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Aspects of the Maine Lobstering Industry

One of the most common topics associated with the state of Maine is lobster. Year round, people fish for these creatures with the intent of selling and/or consuming them. However, it is not as easy as it may appear to be. In spite of the hard work involved in catching lobster, the world consumes mass amounts of lobster every year and so some people fear that the supply will be depleted. One question often debated when it comes to lobstering is whether or not the Maine lobster industry should be more regulated than it already is. There is a big concern for if the industry is likely to be over-fished, resulting in a decrease or extinction of the Maine lobster population. On the other hand, there are also people who disagree, believing that the regulations in place are fine and the Maine lobster population will continue to exist. To assess this issue, we must look into certain aspects of the business: how lobstering is done, the history of the laws, economic factors in relation to these current laws and also what can be done to maintain a solid, working industry.

Given the difficulty of lobstering, it is amazing that there is an industry large enough to need regulation. Before you even think of going on the ocean be sure you have a boat and traps. A trap is boxed-shaped, made out of either wire or wood with usually two mesh entrance areas and typically either one or two mesh parlor entrances. Be aware of what a Maine lobster looks like too. Lobsters relatively red with two claws, usually 8 legs (unless wounded or injured, this goes for all parts of its anatomical structure), a tail and shell, not hard to decipher between the other organisms considering the only other crustacean often caught in your traps will most often be crabs. Once you have your boat and traps, its time to get the rope and buoys. Without these two items you would never find your traps, unless you went diving for them. The rope should be tied with one end to your string of traps (any desired number per string) and the other end to a buoy (buoyant, round object with a chosen color scheme). At this time you can

bait up your traps, head out to sea and hope for the best but only after you know several restrictions pertaining to lobstering in Maine's salt waters.

To understand why present laws are here, you need to know where they have originated from. Lobstering has been around since the colonial period but was never as heavily regulated as it is today. It emerged into an industry in the 1840s when a sloop with a holding tank was created to ship lobsters to coastal northeastern cities (Acheson 6). The average lobster was much larger back then as well, ranging anywhere from 10-20 pounds but now you are lucky if you can catch an average sized lobster of above a pound and a half. Furthermore, something had to be done, soon after the single-gauge law was introduced. This prohibited catching of any lobsters that were below 10 ½ inches in full length (Acheson 7). From this time up until present day, the required length was modified a total of seven times (Acheson 7-20). In fact, the single-gauge law is now no longer existent. It has been replaced with a double-gauge law, allowing a lobster that has a shell length (excluding the tail) between 3 ¼ and 5 inches long to be caught by a valid license-holder. The purpose behind the double-gauge is to let smaller lobsters become larger and grow and also let the bigger ones free because they are much better breeders compared to any lobsters smaller than them (Acheson 11).

Around the same time the single-gauge law had first been established, there was the issue over the egg-bearing female law. Frequently, fishermen were trying to get every lobster they could so they would even go as far as brushing the eggs off of legal-sized female lobsters (Acheson 7). The impact of the scrubbing eventually killed some of the eggs. Therefore, this decreased the chance of an even larger population, leading to a decline in annual catch landings. Some of the lobsters being brushed were not done producing eggs and over time they were being found with eggs on them by packers and shippers on land when transferring the lobsters from crate to crate. Finding lobsters like this made it necessary to declare that it is illegal to keep any lobster bearing eggs and if you are caught attempting to remove those eggs, you will be punished with quite a hefty fine.

However, the industry has gone further on the restrictions of female lobsters. Another law pertaining to the actual type of lobster is the V-Notch regulation, which was introduced in 1947 (Acheson 15). That is, you cannot keep any female lobster with a notch or mutilation (refer to <http://mainegovimages.informe.org/dmr/bmp/images/vnotch1.jpg> for examples) on the second-to-the-right flipper out of its set of five at the end of its tail. You need to

understand that some males tend to be v-tailed as well but it is still okay to keep them. Fishermen have been known to misinterpret grass under the tail as eggs and sometimes end up notching a male and throw it back overboard. One should check in between the last pair of legs, closest to the tail. If there are two white stick-like organs pointing to form an upside down v, then the lobster is considered to be a male and may be legal depending on the shell length. Otherwise, you have caught a notched-female and will not be allowed to keep it regardless of it carrying eggs or not. From personal field experience, I can say that it is very frustrating to come across any legal-sized lobster and then discover a v-notch and have to throw it back, but in the end it is for the best. If females are caught at a young age and notched while bearing eggs, then they have the potential of breeding multiple times, in turn helping the entire population remain stable.

There is also a concern for the safety of young lobsters. Often times, while inside the traps, smaller lobsters will be enclosed in the midst of larger ones fighting and end up wounded because of it. Due to impatience, fishermen may be apt to manhandle anything in the trap in order to get to what they need because they want to get done early, and in the process, can injure other lobsters. Sometimes those lobsters that have been injured are not very big and in turn, become at risk of death if they do not regenerate properly, therefore, reducing reproductions rates because of fatalities. To attempt to overcome these obstacles, from the mid 1970s to present day, escape vents are required in every trap to allow smaller lobsters, no doubt undersized, to leave the mess of things and to also make it easier for the lobstermen to deal with generally legitimately good-sized lobsters (Acheson 15). Even better, all vents are now biodegradable, meaning that they are not harmful to the environment.

Besides satisfying the environmental requirements, there are other regulations you need to follow in order to keep up with the industry. To get into the business it is extremely important to acquire a license. In Maine, there are three different kinds of licenses: recreational, student and commercial. To get any of these, you must show proof of state residency. Probably the easiest license to register for is the recreational. This license allows you to have 5 traps but you can only consume or give away the lobsters you catch, no other prerequisites are necessary. As for the student, you must be enrolled in school and once you are, you are able to fish 150 traps. Meanwhile, to earn a commercial license it is a lot more complex. First, you have to complete an apprentice program, which is 200 documented fishing days. If done before the age of 18, you can receive your commercial license immediately. On the other if you don't, you go on a wait

list and don't expect to get it anytime soon. In fact, a friend of mine waited almost three years to get his commercial license because he didn't finish his fishing days before becoming eighteen due to various weather conditions and scheduling conflicts with education. Even though this rule is alright to have around, hopefully no one else has to go through this because it is very stressful to wait, especially if this is your only source of income. The purpose of these license requirements is to limit the number of new fishermen entering or at least make them reconsider because of the slow process involved in getting a license. As a matter of fact, I have met people that have thought about entering the business until they heard what they had to do to get a commercial license and then changed their mind, so these regulations have been quite effective. Each year since the license requirements have been in place, the rate of people entering the business has declined (www.maine.gov/dmr). Nonetheless, once you have your commercial license; you begin with permission to haul 300 traps and can go up another 100 beyond your previous total as each year passes. The maximum amount you can fish will either be 600 or 800 depending on which zone you declare.

Maine coastal waters have precisely seven fishing zones labeled A-G. Logically, the typical lobsterman will designate the zone closest to home as their desired zone to fish in. For me, that zone is zone F, the most heavily-fished zone in Maine and even here, fishermen still manage to find a piece of bottom to fish off of. Furthermore, each zone has a council consisting of elected license holders. These councils have the power to propose laws concerning trap limits, number of traps allowed to be hauled on one string and when fishermen should be permitted to haul their traps. "If the proposed rules are passed by two-thirds of the license holders in the zone, voting through a referendum process, they are referred to the Commissioner of Marine Resources, who is empowered to adopt rules to enforce them under regulatory powers of the Department" (Acheson 426). In other words, the lobstermen and council members propose rules and the government officials eventually decide on these proposals after listening to the personal input from the zones.

One regulation the whole state has been able to agree on is the days and times acceptable for hauling traps. Whatever zone you decide on, the permitted hauling days and times remain the same. From June 1st to October 31st, you are allowed to begin lobstering a half-hour before sunrise and must be finished hauling your last trap a half-hour after sunset. However, from and including June 1st to August 31st, you are not allowed to fish or transport any traps from four in the afternoon on Saturday to a half-

hour before sunrise on Monday. This is done to prevent over-fishing because some fishermen apt to be quite ambitious when their average catch is high. In turn, these limitations help conserve the Maine lobster population because the fishermen do not have an unlimited amount of fishing time.

If closed times prevents over-fishing, then what preserves the whole industry? The answer to this is in fact a variety of things, all of which are related to the present regulations. General agreements between the fishermen and state government have built these laws and they are also what have been leading to laws satisfying each party. Sure some laws have been altered a few times but the bases of ideas for most of these limits are still there. In a recent interview, commercial fishermen Dan Millar was asked, "In general, are you content with the current regulations in place for the Maine lobster industry?" He responded, "Yes, things seem to be working very well and the catch has remained fairly constant." Now while Dan does not speak for the voice of the entire Maine fishermen population, but he has witnessed some changes done to industry first-hand. He was in fact, one of the many who was had his trap count reduced from an unlimited number to only 800. Moreover, the more traps you have in the water, the higher your chances are of catching more lobsters. So for someone to come out and say that this ok, the laws must be working out fine. Furthermore, to add to the second half of Dan's reply, the present regulations have helped the annual landings, in reality, remain rather steady and constant. If you go to the homepage of the Maine Department of Marine Resources (www.maine.gov/dmr), you will find a chart of the total amount of lobsters caught in the State of Maine during each year, dating back to the 1950s, a decade in which the majority of all laws' mentioned above, original versions had been established at least, date back to. Interestingly, if you examine the data, there is evidence proving that the lobster industry has not been decimated by the establishment of these regulations.

Also provided in the chart is the amount of money brought in from the annual catches and the price per pound for each particular year. From this, you can tell that the industry was generally making more as years went on. One reason the industry's income has increased is because the Maine lobster has gone up in value sufficiently. Another reason is that there are more lobsters being caught than before the turn of the century. However, these two reasons emerged because of something else, the current regulations. In World War II and also before any drastic restrictions were made in the business, the industry suffered from a severe decline in catch and income (Acheson 5).

The catch was low because there was nothing preserving the lobster-population and the price was low considering the demand had decreased. With the world having a war it made it difficult to transport lobsters to other countries, in turn, the price per pound dropped because no one wanted them. On the other hand, after September 11 boarder patrol was tight once again and for awhile Maine could not export lobsters to Canada, so the price remained fairly low. Yet this generation did not suffer as badly as the World War 2 era because regulations on shell length and v-notched and egg-bearing females have helped the lobster population resist from declining severely.

Nevertheless, as much as you may think the present rules are working, there may still be some concern by others. First of all, people can think it is cruel to be cutting v-notches into the end of a lobster's tail. Not to worry, a lobster can regenerate parts of it body even though it does a hurt a bit. Wouldn't you rather make a cut in a lobster's tail to save an entire population anyway? It may take time for the slices to heal but a small wound in the tail gives them the ability (if female) to breed several more times because they can never be kept by a fishermen again. There have also been complaints about the trap limits. One person states that the trap limits are apt "to affect the 'big fishermen' who fish a large amount of gear, and may not force the small or average fishermen to make any changes at all" (Acheson 428). Yes this individual makes a good point but what else can be done? If you take away trap limits you can have gear clusters, making it very difficult to find empty space to fish and this could lead to over-fishing as well. Until someone develops a plan to improve the trap limits, the present one is going to have to make do, unless Canada does something about at least one of their laws. At the present moment their double-gauge law allows their fishermen to catch a smaller sized lobster than Maine can, which affects the industry in turn. In other words, undersized Maine lobsters may migrate to Canada and be caught rather than having the potential to live longer and breed more if they are female.

Without any further modifications to present laws, the lobster industry remains to still be a strong contributor to Maine's economy. There are so many jobs created both indirectly and directly from lobstering. In my town, it is not uncommon for someone to easily find themselves working on a boat or helping out as a dock-hand or as a bait/lobster truck driver; the lobsters need to get to the restaurants somehow. Furthermore, this field gives people who may not have done well in college or need to get out of a dead-end job, a chance to make a decent living doing something different not involving the patience of extensive education. To give you a good idea what an

average lobsterman makes, including expenses and weather permitting, you take the number of total traps they fished the entire season and multiply it by the average price per pound for that year. Last year, the average price per pound was \$4.01 (www.nationalfisherman.com), and the typical commercial lobsterman fishes about 350 traps per day, 4 days a week for about seven months (approximately 210 days). Now you should have 73, 500 traps hauled per year (350 x 210). Next multiply that by \$4.01 and you get \$294,735. Finally deduct 15% of that for help, 5% for gear additions and boat maintenance and 20% for bait and fuel. At this point you should be left with near 60% profit, or close to 175,000 dollars, the average hypothetical income of a typical commercial lobsterman in 2004. This proves that the lobster industry can provide some well-paying jobs for those in need, in turn building the local economy.

The business world is basically a bunch of smaller economies interconnected and the Maine lobster industry is one. In fact, it may not even be operation without the assistance of a few laws. Furthermore, the Maine lobster industry regulations are fine the way they are, for a variety of reasons. The laws themselves, maintain a functioning industry because the rules are based on the voices of the fishermen and government working together to build a stronger business, furthering the situation to improve the overall economic status of the state through high-waged salaries and job opportunities. Therefore, it is not recommended that someone modify the present regulations because the industry is at fine medium, not only keeping the Maine lobster population from deteriorating but also maintaining the occupational positions of many state residents as well. In the future there is the possibility for more modifications to these rules but for now, everything seems to be going all right.

Works Cited

Acheson and Laura Taylor. "The Anatomy of the Maine Lobster Comanagement Law." Society and Natural Resources 14 (2001): 425-441.

Acheson, James. "Evaluation of the Maine Lobster Co-Management Law." Maine Policy

Review. 17 Mar. 2005

<<http://www.umaine.edu/mcsc/MPR/Vol9No2/LobMan.htm>>.

Acheson, James. "The Politics of Managing the Maine Lobster Industry: 1860 to the Present." Human Ecology 25 (1997): 3-27.

Department of Marine Resources. Everything you wanted to know about Lobsters. 17

Mar. 2005 <http://www.maine.gov/dmr/rm/lobster/lobster_info.html>.

Lobster Industry. 17 Mar. 2005.

<http://www.maine lobster promo.com/lobster_industry.html>.

Millar, Dan. Personal Interview. 4 Apr. 2004.

National Fisherman Magazine. 4 Apr. 2004 <<http://www.nationalfisherman.com>>.

Quinn, Eastman. "Thriving Lobsters Live Off Bait." Science Now. (2003): 1 pp. 17

Mar. 2005 <<http://web25.epnet.com/citation>>.

The Lobsterman's Page. 17 Mar. 2005

<<http://www.crewdog.net/lobsterpage/lbstrng/lqfact.html>>.

Wood, Pamela. The Salt Book: lobstering, sea moss pudding, stone walls, rum running, maple syrup, snowshoes, and other Yankee doings. United States: Anchor Books, 1977.