



Ask the lobster doc

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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>.

Counting lobsters: 2005 census

The Lobster Conservancy's (TLC) Juvenile Lobster Monitoring Program (JLMP) began at one site where lobsters have been monitored and tagged for 13 years. Eleven years ago, volunteers became involved, some of who have

been monitoring sites for nine years. The JLMP includes at least one site in each of Maine's seven lobster management zones plus several sites in New Hampshire and Massachusetts.

During 2005, TLC volunteers and

staff censused 25 sites in the Gulf of Maine from Scituate, MA to Great Wass Island, ME. Each month's lobster census consists of visiting sites during the lowest tides, stretching a tape measure along the waterline, and using a square meter quadrat to sample one piece of bottom after another.

The technique for sampling lobsters is to flip rocks within 10 to 20 quadrats and capture the lobsters hiding beneath the rocks. Each lobster is measured, its distinguishing characteristics are recorded, and it is returned to its hiding place. Lobsters are also tagged at two sites.

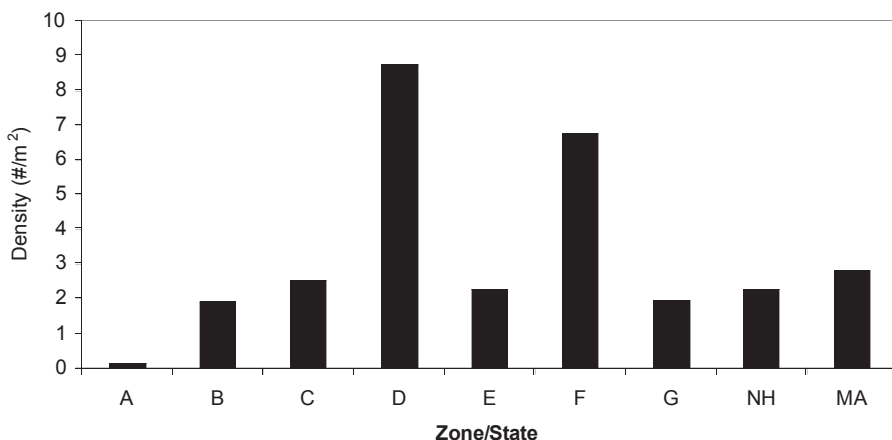
At most locations, juvenile lobster densities have increased over the years, with many reaching their highest peaks in 2005. By far, the highest densities were recorded at Zones D and F and lowest in Zone A. In 2005, settlement was observed at 11 sites and first-year lobsters were observed at 21 of 25 sites. Larger juvenile lobsters were captured at all sites.

There continues to be a strong seasonal cycle to the presence of lobsters. Densities are highest in the summer and fall and lowest during the winter months. It is notable that juvenile lobster densities were higher at Lowells Cove in the 2004 and 2005 winter months than in most previous years – when juvenile lobsters were barely detectable.

It is also interesting that we found the first postlarvae (the stage of the lobster's life cycle that settles to the bottom) to be detected in January. To date, we have observed settlement in each month of the year, with the exception of May and June. Although most settlement occurs in August of each year, finding postlarvae from July to April indicates that embryos must be hatching throughout most of the year.

These results are intriguing and warrant further investigation. They also point out the benefits of sampling throughout the year – most notably allowing us to detect shifts in the timing of events. ■

2005 Juvenile Lobster Peak Densities



Diane Cowan graphics

Peak juvenile lobster densities recorded at monitoring sites in the Gulf of Maine listed east to west from each of Maine's Zones and along the New Hampshire and Massachusetts coast.

Juvenile Lobster Densities

