

Capturing the Commons:
Social Changes in the Territorial System of the Maine Lobster Industry

James M. Acheson, Professor of Anthropology and Marine Sciences

University of Maine, Orono, Maine 04469

and Jennifer Brewer, Ph.D candidate, Geography

Clark University, Worcester, Mass.

The state of Maine is currently home to two very different ocean tenure systems. According to the law of Maine all of the oceans, lakes, rivers are considered "owned" by all of the people of state. All of the ocean waters are held in trust by the state for all citizens. All beaches to the high tide are owned by the state, and all citizens have legal access to them. Maine had a long tradition of holding all fish in lakes and rivers and animal resources in public trust. The "great ponds" law allows anyone to travel over privately owned property to any pond over 10 acres in size to fish and "fowl." All these laws have been tested in court in recent years; all have been upheld. By law people are allowed to hunt on private property without permission of the landowner.

In the lobster fishery, a different tradition prevails. Here, local fishing territories are the rule. To go fishing at all one needs a state license, which ostensibly allows a person to go fishing anywhere in state waters. In reality, more is required—one also needs to gain admission to a group of people fishing from the same harbor, which are sometimes called harbor gangs. Once a person is admitted to a harbor gang, he or she can only go fishing in the territory of that gang.

These groups defend their territorial lines with threats of violence and, in extreme cases, by surreptitious destruction of lobstering gear. Among state fishery officials, there has been a tacit acceptance of this territorial system. Everyone knows it exists, but it is accepted as long as violence and destruction of property were kept to a minimum and did not come to public attention. When it does, those cutting traps are prosecuted in court, long standing tradition aside. In this sense the lobster industry operated as an encapsulated political system—a system within a system—in which both public officials and lobster fishers made accommodation to each other. Both sides treated the territorial system like a “skeleton in the closet;” everyone knew it was there, but no one wanted to admit to its existence.

While this system may seem exotic and unusual in a modern country, riparian rights and ownership of ocean areas is quite common in world wide perspective (Acheson 1981: 280-281).

In recent years, the traditional territorial system has undergone a number of important changes. Some have stemmed from technological and economic factors. Others have resulted from the territorial system both affecting and being affected by the new zones management system for the lobster industry.

The Maine Lobster Industry: General Information

The Maine lobster industry throughout its history has been an inshore trap fishery. In 2000, the typical lobster fisher has a boat about 35 feet long equipped with a diesel or gas engine, which he operates alone or with one helper. The average fisher today uses an average of 535 traps made of wood or wire, which are baited with fish remnants. Each trap is equipped with funnel shaped nylon "heads," which make it easy for lobsters to climb in the trap, but difficult to find their way out. The traps are connected to a buoy made of wood or styrofoam by a "warp

line." The buoys are painted with a distinctive combination of colors registered with the state (Acheson 1988: 84-90).

Each day fishers sell their catches to one of the 80 private dealerships or 17 cooperatives that are located in every harbor along the coast (Acheson 1988: 115-132).

The lobster fishery is one of the world's most successful. Lobster catches are at all time historic highs at present. From 1947, when the modern enumeration system was started, to 1988 Maine lobster landings were very stable, ranging from 15.1 million to 22.7 million pounds. Since 1988, lobster catches have been over 30 million pounds every year. In 1998 the catch was 46 million pounds, and in 1999 it was over 52 million pounds. The causes of these huge catches is uncertain (Acheson and Steneck 1997), but almost certainly one factor is the strong conservation ethic of the industry, that has resulted in a number of laws which are apparently quite effective. (Other causes of the high catches are almost certainly environmental factors). These laws include both minimum and maximum measures to protect juveniles and large reproductive-sized lobsters, a prohibition on taking egged lobsters, the v-notch law, the escape vent law allowing small lobsters to escape from traps, and a law requiring that lobsters be taken only with traps, a very selective type of gear. There is no quota on the number of lobsters that can be taken. These laws, which have been on the books for decades, are compatible with the existing territorial system. Recent legislation, especially the new "Zone Management Law," is one of the factors causing profound changes in the territorial system.

Aspects of the Traditional Territorial System

Once one gains admission to a harbor gang, one was usually allowed to go fishing only in the territory of that gang. Interlopers are usually warned verbally or by minor molestation of

their gear. If they persist, enough of their traps are destroyed to make it unprofitable to continue to violate the territorial boundaries. However, it is important to note that violation of territorial boundaries meets with no certain response. People with certain characteristics are usually able to get away with a lot more than others.

Small scale trap cutting is a problem all along the coast, but incidents in which are numbers of traps are cut are rare and becoming rarer. The norms concerning territoriality are well known, and people are reluctant to violate them. However, when territorial conflicts do break out, they are kept very quiet regardless of how blatant the territorial incursion is. Trap cutting is illegal, and can lead to loss of lobster license; silence reduces the chances for retaliation by one's victims.

Most territories are quite small and are fished by small groups. Most territories are under 100 square miles and most are far smaller. These areas might be fished by as few as six or eight boats, and harbors containing over fifty boats are rare indeed.

The territorial boundaries near shore are delineated by features on shore, a cove, a ledge. Further offshore, boundaries are marked by reference to landmarks on shore or on islands. For the past twenty-five years, Loran C lines have been used to define fishing locations and territories.

The delineation of boundaries varies considerably with distance from shore. Thus, boundaries close to shore are known to the yard and well defended. Further offshore, boundaries are less well defined. In the middle of large bays, men from four or five harbors might "fish together," which is sometimes called "mixed fishing." If one goes ten miles from shore, there is no territoriality at all, and people have always been free to go where they want, providing they

stay away from island areas. This pattern is almost certainly due to competition for bottom. Bottom near shore is fished in the summer, and competition for it is high since there is less of this kind of bottom, fishing is good, and the number of people fishing is at the annual high. In the winter, lobsters are found in deep waters, and competition is far less. There are fewer boats fishing at this time of year, the amount of available bottom is far greater, and these grounds are far less productive.

There are two different types of territories. Harbor gangs on the mainland have what I call nucleated territories (Acheson 1988). That is, there is a strong sense of territoriality near the harbor where the boats are anchored, and a stranger putting traps in this area is almost certain to be sanctioned. This sense of ownership grows progressively weaker the further from the harbor one goes, and the willingness to sanction interlopers is less. On the periphery (i.e. three to five miles away from the harbor) there is virtually no sense of territoriality. (This is not to suggest that these more distance “mixed fishing” areas are open to anyone.)

The island areas, particularly those in Penobscot Bay, exhibit what I called perimeter defended territoriality (Acheson 1988). Here, boundaries are known to the yard and are strongly defended. No mixed fishing is allowed within the boundaries of such islands, although some mixed fishing is permitted outside.

Recent Changes in the Maine Lobster Industry

Trap Escalation and Trap Limits

Over the course of the past several decades, there has been a steady increase in the number of lobster traps in the water, leading to trap congestion. This trap escalation was made possible by the adoption of a number of technological innovations, including the hydraulic trap

haulers beginning in the 1960's, and the adoption of larger boats able to haul more traps, and nylon netting, which lasts far longer than the older hemp twine.

A number of non technological factors have led to the widespread increase in traps fished. The first is competition between fishers. In every harbor, some would put more traps in the water to increase the proportion of traps they had on the bottom and their incomes. Others would follow suit in an attempt to keep even. This would stimulate people to put fish even more traps to stay ahead of the competition. This never ending cycle has gone on for the past fifty years. In some places such as Casco Bay and Penobscot Bay (before 1995) it was common for people to fish 1800 traps and gangs of 3000 were not unheard of. The second factor was an increase in the number of full-time fishers as people moved out of the failing ground fisheries, scallop fisheries, etc. into the booming lobster fishery. While the number of fishers remained approximately the same, a very large number of license holders, who had been part time fishers earning their living in other industries, have become full time lobster fishers using far more traps. As a result, between 1995 and 2000 there has been an increase in the number of traps used, despite the trap limit (Acheson 2000). In 1960, there were approximately 750,000 traps in Maine waters; currently the number is in excess of 2,700,000 traps (Acheson and Steneck 1997: Figure 3). Third, the uncertainty brought about by recent laws and the threat of Federal intervention in the fishery has motivated people to fish more traps in an attempt to grandfather themselves into the fishery. There is a strong feeling that the Federal government may force very strict trap limits on the fishery. Those who begin with a lot of traps, they believe, will end up more gear than those who start at a lower base figure (Acheson 2000).

The increases in the amount of gear finally led to a trap limit law. Many fishers have

wanted trap limits (a maximum number of traps that could be fished by a single license holder) for some thirty years. Unfortunately, there was no coast-wide consensus on what that trap limit should be. What was considered an adequate trap limit in some areas was considered far too restrictive in others. In 1995 the legislature solved this problem by passing what has become known as the Zone Management Law. This law stipulated that the entire coast was divided into zones, and that each zone was to be governed by a council composed of lobster fishers elected by the license-holders of that zone. These zone councils have the power to recommend rules for their zone on the number of traps to be used (a trap limit), the times of day when fishing will be done, and, most important, the number of traps that can be fished on a single warp line. If these rules are passed by referendum by a two-thirds vote of the voting license holders in the zone, they are referred to the Commissioner of Marine Resources, who can make them regulations enforceable by the wardens. In fact, seven zones were established and by 1998, all of them had passed a trap limit. Six of the seven zones passed an 800 trap limit for 2000; Zone E passed a 600 trap limit.

There have been two important effects of these changes which have impacted the territorial system. First, they have resulted in greater pressure on territorial boundaries as fishers seeking additional space put more gear in areas where mixed fishing was allowed or move into territories that had been the domain of other fishers from other harbors. The trap escalation has caused fishers to begin to fishing far larger gangs of gear further from their home harbors and in areas where they did not fish previously. There is much more gear in offshore areas where virtually no one was fishing twenty years ago. Second, while the Zone Management Law has generally been very successful, implementation has had some problems. Some of the most

serious have resulted from conflict over zone boundaries. As we shall see, both of these factors are having an effect on the territorial system.

Administrative Changes

Over the course of the past several decades, the warden force has become increasingly professionalized and effective. Enforcement of laws has become much stricter. In part this is due to better leadership in the Department of Marine Resources, increased enforcement budgets, and better training. But more important, it is also due to changes in attitudes in the industry. People in the industry have become better educated and more committed to conservation. They are much more likely to report infraction of the law to the wardens.

Increased law enforcement has increased the risks for those who cut traps. In the past, trap cutting incidents were not likely to result in people being apprehended by the law. Evidence that would stand up in court was difficult to get, and the victims, when evidence was available, preferred to handle the problem by private retaliation. This is no longer true. Victims of trap cutting incidents are increasingly willing to report the incidents to the wardens, and the warden force is having far more success in enforcing such violations of the law. Within the past two years one man from the Penobscot Bay region was convicted of cutting off some 500 traps. He was heavily fined and sent to jail. This would not have occurred thirty years ago due to the code of silence that prevailed in the industry at that time.

Changes in the Territorial System

Larger gangs of gear have made it advantageous for fishers to exploit more distant waters, and the adoption of larger and more powerful boats and gear haulers has made it cost effective for them to fish in more distant areas. Moreover, an increasing number of people are fishing for

lobsters during more months a year. In the past, it was common for people in the lobster industry to haul all of their gear in the early winter and put their boat on shore, and to devote the winter months to building traps. Now, very large numbers of fishers are placing large numbers of traps in offshore areas and fishing throughout the winter months. Fishers from Friendship and Bremen are currently placing traps ten miles south of Monhegan Island where only a few Monhegan fishers used to place traps twenty years ago. People from Spruce Head are fishing large numbers of traps the winter south of Matinicus Rock, some thirty miles from their home harbor. Boats from Portland and other towns in Casco Bay have been going to offshore areas southeast of Cape Elizabeth. Interestingly enough, these fishers have asserted their right to fish in such offshore areas, and, as we shall see, have been quick to assert their rights to fish there when the establishment of limited entry rules threatened their ability to put large numbers of traps in offshore waters over the line in another zone. However, they have not made any attempt to incorporate these areas into their traditional fishing areas. As a result, the amount of area where mixed fishing is allowed in these offshore areas has increased enormously.

The size of the traditional areas has not expanded, even though fishers are ranging over larger areas. Moreover, it is unlikely that these fishers will begin to defend these offshore areas when enough time goes by. These areas are exploited, typically, by people from several harbors. Territorial defense, when it occurs, has occurred because groups of people from harbors, who are well organized and know each other well, are able to coordinate in the defense of an area they have fished for years. There is no instance, of which we are aware, in which people from a number of harbors have been able to organize territorial defense. People from different harbors are not likely to know each other well; have little social capital built up; and most likely have a

history of antagonism, competition, and even conflict to overcome.

Second, important changes have occurred in areas that have long been incorporated in the traditional territorial system. The amount of mixed fishing in inshore area is increasing, and the amount of bottom that is the exclusive fishing area of particular harbors has decreased. This is due to the cost benefit ratios faced by defenders and aggressors. People who invade other areas have much to gain in the form of greater access to increased bottom, and face little chance of facing effective retaliation. The people whose boundaries have been violated have little to gain from a successful defense, in comparison with the possible losses. The traditional way to defend boundaries involves trap cutting or molestation, and this can lead to a loss of license, a fine or even time spent in jail. One man from an island whose territory was being invaded by mainlanders was heard to remark, "In the good old days we would have taken care of the problem with the knife, but this isn't the good old days."

Third, some of the island areas have been very successful in defending their territorial interests. Some, such as Criehaven, Green Island, Metinic, and other islands in Penobscot Bay have mounted an effective traditional defense. They have agreements about where people from various harbors and the island are going to fish and those have been maintained, sometimes by force or the threat of force.

Other islands have succeeded in defending fishing areas by the novel ploy of going to the government. In 1984, Swan's Island, under increasing pressure from mainland fishers and experiencing increasing trap escalation, was able to get a consensus of people on the island to request that the state form a conservation zone. They were successful in persuading people from adjacent harbors and the commissioner to support their efforts. In 1984, the Swan's Island

conservation zone was formed, specifying that only 350 traps would be used in waters adjacent to the island. People from other harbors would be allowed to fishing in Swan's Island waters providing they obeyed the Swan's Island rules.

In 1995, Monhegan was also successful in getting a conservation zone. Monhegan has long had a two mile zone around the island where fishing is only allowed from January to June. They have also had a trap limit and have limited entry into their own harbor gang as well. In 1995, fishers from Friendship began to fish in waters south of Monhegan which had been an area fished exclusively by people from this island. A large number of Friendship traps disappeared in a series of "killer fogs." In retaliation, Monhegan traps were destroyed and a Monhegan boat was sunk deliberately at nearby Port Clyde. In 1996, the Commissioner of Marine Resources, Robin Alden, got both sides to come to an agreement setting up a conservation zone around Monhegan providing that people from other harbors could fish there if they obeyed the special Monhegan rules. This agreement broke down when several Friendship fishers signed up to fish in this special Monhegan Zone. In 1998, after months of trouble and endless debate in the newspapers and on docks, the Monhegan fishers successfully lobbied the legislature to establish a conservation zone where only people who lived on the island could fish. The law also established a very strict trap limit, a limited entry program, and a special apprenticeship program. Monhegan clearly has the most restrictive conservation regime in Maine.

A number of other islands, emboldened by Monhegan's success, were seriously discussing establishing such conservation zones around their own islands. At this point, the legislature responded by establishing a special commission to study the establishment of more

“sub-zones.” The final report of this commission concluded that “sub-zones should be discouraged at this time.” This conclusion was clearly one that was desired by officers of the Department of Marine Resources and members of the legislature who had come under considerable constituent pressure concerning this issue. To date, no other island or harbor has managed to get the legislature to establish any other special fishing zones. The areas around Swan’s Island and Monhegan stand alone. It is important to note that these two islands have defended their traditional fishing areas by unusual means. They have maneuvered the legislature into formalizing traditional territories, and using the state wardens to defend those boundaries. They have also agreed to the most stringent conservation rules in existence in the industry.

Fourth, when the Zone Management Law was passed in 1995, few people thought the imposition of zone boundaries would cause a major problem. After all, the law stated that people could fish on both sides of a zone boundary line. If there was a difference in rules between the zones, they could fish on both sides provided that they followed the rules of the most restrictive zone. Moreover, the zone boundaries were set in 1996 by interim zone councils and they placed them in places which followed traditional boundaries.

However, by the year 2000 five of the seven zones were embroiled in zone boundary disputes. All of these disputes were essentially distributional in nature. Two of the three disputes did not come to a head until a change took place that restricted someone from fishing in a “mixed fishing” area where they had gone traditionally. The first serious dispute took place off Pemaquid Point, the boundary between zones D and E. The dispute came to a head when the fishers of Zone E voted in a more restrictive trap limit (600 in the year 2000) than Zone D which had an 800 trap limit. This meant that fishers with more than 600 traps (including many full-time

fishers) could not go fishing in the Zone E territory. This made it impossible for many full time fishers to gain access to “shedder” bottom right off Pemaquid Point and productive deep water bottom southwest of Pemaquid Point. Many in Zone E were pleased by this turn of events, since they could go anywhere in zone D territory while the zone D fishers were prohibited from crossing the line into Zone E. This dispute was settled late in 1999 and early in 2000 by fishers from both sides agreeing to a “buffer zone” off Pemaquid Point where people from both zones could fish. This solution was accepted by the Commissioner.

The next dispute occurred between zones C and D concerning an area close to Vinalhaven where fishers from Wheeler’s Bay (Zone D) had successfully invaded an area previously fished by Matinicus and Vinalhaven. The Wheeler’s Bay fishers wanted to continue fishing in this contested area. The Matinicus and Vinalhaven men wanted them out; and they were pleased when the zone boundary was drawn in such a way as to place the contested area in Zone C. This dispute simmered from 1995 to 1999 but there were few problems since Zones C and D both had voted in an 800 trap limit so that men from both sides could fish on both sides of the line with no restrictions. However, in 1999 the limited entry by zone law passed which would make it illegal for people to fish more than 49% of their traps in another zone. This would prohibit “big fishers” from the Spruce Head area from placing a large number of traps south of Matinicus Rock where they had put traps for the past several years. At that point, the dispute heated up. It too was settled by the imposition of a buffer zone in the spring of 2000.

The third dispute is between zones F and G over waters in the Cape Elizabeth area south of Portland. Fishers from Zone F have long fished very large amounts of gear in the winter in offshore areas which are now part of by Zone G. The zone G people want to restrict their access

to the area. In 1997, the Zone G fishers passed a very restrictive 600 trap limit, which made it illegal for those from zone F to fish large gangs of gear across the line. The zone F fishers were very incensed, and insisted on their right to fish in places in Zone G where they had long placed traps regardless of zone G trap limit rules. The dispute was put on hold when the zone G trap limit was nullified by a court ruling in 1998. It heated up again with the passage of the limited entry by zone law, which again will make it illegal for zone F fishers to place large amounts of gear in zone G waters. It still has not been settled.

In all of these cases, the imposition of formal zone boundaries is having an effect on where people can fish. Zone boundaries will undoubtedly change traditional fishing rights in the area of the boundary, and they will influence where people fish in offshore areas.

Summary and Conclusion

Traditional lobstering territories are changing rapidly. One source of change is trap escalation and new boats and technology which have made it profitable to fish in more distant areas. Another is the actions of the government of Maine. The increased ability to enforce trap cutting laws has impeded the defense of traditional territorial boundaries. These factors have decreased the amount of territory held exclusively by harbor gangs, and increased the area where mixed fishing takes place. They have resulted in some islands using unusual strategies to hold traditional fishing territory, namely lobbying the legislature to establish special conservation zones.

The new zone management law has imposed boundaries and rules that are changing where people fish. These rules help people from some harbors gain and hold territory, and impede those from others.

There are many in Maine who believe that we are witnessing a fundamental change in the traditional territorial system. Some think the system will no longer exist in a few years.

Bibliography

Acheson, James M.

1981. Anthropology of Fishing. *Annual Review of Anthropology* 10: 275-316.

1988. *The Lobster Gangs of Maine*. Hanover, NH: New England University Press.

2000. Confounding Management: The Response of the Maine Lobster Industry to a Trap Limit.

Submitted to the *North American Journal of Fisheries Management*.

Acheson, James M. and Robert S. Steneck

1997 Bust and Then Boom in the Maine Lobster Fishery: Perspectives of Fishers and Biologists.

North American Journal of Fisheries Management 17(4): 826-847.

