

Effort in the groundfish fishery is represented in part by the number of active vessels, the number of trips taken and by days absent on trips. The number of groundfish trips taken and the number of days absent on groundfish trips decreased in 2012 from 2011 for both sector and common pool vessels, in addition to the overall decrease in the number of active groundfish vessels (Table 1). For sector vessels, the number of groundfish trips taken fell by 736 trips (5.4%) and the number of days absent on groundfish trips fell by 999 days absent (5%) from 2011 to 2012. Common pool vessels took 726 (31.9%) fewer groundfish trips, with 531 (35.4%) fewer days absent on groundfish trips. Non-groundfish effort increased slightly for sector vessels and decreased for common pool vessels from 2011 to 2012. Sector vessels took 295 (1.8%) more non-groundfish trips, with 705 (4.6%) more days absent on these trips. Common pool vessels took 1,447 (8.6%) fewer non-groundfish trips, with 71 (0.6%) fewer days absent on these trips (Table 1).

## 2. LANDINGS AND NOMINAL REVENUES

Nominal revenues are an important indicator of financial performance, all other things being equal. In commercial fishing, gross nominal revenues are a function of the amount of fish landed and the price paid at the time of sale. Prices paid by dealers vary by species and may fluctuate as a result of short and long term market changes. Annual changes in gross nominal revenues can result from three different factors: changes in prices paid for fish at the dock, changes in quantity of landings, and changes in the species composition of the landings. Flexibility to target specific species and/or market categories at times when market values are high can be important in maximizing gross fishing revenues. Information is provided below on landings, overall nominal revenues, and nominal prices in 2012 compared to those in 2009 through 2011. Aggregate revenues in Table 2 are also provided in 2010 (real) dollars using the GDP Implicit Price Deflator.

### 2.1. Landings

The groundfish fleet experienced a marked decline in groundfish landings in 2012, with little growth in non-groundfish landings from 2011. Total landings of all species on all trips were 258.3 million pounds in 2012, a decrease from 2011 (272.9 million pounds), but higher than in 2009 (254 million pounds) and 2010 (232.4 million pounds) (Table 2). Total groundfish landings on all trips decreased to a four-year low of 46.3 million pounds in 2012, compared with 61.7 million pounds in 2011, 58.2 million pounds in 2010, and 68.4 million pounds in 2009. Total non-groundfish landings on all trips in 2012 were 212 million pounds, a four-year high, but less than 1% greater than in 2011. Groundfish landings accounted for only 18% of total landings in 2012 down from 23% of total landings in 2011 (Table 2).

Total landings in 2012 of all species on groundfish trips decreased to a four-year low of 73.8 million pounds (Table 3). Groundfish landings on groundfish trips also decreased to a four-year low of 46.2 million pounds<sup>14</sup>. Non-groundfish landings on groundfish trips decreased to 27.5 million pounds, compared with 28.8 million pounds in 2011, 23.1 million pounds in 2010,

---

<sup>14</sup> Note that almost 100% of groundfish landings occurred on groundfish trips. For that reason, groundfish landing values for all trips and groundfish trips are nearly identical.

and 31 million pounds in 2009. The landings data indicate that in 2012 the groundfish fleet had difficulty substituting non-groundfish landings for declining groundfish landings.

## 2.2. Gross Nominal Revenues

Gross nominal revenues for the groundfish fleet further indicate that groundfish fishermen were unable to use non-groundfish revenues to offset their losses in groundfish revenues in 2012. Total gross revenue in 2012 from all trips was \$305.5 million, a decrease from 2011 (\$330.8 million), but higher than in 2009 (\$262.9 million) and 2010 (\$293.8 million) (Table 2)<sup>15</sup>. Groundfish revenue in 2012 decreased to a four-year low of \$69.8 million (22.9% lower than in 2011). Non-groundfish revenue decreased to \$235.7 million (2% lower than in 2011), but was still higher than in 2009 and 2010.

Total nominal revenue from all species on groundfish trips in 2012 was \$95.4 million, a four-year low (Table 3). Groundfish revenue on groundfish trips in 2012 was \$69.7 million, also a four-year low. Non-groundfish revenues on groundfish trips decreased in 2012 to \$25.8 million, from \$31.8 million in 2011. Non-groundfish revenue earned on groundfish trips was higher than it was in 2010 (\$22.3 million), but essentially the same as it was 2009 (\$25.9 million) (Table 3).

### 2.2.1. Nominal Revenues by Landing Port and Home Port

Most Northeast states experienced decreases in all species nominal revenues in 2012, both from the perspective of state of landing and home port state (Table 4 and Table 5). For landed state revenues, Connecticut and Maine were the exception, with landed all species revenues at four-year highs. In terms of all species revenues by home port state, only Connecticut saw an increase, also reaching a four-year high. In New Jersey, all species revenues by home port state remained constant in 2012 from 2011. All other landing and home port states saw decreases in all species revenues in 2012. New Hampshire, in particular, was at a four-year low in 2012 for all species revenues from landed fish (Table 4 and Table 5).

Groundfish nominal revenues increased in 2012 in the landing port states of Connecticut, Maine, New Jersey, and New York. Connecticut, Maine, and New Jersey also achieved four-year highs. All other landing port states saw groundfish revenues decline in 2012, with Massachusetts and New Hampshire experiencing four-year lows (Table 6). Groundfish revenues by home port state dropped significantly in 2012 for all Northeast states, with all but Maine also hitting four-year lows (Table 7). The largest percentage drops from 2011 to 2012 occurred in the home port states of Connecticut (68% reduction), New Jersey (55% reduction) and New York (48% reduction) (Table 7).<sup>16</sup>

By port of landing, the nominal value of landings of all species at each of the major landing ports in New England (Boston; Chatham; Gloucester; New Bedford; Portland; Pt. Judith) declined in 2012 with the exception of Portland, Maine which reached a four-year high. Gloucester and Chatham, Massachusetts both experienced four-year lows in terms of all species

---

<sup>15</sup> To provide a sense of the influence of inflation on revenue changes, revenues in Table 2 are also given in 2010 dollars (deflated by the GDP Implicit Price Deflator).

<sup>16</sup> These declines may be partially due to the impacts of Superstorm Sandy, which occurred in late October 2012.

revenue from landed fish. Gloucester revenues from landings decreased by almost 25% and Chatham revenues decreased by 20% since 2011 (Table 4).

Groundfish nominal revenues dropped in 2012 for all of the major landing ports in New England except Portland, Maine which achieved a four-year high. All major landing ports in Massachusetts hit four-year lows in 2012. The landing port of Chatham had the largest percentage decline in groundfish revenues (59% reduction) (Table 6).

By home port, the nominal value of landings of all species at each of the major landing ports in New England decreased in 2012, with Gloucester experiencing a four-year low (Table 5). Groundfish revenues by home port fell in 2012 for all major New England ports, with all but Portland, Maine hitting four-year lows. Chatham, Massachusetts experienced a 63% decrease in groundfish revenues as a home port in 2012 (Table 7).

Groundfish nominal revenues for 2012 by port landed are displayed in Figure 1. Groundfish nominal revenues for 2012 by county landed are displayed in Figure 2.

### 2.2.2. *Nominal Revenues by Species*

In 2012, nominal groundfish revenues from American plaice, winter flounder, redfish, and white hake increased modestly from 2011 levels. Revenues from cod, haddock, yellowtail flounder, witch flounder, and pollock all decreased in 2012. Cod and haddock revenues experienced very significant drops, falling to four-year lows (45% reduction for cod; 62% reduction for haddock from 2011) (Table 8). Given higher average prices in 2012 for cod and haddock, these reductions in revenue can be attributed to sharp declines in landings (Figure 4).

The eleven non-groundfish species with the highest landings by limited access groundfish vessels are presented in Table 9. Sea scallop landings and prices held constant in 2012 resulting in a less than 1% increase in revenue. Sea scallop revenue (\$90 million) accounted for 29% of total revenue for all species and 38% of revenue from non-groundfish species in 2012 (Table 2 and Table 9). Loligo squid and lobster had the largest overall gains in revenue in 2012 (\$3.1 million for loligo squid; \$2 million for lobster). Since average yearly prices dropped in 2012 for loligo squid and lobster, the increased revenues can be attributed to higher landings. The non-groundfish species with the largest percentage gain in 2012 was spiny dogfish (36%). Monkfish and illex squid saw the steepest declines in nominal revenue in 2012, with monkfish dropping by \$6.7 million (31%) and illex squid dropping by \$2.8 million (66%). These reductions can be attributed to both lower prices and landings. Changes in revenues for the non-groundfish species balanced each other out for the most part in 2012, resulting in a relatively modest \$4.6 million decrease compared with the \$20.7 million decrease in groundfish species revenue. However, even small declines in total non-groundfish revenues are especially notable in 2012 because this means that many groundfish fishermen were unable to offset the significant drop in groundfish revenues with revenues from non-groundfish landings, particularly if the composition of non-groundfish species they landed were heavily dominated by skates, silver hake, scup, illex squid and monkfish (Table 2).

## 2.3. Prices

In 2012, the nominal average price of the nine allocated groundfish species (as a group) increased slightly, reaching a four-year high, while the nominal average price of all non-groundfish species (as a group) declined slightly (Figure 3). The average nominal price for

redfish decreased by about ten cents per pound from 2011 to 2012 and the average nominal price for witch flounder changed very little. All 7 of the other allocated groundfish species increased in price in 2012, with the largest increase being \$0.71/lb for haddock (Figure 4).

Using simple average nominal prices of all groundfish species combined to compare changes in prices over time may be misleading because this average does not account for annual changes in the quantity and mix of groundfish species landed. A price index was therefore constructed to more accurately reflect price trends of groundfish species. The approach used the “Fisher Ideal” index (Balk 2008), which was constructed from price and quantity data recorded in dealer purchases of all groundfish species. Quarterly data were used in all fishing years from 2007 through 2012. May-July (quarter one) of 2007 was set as the base period, with a value of 1.0.

The index values (Figure 5) show how combined nominal prices have changed in relation to quarter one 2007 nominal prices. A value less than one means that prices are lower compared to the base time period, while a value greater than one indicates that prices have increased relative to quarter one in 2007. In 2012, the quarterly adjusted groundfish price indices increased in quarters 1 and 2, decreased in quarter 3, and then reached a six-year high in quarter 4.

### **3. NUMBER OF VESSELS AND EFFORT**

Effort indicators provide information about the amount of fishing that occurred to produce the landings. In this report, three indicators were used to measure fishing activity and effort: the number of active fishing vessels, the number of fishing trips, and the number of days absent from port.

#### **3.1. Number of Vessels**

The number of active vessels in the groundfish fleet continued to decline in 2012. Both the number of vessels with revenue from any species and the number of vessels with revenue from a groundfish trip continued to fall. The total number of groundfish limited access eligibilities fell by 56 eligibilities in 2009-2012. In addition, the numbers of eligible vessels that did not renew a limited access groundfish permit has increased over the 2009-2012 period. The percentage of inactive vessels with a limited access groundfish permit has remained around 35-40% over the 2009-2012 period, with 2012 having the lowest percentage of inactive vessels (35%) in the four year span. Both the number and the percentage of groundfish limited access eligibilities placed in Confirmation of Permit History (CPH) have grown over the 2009-2012 period. In 2012, 60 additional eligibilities were placed in CPH, a 35.7% increase from the number of eligibilities in CPH in 2011 (168 eligibilities). In 2009, 81 eligibilities (5.5% of total eligibilities) were placed in CPH. By 2012, there were 228 eligibilities in CPH, accounting for 16.2% of the total number of eligibilities (Table 10).

The number of vessels with revenue from any species fell from 776 vessels in 2011 to 764 vessels in 2012 (1.5%). Since 2009, the number of vessels with revenue from any species has fallen 16.6%, with the fishery losing 152 active vessels. The number of vessels with revenue from a groundfish trip declined 4.3% from 2011 to 2012 (419 to 401 vessels). Over 2009-2012, the number of vessels with revenue from a groundfish trip fell from 566 vessels in 2009 to 401 vessels (29.2%) (Table 10).