerned to reduce the harvests of commercial fishermen, albeit for different reasons. The Audubon Society report notes that "While conservative stock management is supported by some commercial fishermen, it is widely urged by recreational fishermen"

to add that the latest administrator for marine fisheries at NMFS is Dr. William Fox, who presents himself as an advocate for both sports and environmental interests?

The important question is whether the public interests will be any better served under a more balanced set of constituents than in the past as well as how long such a balance will last. Another question is how environmentalist-led trends toward centralization and professionalization of fisheries management will affect both commercial and sports fishing interests. It will be hard to answer the question in the abstract because of the historical, geographic, social and cultural specificity of fisheries. However, at least in the shorter run it seems counter to movements toward greater user-participation in management, if realized in the form advocated by the National Fish and Wildlife Foundation or the Audubon Society. The chance for meaningful cooperation, however difficult, among diverse stakeholders may be sacrificed, and, fulfilling a self-fulfilling prophecy, the "foxes," having lost whatever chance they had to present themselves as, and to be, constructive and public-minded, may become even more elusive, clever, and opportunistic in their pursuit of the "hens."

(Chandler 1988: 73, footnote 56), and suggests that the Secretary of Commerce only appoint nominees who support "conservative" fishery management strategies.

References Cited:

Bilger, Cameron Crone.

1988 US-Soviet fishing agreement; treaty authorizing Soviet fishing in US waters. *Marine Policy* 10(1): 51-56.

Center for Marine Conservation. 1991. *Federal Fisheries Management...*

Chandler, Alfred D. 1988. "The National Marine Fisheries Service," pp.3-98 in *The National Audubon Society, Audubon Wildlife Report 1988/1989*. San Diego, Academic Press.

Edwards, Steven F.

1990 *An Economics Guide to Allocation of Fish Stocks between Commercial and Recreational Fisheries*. NOAA Technical Report NMFS 94. Washington, DC: U.S. Department of Commerce.

Finch, Roland.

1985 Fishery management under the Magnuson Act. *Marine Policy* 9(3): 170-179.

Foreman, Christopher H., Jr.

1984 *Fisheries and the search for regulatory consensus: Lessons from New England*. Paper prepared for annual meetings of the American Fisheries Society, Ithaca, New York, August 12-16.

Halbert, Cindy and Kai Lee. 1990. "The Timber, Fish and Wildlife Agreement: Implementing alternative dispute resolution in Washington State." *Northwest Environmental Journal* 6: 139-175.

Hoel, Alf Hokon, Svein Jentoft, and Knut H. Mikalsen. 1991. *Problems of user-group participation in Norwegian fisheries management*. Paper presented to the Second Common Property Conference, Winnipeg, Manitoba, September 1991.

McCay, Bonnie J. and Carolyn F. Creed

1990 *Social Structure and Debates on Fisheries Management in the Mid-Atlantic Surf Clam fishery*. *Ocean & Shoreline Management* 13: 199-229.

McCay, Bonnie J., John B. Gatewood and Carolyn F. Creed

1990 *Labor and the Labor Process in a Limited Entry Fishery*. *Marine Resource Economics* 6: 311-330.

McFarland, Andrews. 1987. "Interest groups and theories of power in America." *British Journal of Political Science* 17: 129-147.

Miller, Marc L and John van Maanen
1979 "Boats don't fish, people do": some ethnographic notes on the Federal management of fisheries in Gloucester. *Human Organization* 38 (4): 377-385.

National Fish and Wildlife Foundation.
1990 Needs Assessment of the National Marine Fisheries Service. Washington, D.C.: National Fish and Wildlife Foundation.

Pinkerton, Evelyn K.
1989 Cooperative Management of Local Fisheries. Vancouver, B.C.: University of British Columbia Press.
1991 "Translating legal rights into management practice: overcoming barriers to co-management in a worst-case scenario." Paper presented to Conference of Canadian Institute of Resources Law, Ottawa, May 1991.

Smith, M. Estellie
1978 The 'public face' of the New England regional fishery council: year 1. Wood Hole Oceanographic Institute Technical Report 78-36.
1982 Fisheries management: intended results and unintended consequences. Pp.57-93 in John R. Maiolo and Michael K. Orbach, eds., *Modernization and Marine Fisheries Policy*. Ann Arbor, MI: Ann Arbor Science.¹
1988 Fisheries risk in the modern context. *MAST* 1(1): 29-48.
1990 Chaos in fisheries management. *Maritime Anthropological Studies* 3(2): 1-13.

Turgeon, Donna
1985 Fishery regulation; its use under the Magnuson Act and Reagonomics. *Marine Policy* 9(2): 126-133.

U.S. Department of Commerce. National Oceanic and Atmosphere Administration, National Marine Fisheries Service.
1986 NOAA Fishery Management Study. Washington, D.C. 63 pp. (June 30).

U.S. Department of the Interior. Fish and Wildlife Service.
1988 National Recreational Fisheries Policy. 17pp. June 1988.

Wilson, James A., Ralph Townsend, Peter Kelban, Susan McKay and John French
1990 Managing Unpredictable Resources: Traditional Policies Applied to Chaotic Populations. *Ocean & Shoreline Management* 13(3&4): 179-197.

1. Need for immediate conservation measures, with secondary consideration of economic benefits, in formation of U.S. fishery management system (FCMA of 1976) – stumbling block to implementation of management plans.

Each regional council is free to work out the actual organizational details, particularly how much emphasis is placed on the input of different structural components (Smith 1982: 67). Guidelines come from the Secretary of Commerce, and these narrow the conceptual principles and technical procedures of each council.

Smith's research 3/1/77 to 2/15/78, in the first year of the system, focused on the public face presented at the monthly meetings, public, of the council. It helped establish the identity of the council for nonmembers and their interactive behavior with it.

New England council: voting membership heavily weighted with representatives of shoreside industries (buyers, processors, cannery owners, etc.), a group that also has informal and business ties, in contrast with the fishermen, who have limited access to knowledge about the management process, and "must base their perceptions and analyses (and the strategies devised on the basis of that cognition) primarily or even solely on what they see or have reported to them as occurring in those public meetings." "attitude formation potential" (71)