

Available data indicate that lobster has been becoming more important in mobile gear vessel income particularly over the past five years or so. However, the importance of lobster in mobile gear fishing income varies considerably among different vessels. For example, over the past 35 years, half of the vessels earned no more than 7% of total mobile gear revenue from the sale of lobsters (Figure 1). By contrast, at least in 1970, one-quarter of all vessels earned between 5 and 51% of total revenue from lobsters and for ten percent of mobile gear vessels, earnings from lobster represented at least 84% of total income. Since 1982 the median share of lobster revenue in total earnings has ranged between 6% and 20% for vessels at the upper end of the 80% interval around the median and has remained at less than one-tenth of one percent at the lower 80% interval. As noted above, the relative importance of lobster sales to mobile gear vessels does appear to have increased since calendar year 2000. For example, the median share of lobster revenues nearly doubled from 1.4% in 2000 to 2.7% in 2005. Similarly, the lobster revenue share increased from 11.2% to 20.4% for vessels in the upper 80% of the mobile gear fleet that landed lobster in 2000 and 2005. This increase in the importance of lobster revenue to mobile gear vessels may be due to reductions in other fishing opportunities particularly in the groundfish fishery making the sales of species like lobster an increasing component of fishing income.

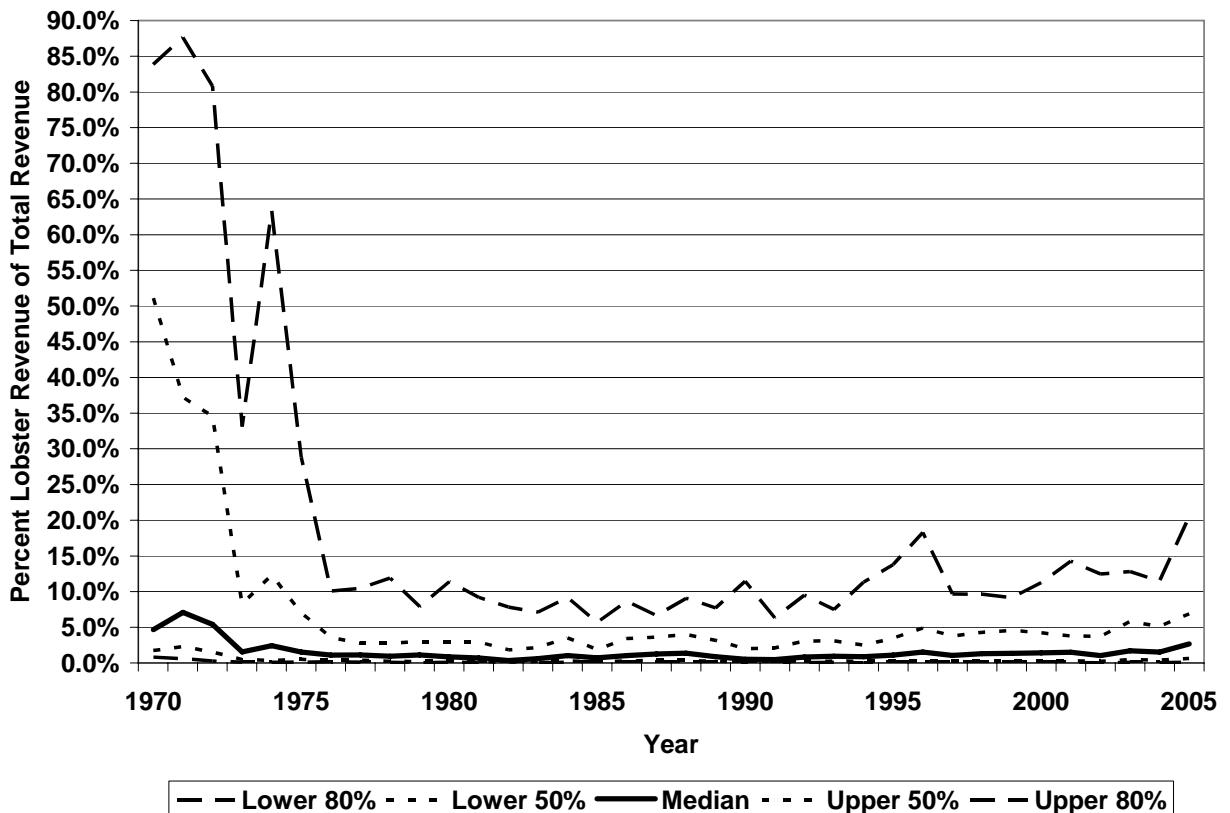


Figure 1. Proportion of Lobster Income to Total Revenue from all Species for Vessels Using Mobile Gear that also Landed Lobster.

The increased importance of lobster in the business income for some mobile gear vessels comes at a time when mobile gear possession limits were implemented. That is, beginning in calendar year 2000 mobile gear vessels were limited to a possession limit of 100 lobsters per day up to a maximum of 500 lobsters per trip. To assess the impact of this possession limit on mobile gear trips the VTR data were queried to estimate how average landings of lobsters by weight on trips of one, two, three, four, and five day duration have changed compared to average landings for a baseline period of 1995 to 1999.

On average, lobster landings by weight declined for one-day, two-day, and three-day trips compared to the 1995-1999 baseline average (Figure 2). By contrast, the average weight of landed lobsters on both four day and five day trips was higher from 2000 to 2005 than in the 1995-1999 baseline. Note that the increase in average landings indicates that the possession limit may not be constraining mobile gear landings on longer trips.

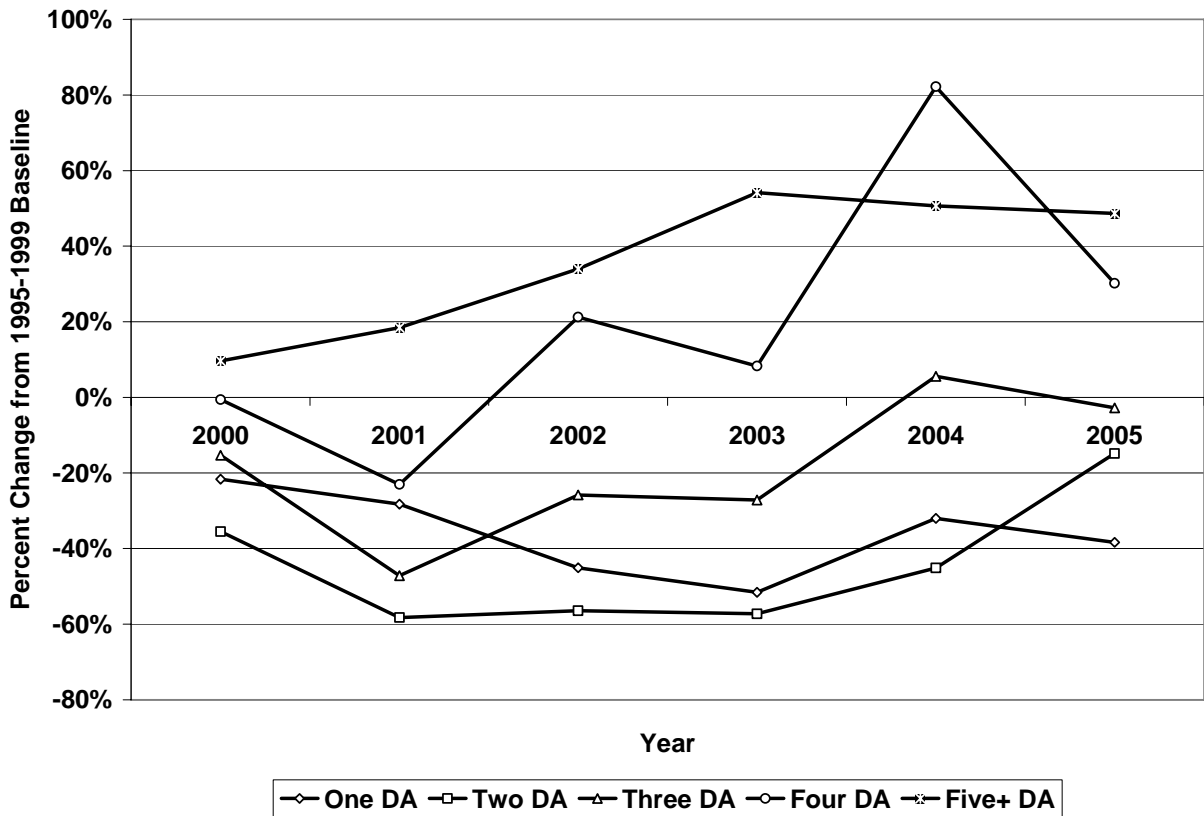


Figure 2. Change in Average Lobster Landings on Mobile Gear Trips by Trip Duration in Calendar Years 2000 to 2005.

Even though average lobster landings on one, two, and three day trips has declined average total trip revenue in constant dollars (1982 = 100) has increased compared to the 1995-1999 baseline (Figure 3). This means that at least part of the reduced lobster landings has been offset by higher earnings from species other than lobster.

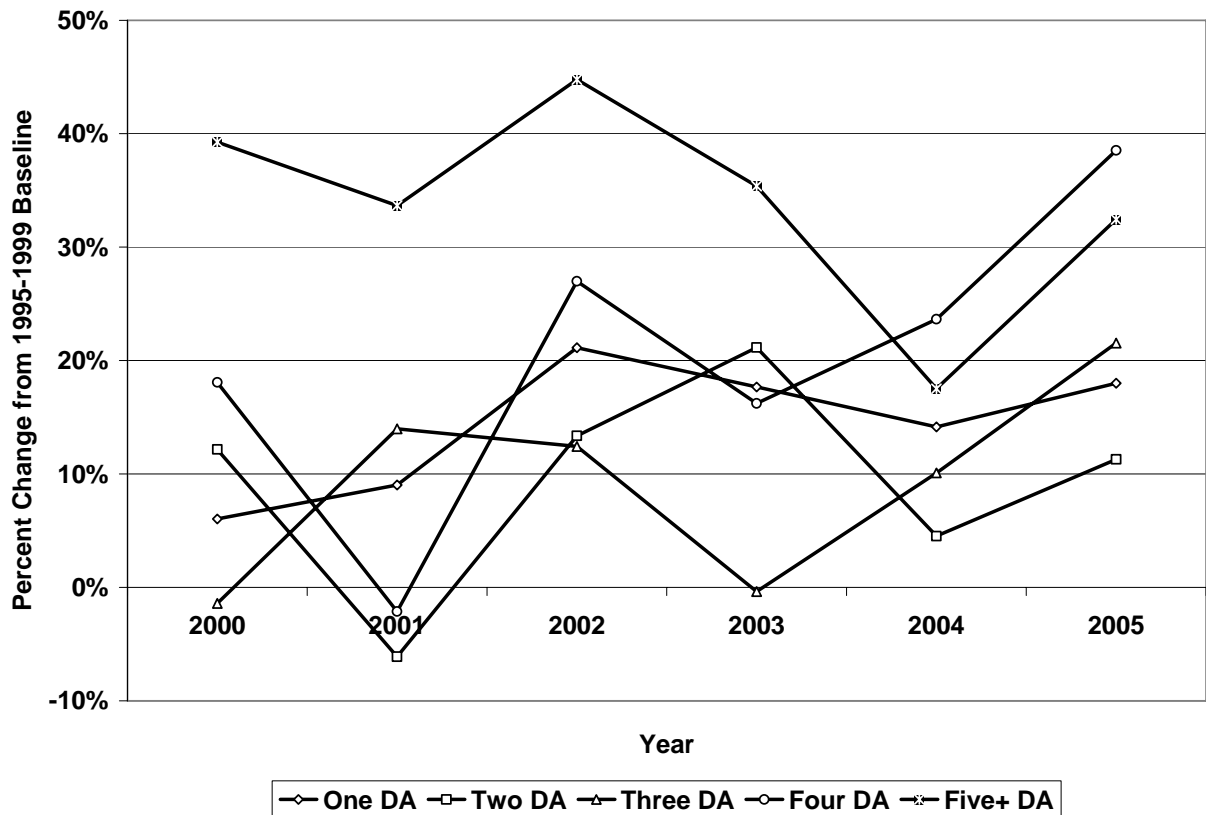


Figure 3. Change in Constant Dollar Average Trip Revenue by Trip Duration Compared to 1995-1999 Baseline Average.

Available data indicate that lobster has become a more important component of fishing business income for vessels using mobile gear. This change may be driven by changes in fishing regulations in groundfish and other fisheries that place a premium on squeezing out every source of revenue from a day at sea. With a higher proportion of mobile gear trips retaining lobster, and an increasing proportion of lobster trips that earn at least 50% of trip income from lobster there may be secondary impacts on seafood delivered to different states since Maine does not permit landing of trawl-caught lobster. The potential impact on access to seafood products to Maine dealers and processors was mentioned in the public comments on Amendment 13 to the groundfish FMP as a contributing factor in the decline of the Maine-based groundfish industry; prompting a move by some vessels to relocate elsewhere.

The effect on the Maine seafood industry of the state's prohibition on landing mobile gear landings of lobster is uncertain but may be approximated by the value of landings in other states by Maine-based fishing vessels on trips that landed lobster that would otherwise have been landed in Maine. To assess this impact any vessel that reported either a Maine home port or primary port state on their Federal permit application was identified. Logbook records for these vessels were then obtained to 1) identify trips that were landed in Maine that did not land lobster, and 2) trips that did land lobster in some other state. Trip revenues were calculated by multiplying landings by species by an

average price calculated from the dealer reports. Since the mobile gear or non-trap gear permit category did not exist prior to 2000, data for prior years were not summarized.

During calendar year 2000, a total of 48 active Maine-based vessels (i.e. reported landings of any species on at least one trip) were identified (Table 1). Of these vessels, only one did not land any trips in Maine while 30 landed at least some trips in Maine but did not land any lobster, leaving 17 Maine-based vessels that landed at least some of the time in Maine and landed lobsters elsewhere. By 2005 the total number of active Maine-Based vessels had increased to 58 and the number of vessels that landed in Maine but landed trips with lobster in some other state had increased to 28.

Calendar Year	Total Vessels that Landed all Trips Outside Maine, But Did not Land Lobster	Total Vessels that Landed all Trips Outside Maine that Did Land Lobster	Total Vessels that Landed in Mane, Did Not Land Lobster	Total Vessels that Landed in Maine, and Landed Lobster in Another State	Total Vessels
2000	0	1	30	17	48
2001	1	0	34	15	50
2002	2	2	30	17	51
2003	1	1	31	22	55
2004	2	2	34	18	56
2005	5	1	24	28	58

To test whether or not there is an avoidance effect associated with Maine’s prohibition on trawl-caught lobsters the value of all trips landed in Maine was compared to total value of all trips that did not land lobster. The results indicate that between 84 and 95% of revenues were landed in Maine when lobster was not landed, suggesting a strong link between Maine’s prohibition and the chosen landing state (Table 2).

The total value of all species landed outside the state of Maine on trips that also landed lobster ranged from \$1.2 to \$3.8 million from calendar year 2000 to 2005. Assuming these trips would have been landed in Maine in the same proportion as the value landed in Maine when lobsters were not landed the estimated forgone fishing revenue was at least \$1 million per year and was as high as \$3.6 million in 2005. The accumulated forgone value of seafood products that were not available to Maine-based dealers and processors was almost \$10 million from 2000 to 2005. Note that over this time the quantity of lobsters landed by Maine-based mobile gear vessels was about 40 thousand pounds in 2002-2004 but increased to 120 thousand pounds in 2005. Average landings per trip were 465 pounds in 2000 fell to 411 pound in 2001 and has been between 540 and 750 pounds per trip since 2002.

Table 2. Estimated Forgone Annual Maine Fishing Revenue Associated with the Prohibition on Landing Trawl-Caught Lobsters

	2000	2001	2002	2003	2004	2005
Summary of Trips that did not Land any Lobster						
Trip Value in Maine	\$6,495,629	\$4,839,752	\$4,802,075	\$7,138,513	\$4,941,947	\$7,241,403
Trip Value Outside Maine	\$1,257,630	\$819,023	\$424,526	\$505,839	\$862,182	\$412,785
Total Value	\$7,753,259	\$5,658,775	\$5,226,601	\$7,644,352	\$5,804,129	\$7,654,188
Percent of Total Value Landed in Maine	84%	86%	92%	93%	85%	95%
Summary of Trips that Landed Lobster						
Total Value on Trips Landing Lobster	\$1,369,381	\$1,174,576	\$1,433,658	\$1,284,316	\$1,621,195	\$3,772,094
Total Pounds of Lobster Landed	21,403	18,088	36,147	37,149	40,731	120,069
Number of Trips	46	44	67	57	76	160
Foregone Maine Fishing Revenue	\$1,147,258	\$1,004,574	\$1,317,210	\$1,199,331	\$1,380,372	\$3,568,668