

Lobster Recruitment Trap Project And Commercial Trap Sampling Project

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Overview of Project

The Goal of the project was to provide an index of the number of lobsters that will moult into the legal size in the coming seasons.

The project began as a 5 year project in the Spring of 1999. After a review of the data and its uses, it was continued for the foreseeable future.

The Lobster Recruitment Project involved fishermen from LFAs 27-35 who fish standard traps in fixed locations. The fishermen use a special measuring gauge and record the size and sex of the lobsters in the “science” traps. They also monitor the bottom temperature using a VEMCO minilog attached to one of the science traps. The traps are wire with one inch mesh and have no escape mechanisms.

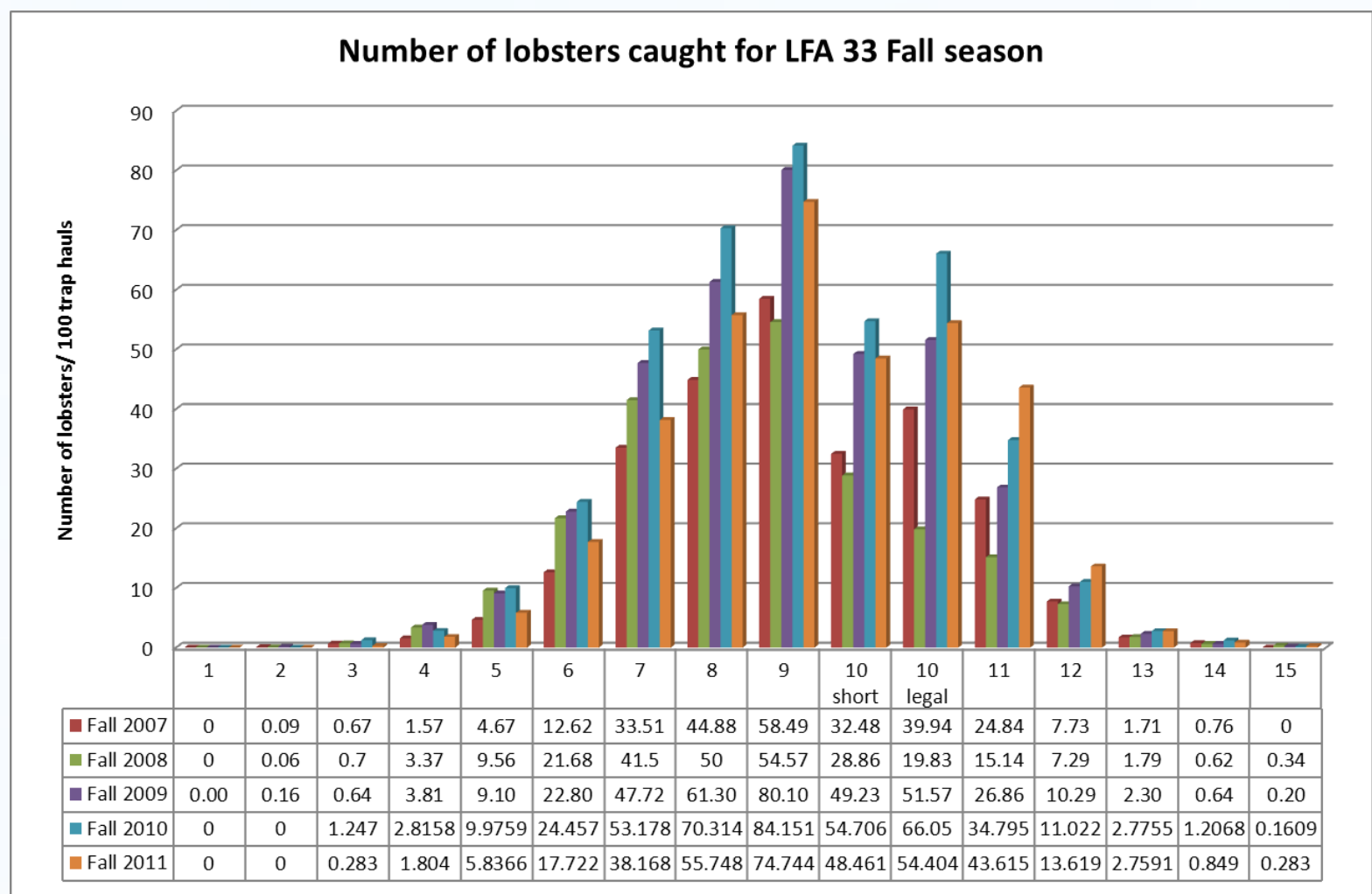
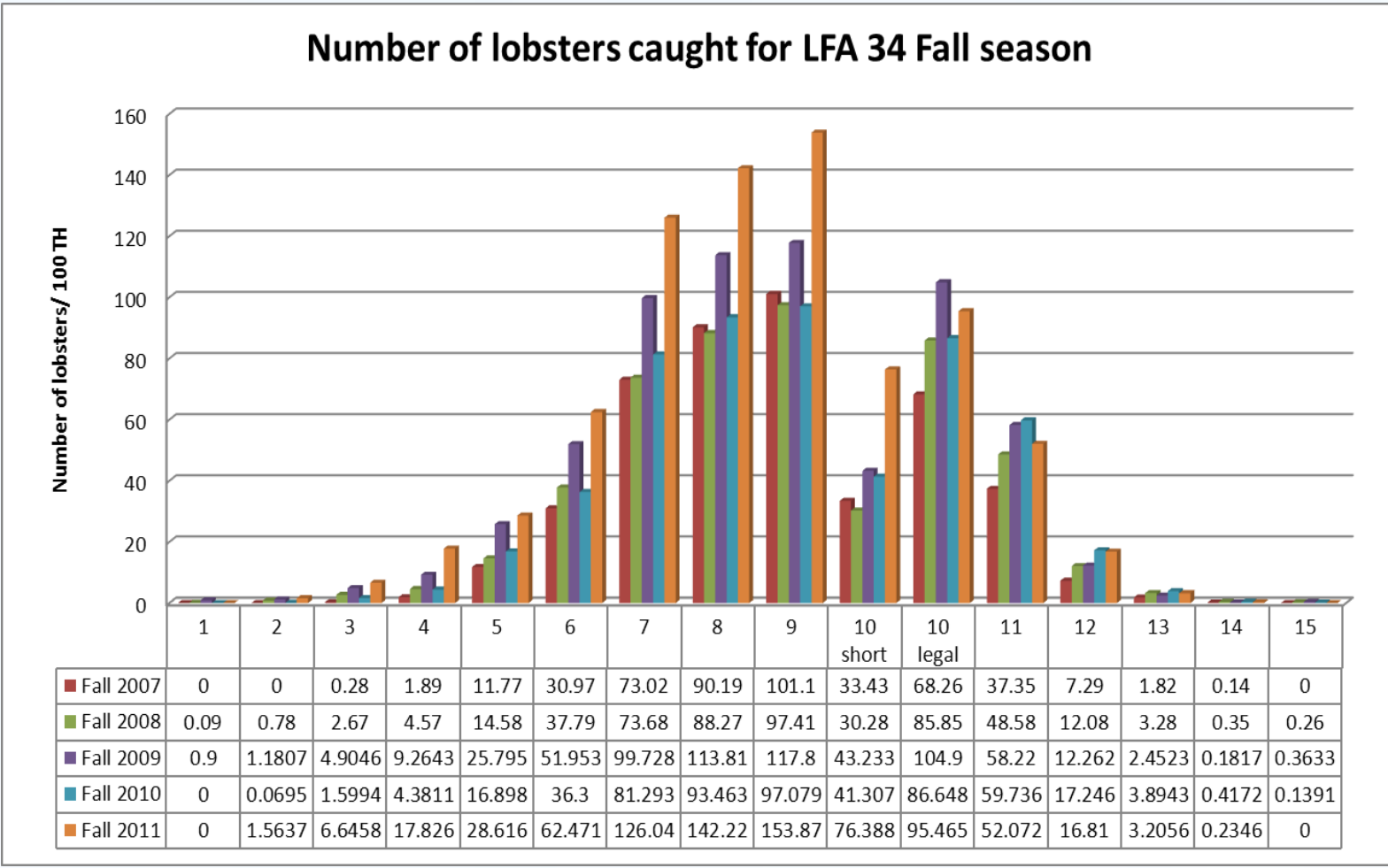
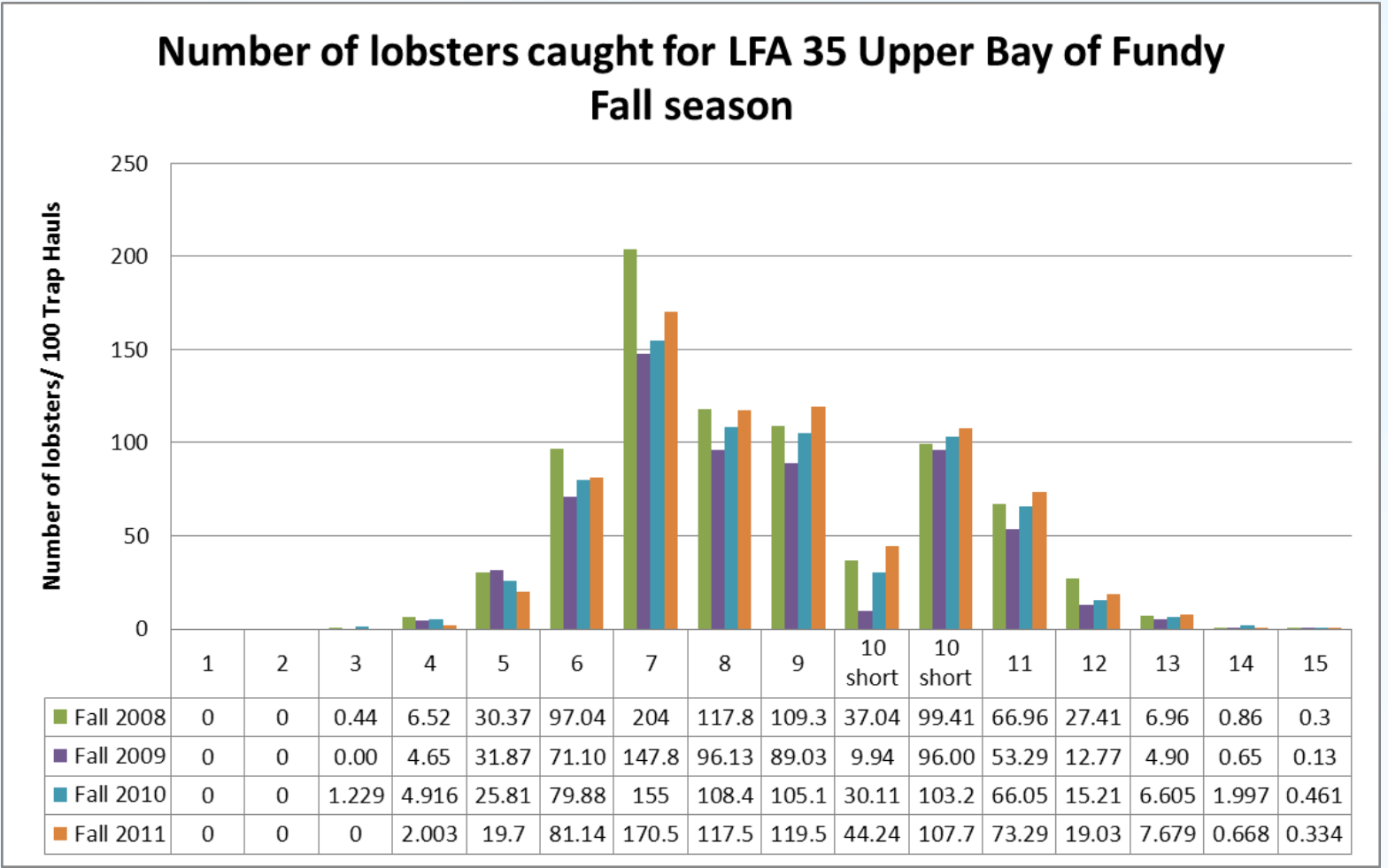
The measuring gauge currently used is divided into 15 units and the fishermen record in a logbook the size range of the lobsters caught in the traps. Before Fall of 2003, the gauge was broken into 8 size units but it was decided that these did not reflect all the sizes that were being caught by the fishermen.

Participants in LFA 33 also participate in a Commercial Trap study where they use three of their own commercial traps and record the size ranges caught using the special measuring gauge

Over the last few years, this valuable data collected by fishermen themselves is being used as an assessment tool for the Fisheries and Oceans Canada (DFO) in their assessment of the American lobster stocks.



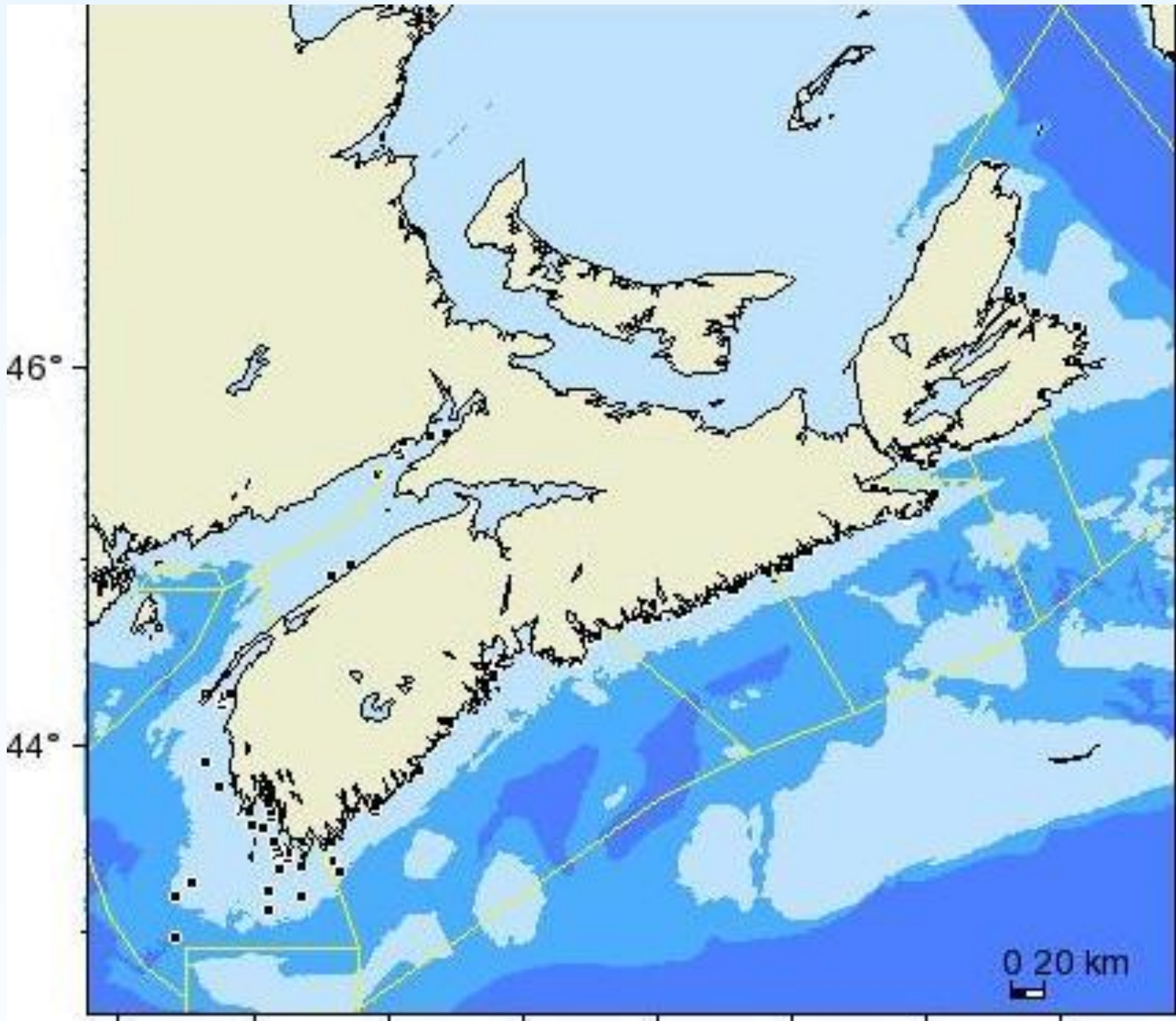
Photos taken by Tricia Pearo, FSRS



Measuring Gauge Size Groupings

- Size 1: less than 10.99 mm
- Size 2: 11mm- 20.99 mm
- Size 3: 21 mm- 30.99 mm
- Size 4: 31 mm-40.99 mm
- Size 5: 41mm- 50.99 mm
- Size 6: 51 mm-60.99 mm
- Size 7: 61mm- 70.99 mm
- Size 8: 71 mm- 75.99 mm
- Size 9: 76 mm- 80.99mm
- Size 10: 81 mm- 90.99 mm
- Size 11: 91 mm-100.99 mm
- Size 12: 101 mm- 110.99 mm
- Size 13: 111 mm- 120.99 mm
- Size 14: 121 mm-130.99 mm
- Size 15: greater than 130.99 mm

** Size 8 and 9 are in 5 mm increments to give a clearer indication of the lobsters just under the legal size limit (82.5 mm).

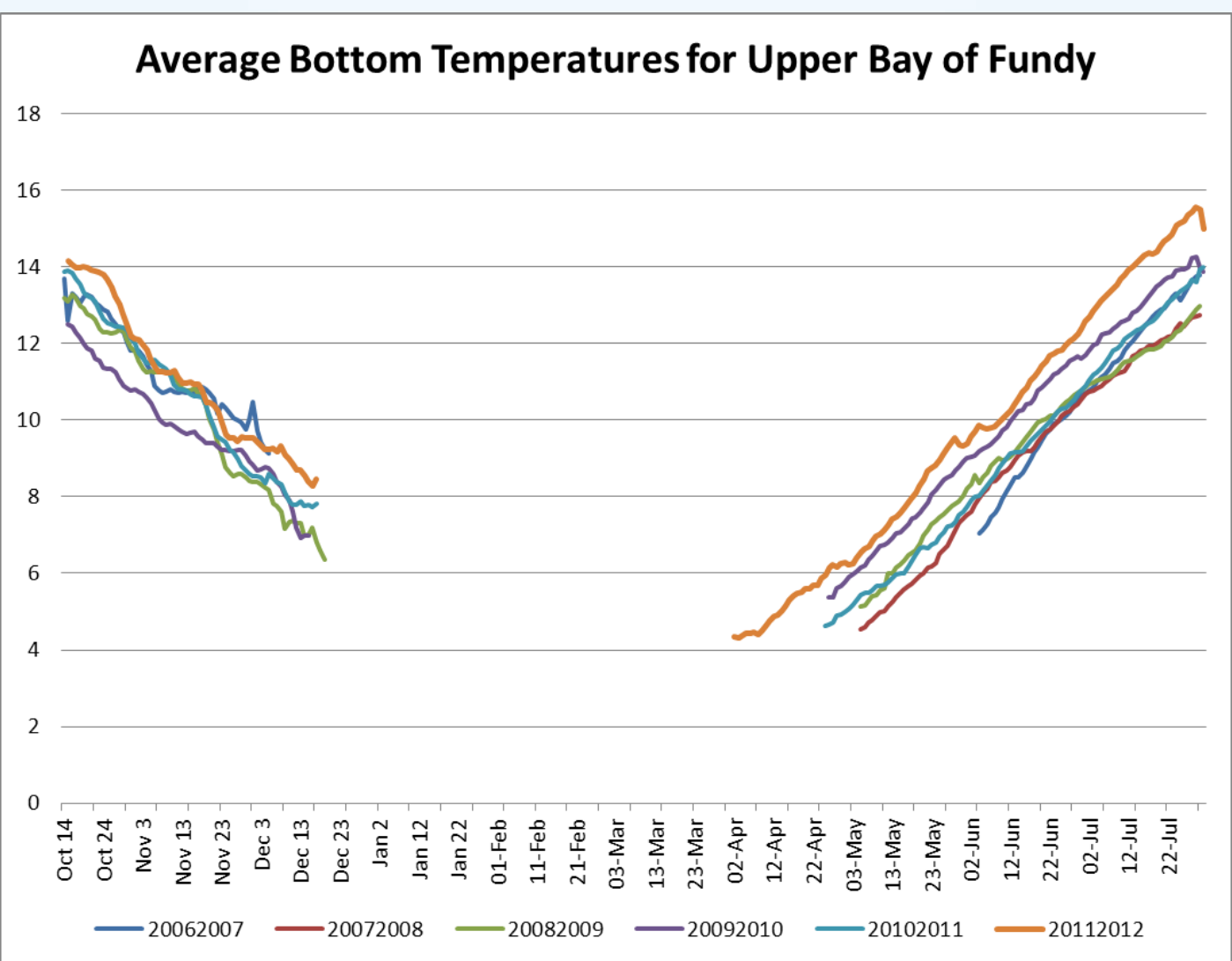


The summary graphs presented on this poster do not show all of the areas sampled. The main sampling area shown are in the SW Nova Scotia and the Upper Bay of Fundy areas. The map above shows the distribution of the FRS recruitment science traps during the Spring fishing season (March- July)when we have representation from all LFAs involved in the study

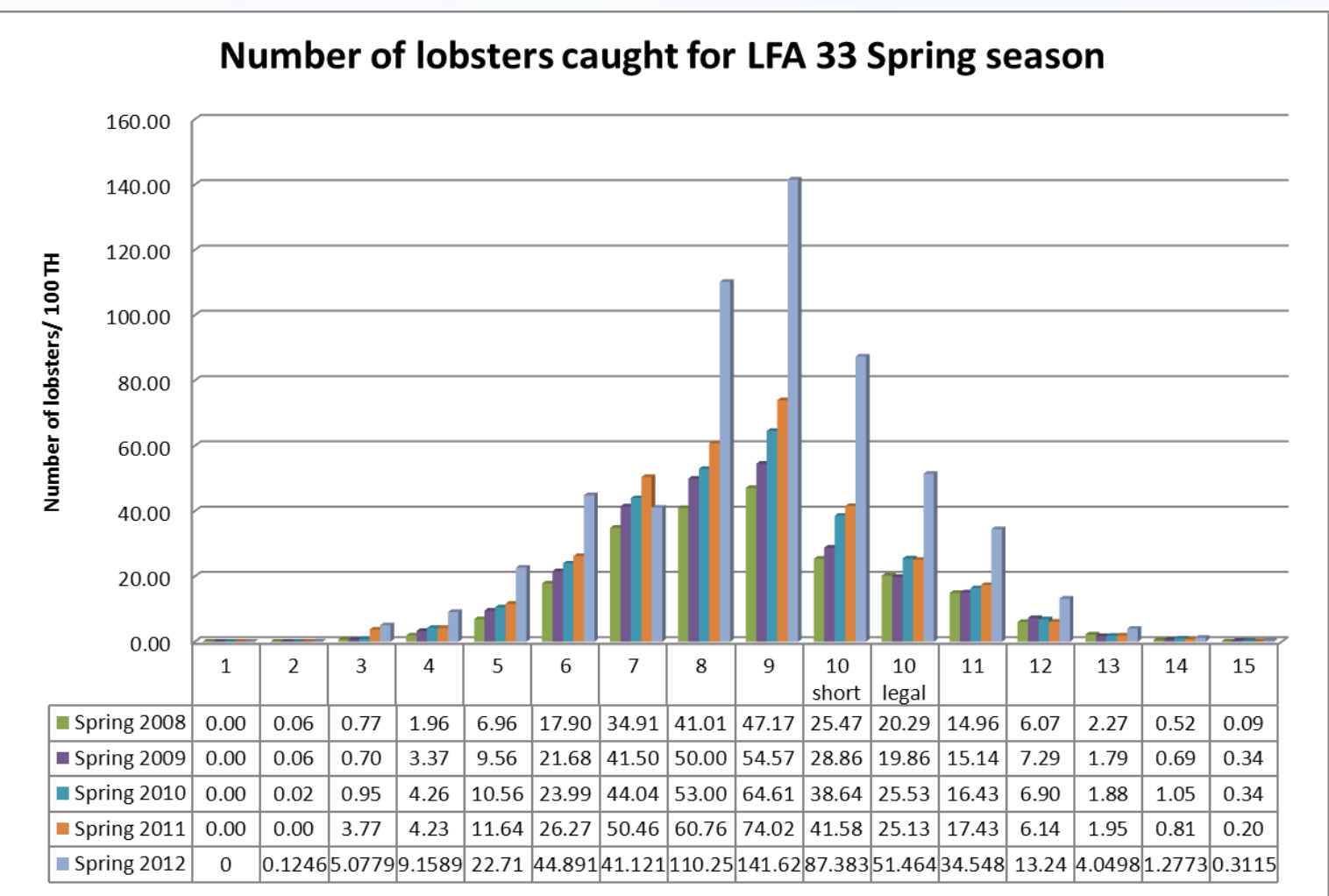
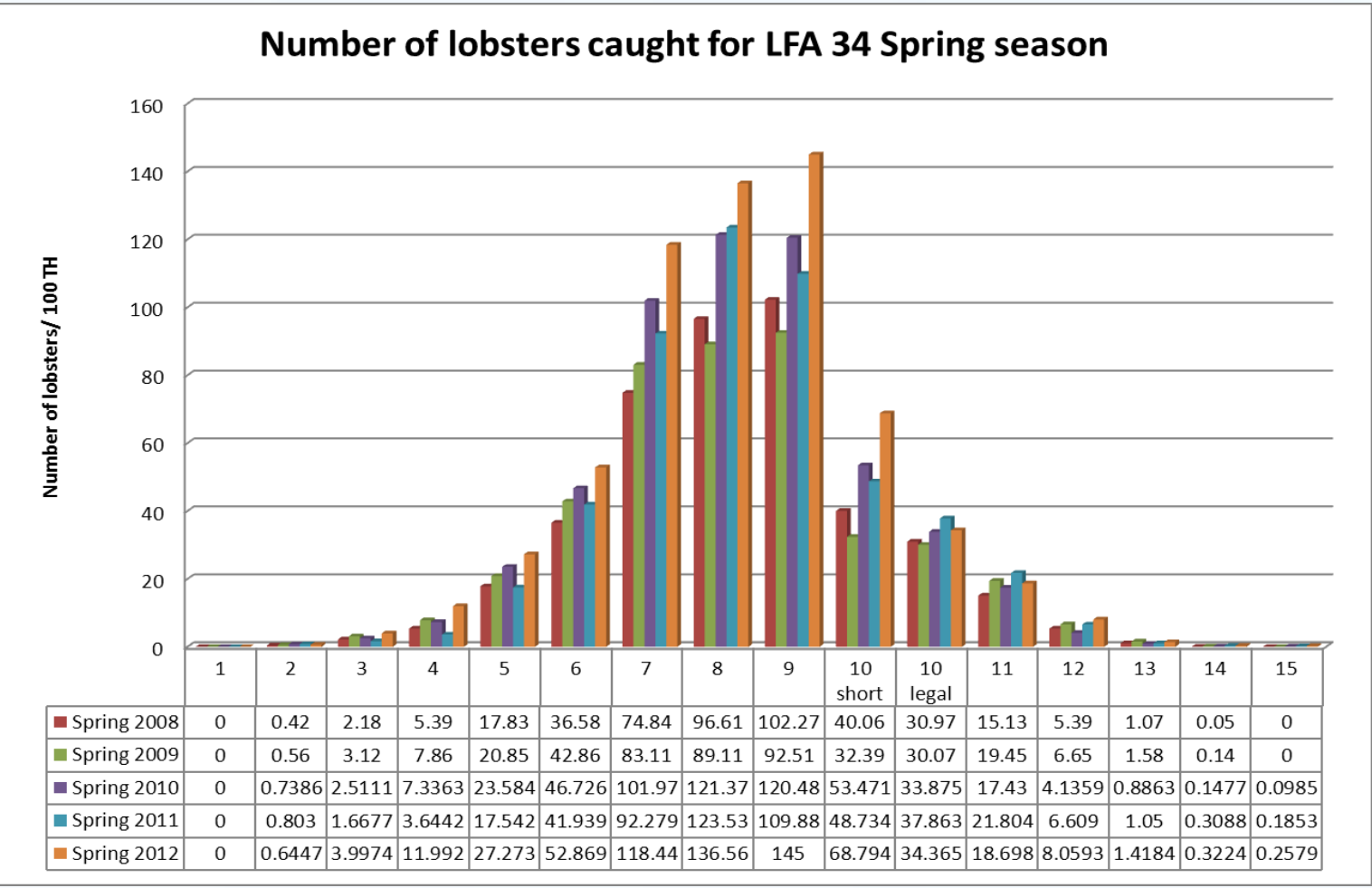
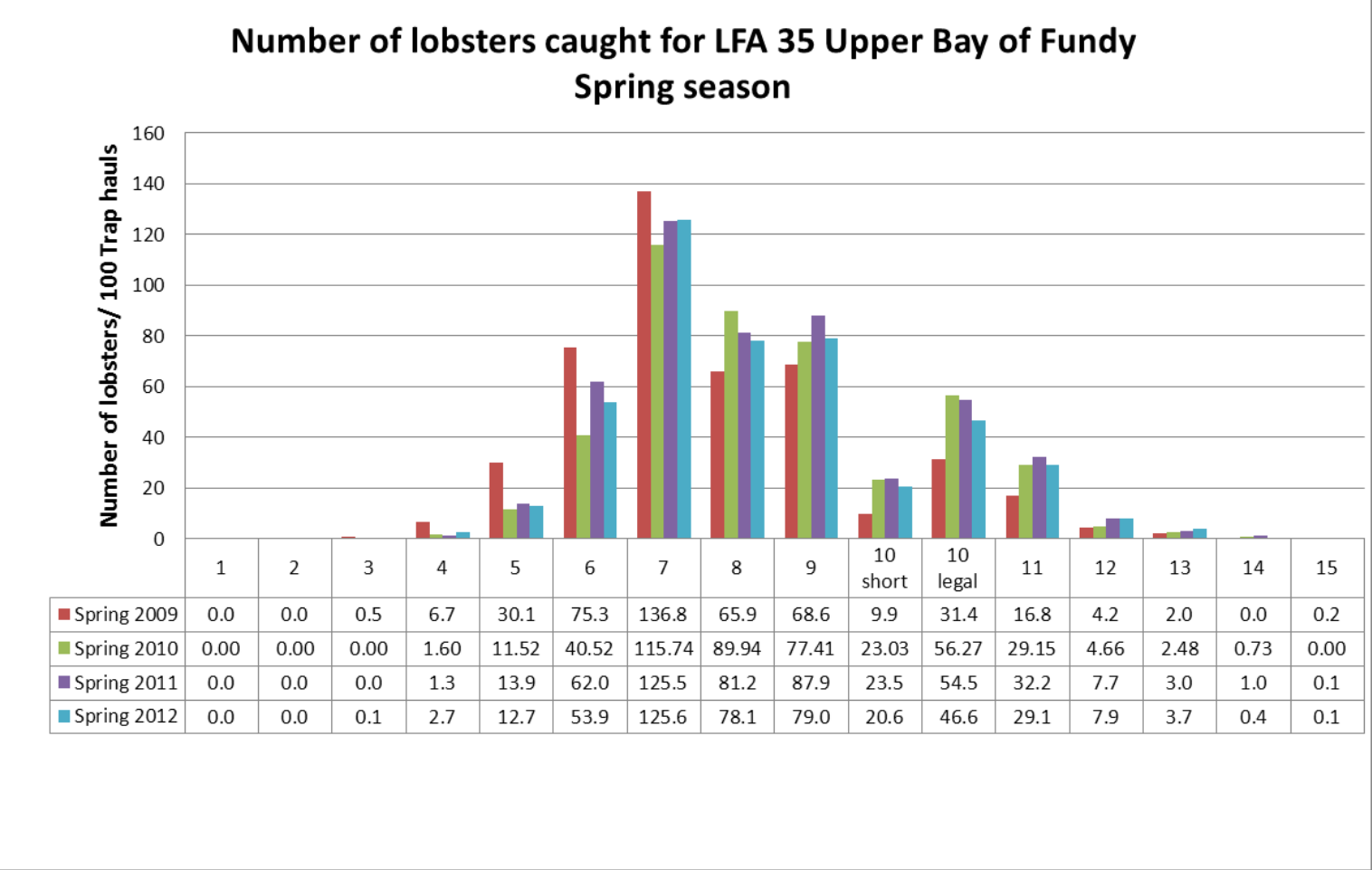


Lobster Recruitment project trap measures 14"x 21"x 40". It has 1 " mesh, no escape vents and a biodegradable panel

Photo provided by Shaun Allain, FSRS



Example graph showing bottom temperatures recorded in the lobster recruitment science trap



Photos taken by Tricia Pearo, FSRS

Lobster Recruitment Results from FALL 2011

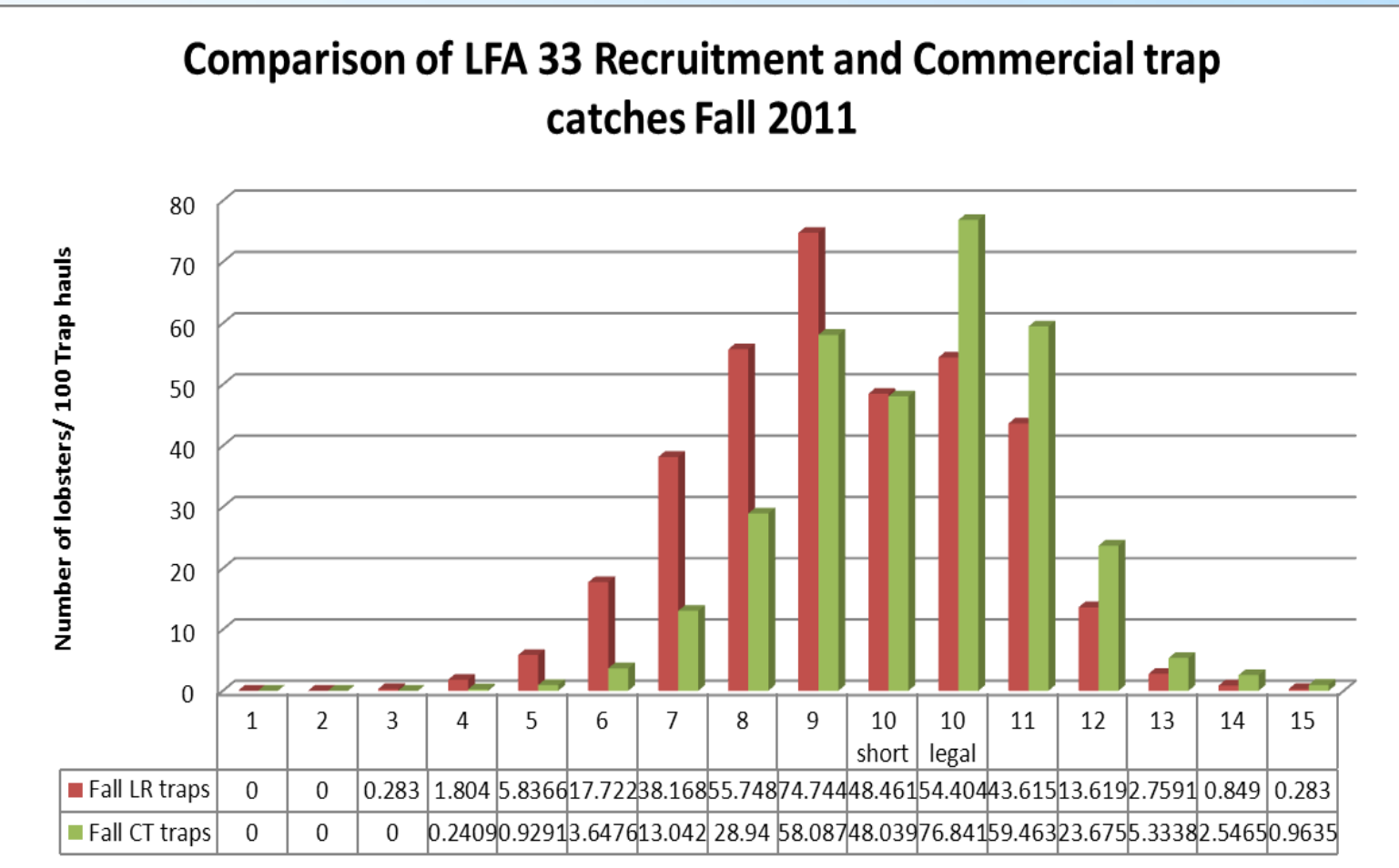
- 72 fishermen participated from LFAs 33, 34 and 35
- 210 project traps were fished
- 4554 trap Hauls
- 24, 473 lobsters measured
- 5.37 lobsters caught per trap haul

Lobster Recruitment Results from SPRING 2012

- 147 participates from LFAs 27-35
- 564 project traps were fished
- 15,676 trap Hauls
- 53,142 lobsters measured
- 3.39 lobsters caught per trap haul

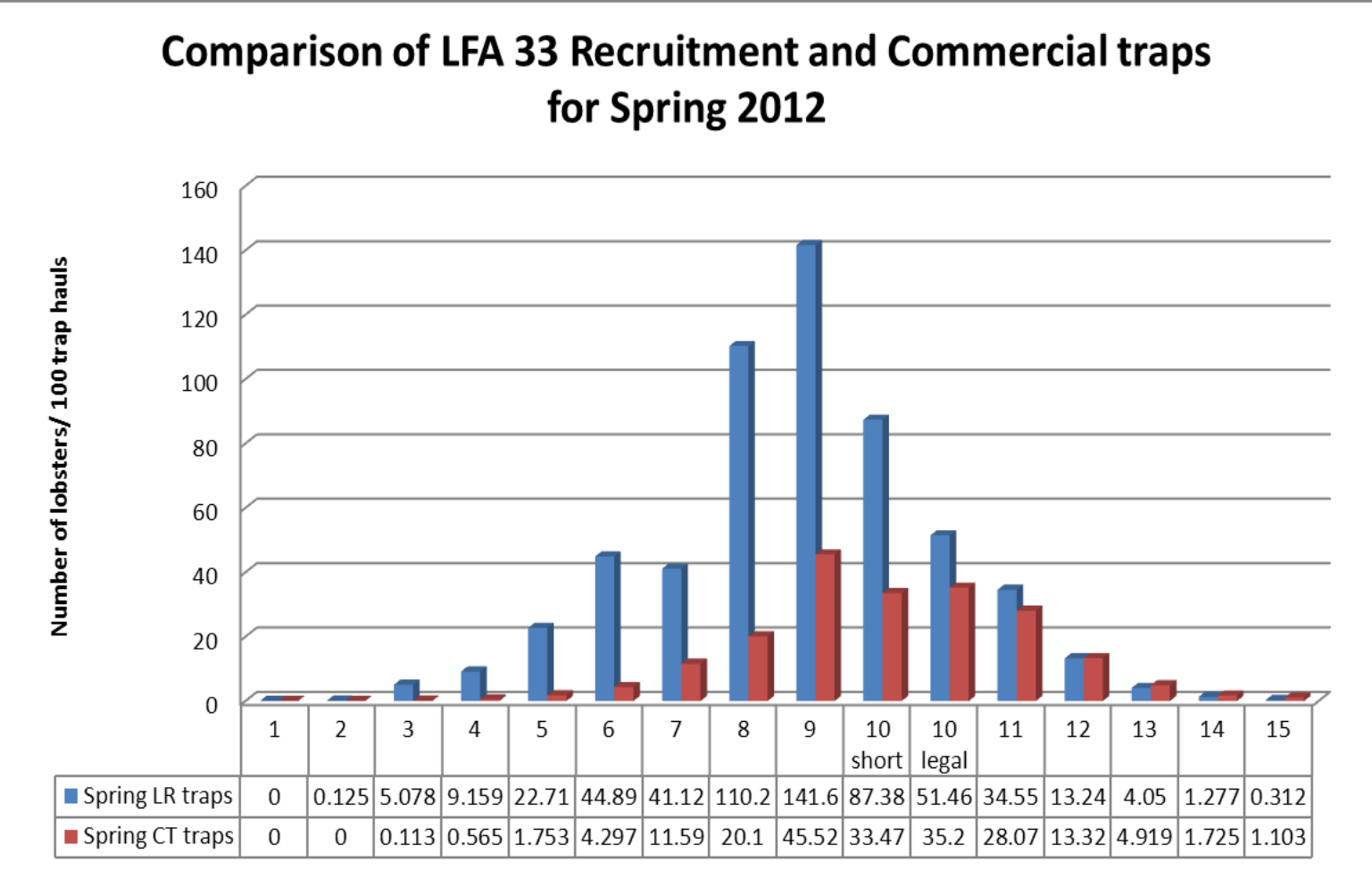
Commercial Trap study Results from Fall 2011

- 41 participants in Fall 2011
- 123 traps sampled, 2906 Trap Hauls, 9350 Lobsters measured
- 3.21 lobsters caught per trap haul



Commercial Trap Study results from Spring 2012

- 38 participants in Spring 2012
- 114 traps sampled, 3537 Trap Hauls, 7136 Lobsters measured
- 2.08 lobsters caught per trap haul



Acknowledgements

The FSRS would like to acknowledge the invaluable support we have received from the fishermen involved in this project. The project would be impossible without all of your efforts. We look forward to continuing to work with all participants and to facing the challenges of scientific work together. Special thank you for the photos provided by Shaun Allain, Tricia Pearo.

For additional information on this project:
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