

Ask the lobster doc

by Diane Cowan, PhD
Senior Scientist, The Lobster Conservancy, <www.lobsters.org>
This column provides lobster health and handling information.

If you have questions or concerns, contact Cowan at (207) 832-8224 or e-mail <dcowan@lobsters.org>.

Maine lobster landings by county

The Maine Department of Marine Resources has kept state lobster landings records for the last 50 years, collected from dealers who reported voluntarily. Starting in 2004, however, dealers are required to account for all the lobsters they purchase.

Mandatory reporting will provide indispensable data without which there is little hope of understanding the complex relationships among fishing, environment, ecosystem, and lobster abundance that drive the magnitude of landings.

Until then, it is prudent to approach the interpretation of landings records with a critical eye that recognizes their shortcomings. The usefulness of the voluntarily reported historic records lies in detecting long-term decadal trends rather than tearing apart the short-term details.

This is the first in a series of columns

that will discuss the putative explanations for why Maine lobster landings have tripled in the most recent decade.

From 1964 until the late 1980s Maine lobster landings were relatively flat. Since then a wave of increase appears to follow a pattern that runs from Knox to Hancock, then Washington County – the northeastern most counties. During the 1960s and 1970s Knox and Hancock counties ran neck and neck for the highest landings. In the 1980s Cumberland County started to outrank Hancock and nearly rivaled Knox.

Although landings reached record highs throughout Maine during the 1990s, Knox left all other counties in its wake. Cumberland and Hancock competed for second place until Hancock raced ahead of Cumberland in the late 1990s. Currently, Washington boasts the third highest landings by county.

The landings in all of the Maine counties currently remain above pre-boom levels.

What can the landings tell us?

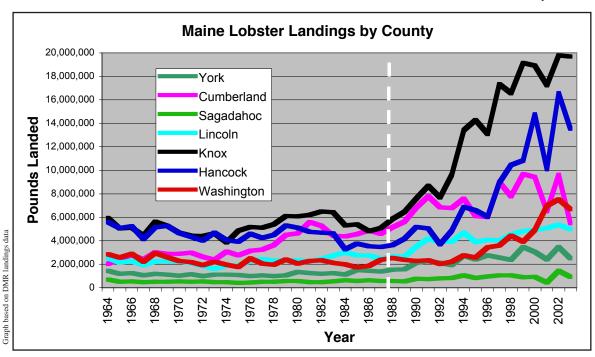
Landings provide information regarding the economic value of the lobster resource based on how many lobsters are harvested and the price dealers pay for the catch.

Although it is tempting to deduce that landings reflect abundance, the relationship between the number of lobsters left on the bottom vs. the number harvested is poorly understood. In addition to accurate reporting, fishing pressure, management measures, environmental conditions, and ecosystems dynamics together shape the landings records.

Many theories have been put forth to

explain the recordhigh landings, assuming that they are reflecting record-high harvests. These include changes in fishing effort, new management measures, the elimination of large fish predators, the influx of bait into inshore waters, larval dispersal, and the various environmental conditions affecting lobster survival and growth.

Next month's "Ask the Lobster Doc" column will explore how changes in fishing effort may account for some of the fluctuations in the magnitude of lobster landings.



Maine lobster landings from York (southwestern most) to Washington (northeastern most) counties. Lobsters captured in Knox County currently account for more than one-third of the lobster landings reported to the Maine Department of Marine Resources. The vertical white line indicates the beginning of a general increase in Maine lobster landings.