

Have Lobster Catches in Port Mouton Increased in Recent Years?

1 The Assertion

It has been stated that lobster catches have increased in recent years in Port Mouton. The implication is that the community should not be concerned about degraded lobster habitat because to all appearances the lobster fishermen are doing well. One associated point can be made here: If increasing catches are accepted as evidence that habitat is unaffected, then reduced catches might be taken as evidence that habitat *is* affected. We return to this below.

2 Background

Veteran fishermen have described the patterns of their work. One essential fact is that lobsters migrate inshore in spring as the waters warm, and move offshore in autumn as the waters cool and fishermen traditionally set traps in the inner harbour accordingly. The existing fish farm at Spectacle Island is in the inner harbour, thus if its waste materials were influencing lobster habitat, the effect would be most noticeable either early in the autumn fishery or late in the spring fishery. Of these, lobster landing data for the spring fishery are easier to identify; the autumn fishery involves a varying number of November days depending on the date of the last Monday in that month.

3 Spatial Trend in Distribution of Catches

A report, Port Mouton Lobster Trap Survey, May 15 to 31st, 2007, Friends of Port Mouton Bay, Contribution #10, June 2007¹, describes a survey conducted in the last two weeks of the 2007 spring fishery. Several lobster fishermen agreed to record the location of their traps and the catches by small regions in Port Mouton Bay, even where this meant deploying traps again in areas which have been practically abandoned in recent years because of low catches. This report concluded (Figure 1) that catches per trap fishing day decrease significantly near Spectacle Island. Complementing this spatial information is time series information compiled by DFO from fishermen's logbooks – section §4 below.

¹ www.friendsofportmoutonbay.ca

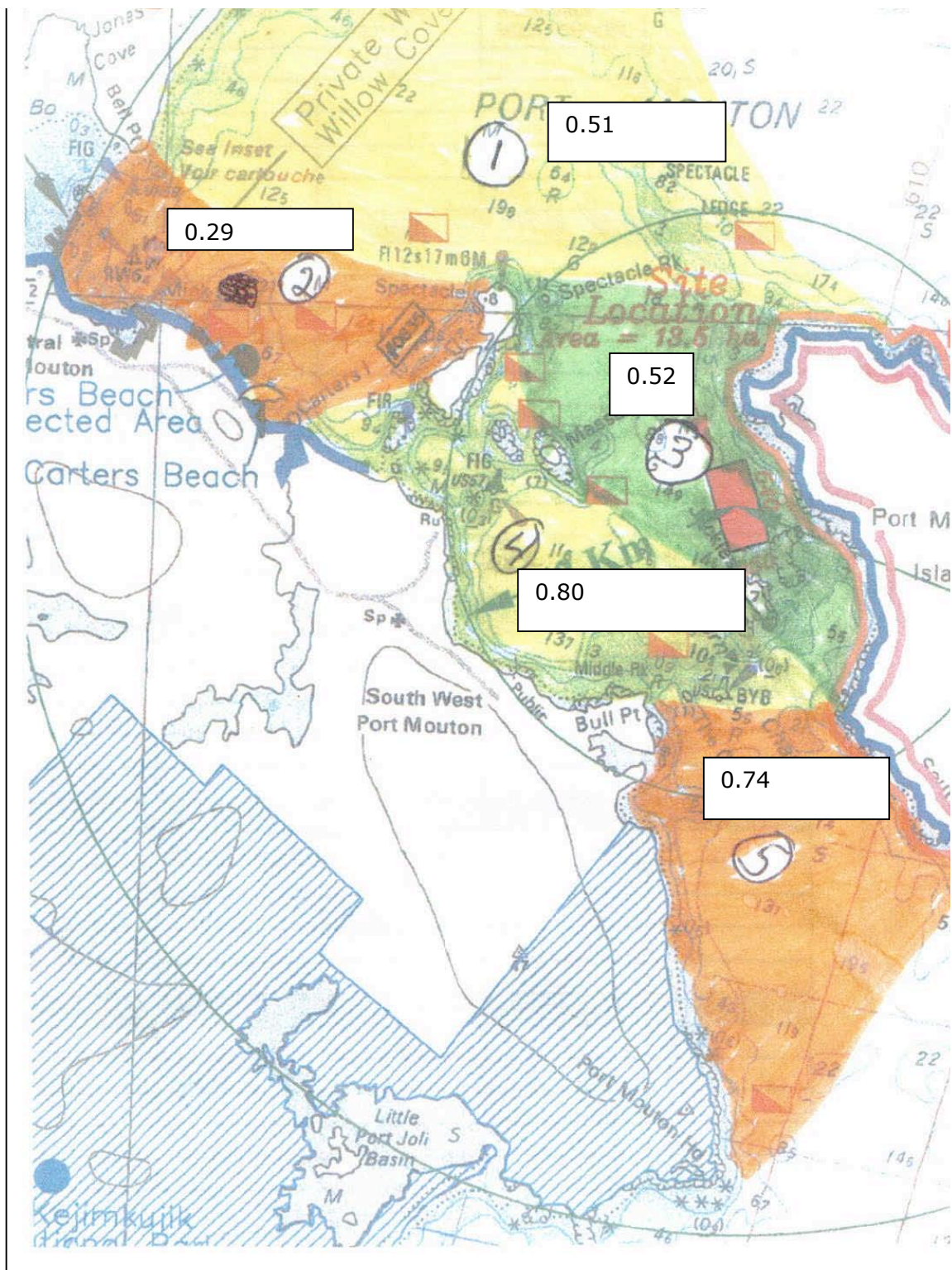


Figure 1. Average yield in pounds of lobster caught per trap-fishing-day in small regions in Port Mouton Bay, May 15-31, 2007

4 Trends Over Time, Recent Years

DFO Statistical Services kindly provided lobster landings data for 2004 - 2007 with the caution that data for 2006 and 2007 remain provisional. These data are not accompanied with information on the locations of the traps. However we infer geographic limits on these catches by 'overlaying' the pattern for lobster migration which are observed by the fishermen, while realizing that the migration pattern and the fishing patterns have recently changed.

Based on the data for Total Catches for the Year (Figure 2), it is correct to say (with the above caution) that lobster landings at Port Mouton have risen in the past three years.

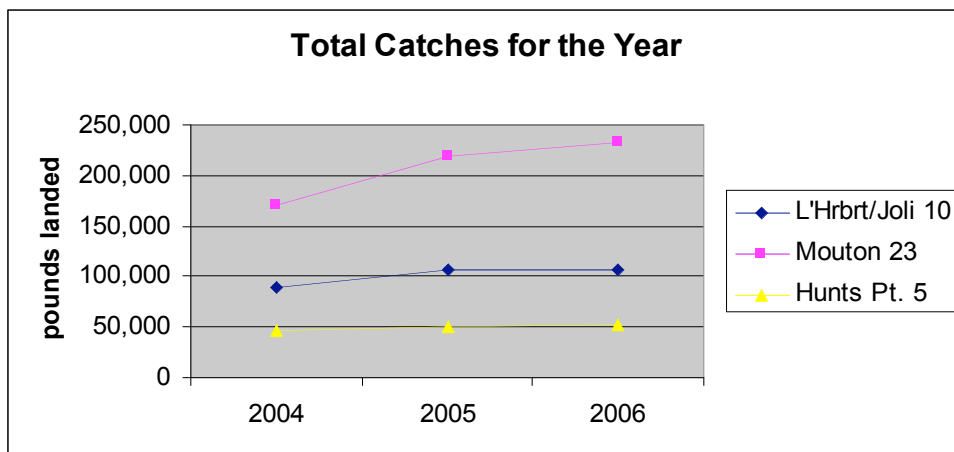


Figure 2. Total catches for the year for 10 boats from Port L'Hebert/Port Joli, 23 boats from Port Mouton and 5 boats from Hunts Point. The number of boats is the average number reporting throughout the period.

The month with largest catches is December. It is also a time when lobsters are moving offshore and so most of the fishing effort is located away from the Spectacle Island salmon farm. Based on the data for Average Catch per Boat in December (Figure 3), Port Mouton catches have risen in December in recent years.

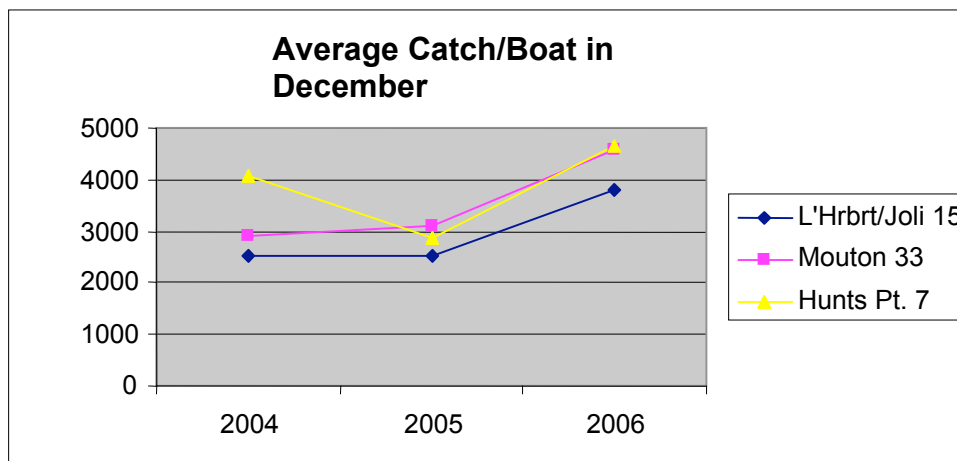


Figure 3. Average catch/boat in December, 2004-2006, for 15 boats from Port L'Hebert/Port Joli, 33 boats from Port Mouton and 7 boats from Hunts Point. The number of boats is the average number reporting.

The month of May is a time when lobsters are moving inshore and so normally in the past fishing effort would be invested around Spectacle Island. As mentioned in section §3, the results of the FPMB lobster trap yields survey in May 2007 from test fishing in recorded regions of Port Mouton Harbour, including around Spectacle Island, indicate that yields decrease significantly near Spectacle Island. This is evidence of lobster habitat degradation. The graph of DFO data for Average Catch per Boat in May (Figure 4) - this being a month when the effect of the fish farm is expected to be strong - indicates a pattern different from that for Total Annual Catches or for December catches/boat: Port Mouton catches/boat in May are *flat* in recent years.

Based on the DFO data, during the month of May when effects of the fish farm on lobster catches would be pronounced, catches per boat have not risen in recent years.

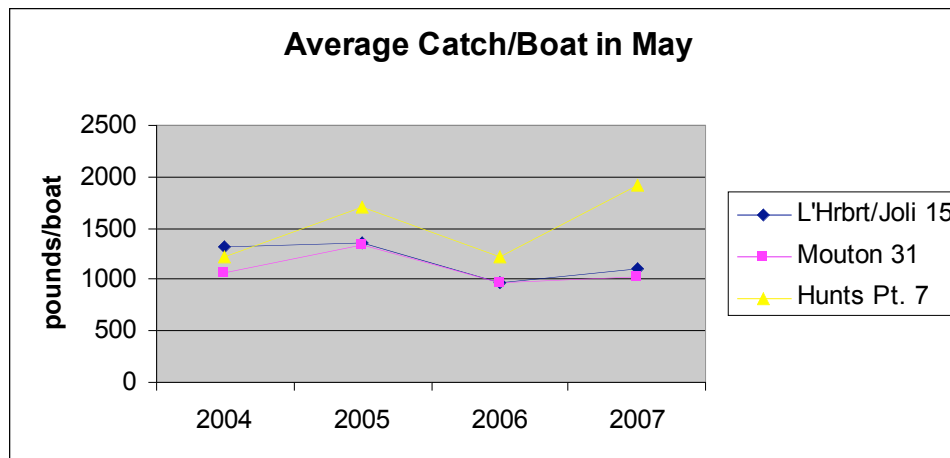


Figure 4. Average catch/boat in May, 2004-2007, for 15 boats from Port L'Hebert/Port Joli, 31 boats from Port Mouton and 7 boats from Hunts Point. The number of boats is the average number reporting.



Figure 5. Lobster coated with waste in Spectacle Harbour, September 2007
Photo by Clyde Fisher

5 Interpretation

Concerns about degradation of lobster habitat by waste from the existing fish farm at Spectacle Island cannot be dismissed, even though total year catches and catches per boat in December have risen in the past three years. Port Mouton lobster catches per boat in May, when inner harbour influences are expected to be strong, have not risen over recent years, 2004 to 2007.

The spatial trend in May, 2007, indicates that the area near Spectacle Island is the most adversely affected. This is consistent with the fact that fishermen have practically abandoned this area after many decades of experiencing it as productive habitat (Traditional Ecological Knowledge, Friends of Port Mouton Bay Contribution #2). In Hunt's Point, May catches per boat increased in 2007 compared to 2006, but not in Port Mouton. It appears that there is an adverse effect being experienced over time in the inner Port Mouton harbour. We know that the Port Mouton boats fish outer harbour and coastal waters because inner harbour catches are so low, and we know that the Port L'Herbert boats intermingle with the Port Mouton boats in the outer waters and experience similar catches for May. (Port L'Herbert boats don't traditionally fish their inner harbour).

Fishermen whose long-standing territory included inner harbour 'berths' have experienced the most displacement. Port Mouton fishermen have stated:

- a) that their costs and risks increase as they are displaced offshore,
- b) that displacement leads to mounting pressures and infringement on territories of other communities, and
- c) that they cannot afford to lose any more territory such as would happen with an expanded fish farm off Port Mouton Island.