

LFAs 33/34 MOULT & QUALITY MONITORING PROJECT

~NOVEMBER 2008 UPDATE~

Monitoring of lobster blood protein levels, shell hardness and moult stage has now been ongoing since the summer of 2004 with pre-, during and post-season sampling. The monitoring currently includes 15 areas in LFAs 33/34 with more than 66,000 lobsters sampled to date. The information collected for this project is available on the Internet and allows people to look at lobster sex, size, blood protein, moult stage and shell hardness by sampling location or date. Below is a breakdown of 10 pre-season sampling locations showing mean blood protein levels, % lobsters in active pre-moult and % hard shell lobsters for 2008 compared to similar dates in 2007 and 2006.

	Argyle Inshore			Argyle Outside (Jacquard's Ridge)			Yarmouth Inside			Yarmouth Outside		
Sampling date	Oct 31 2008	Oct 24 2007	Nov 08 2006	Nov 01 2008	Nov 09 2007	Nov 7 2006	Oct 30 2008	Nov 01 2007	Nov 09 2006	Oct 28 2008	Oct 31 2007	Oct 25 2006
Average blood proteins	10.0	10.3	9.4	9.8	9.7	8.8	9.4	9.6	8.7	9.5	8.2	8.1
% active pre-moult	1.5%	0%	0%	4.0%	0%	30.5%	0%	1.5%	0%	0%	0.5%	0.5%
% hard-shell	70.5%	72.5%	59.5%	77.5%	71.5%	46.8%	69.0%	62.5%	63%	32.1%	57.0%	45.5%

	Sambro/Pennant			Port Latour			Cape Sable Isl. Inside			Cape Sable Isl. Outside		
Sampling date	Nov 04 2008	Nov 06 2007	Oct 27 2006	Oct 14 2008	Oct 16 2007	Oct 10 2006	Nov 01 2008	Nov 12 2007	Nov 07 2006	Oct 31 2008	Nov 13 2007	Nov 06 2006
Average blood proteins	9.5	9.9	7.4	8.1	7.9	8.4	7.9	7.7	8.5	7.8	7.5	8.6
% active pre-moult	0.5%	10%	0.5%	0%	0.5%	0%	0%	1.5%	0%	0.5%	2.0%	0%
% hard-shell	85.0%	n.a.	77.8%	75.5%	93.0%	72.0%	47.5%	42.5%	61.0%	52.0%	11.5%	51.0%

	St Mary's Bay			Bay of Fundy		
Sampling date	Oct 24 2008	Nov 08 2007	Nov 06 2006	Oct 25 2008	Nov 09 2007	Nov 01 2006
Average blood proteins	10.7	11.5	11.4	9.8	10.3	7.5
% active pre-moult	0%	7.0%	0%	0%	1.5%	0.5%
% hard-shell	83.5%	81.5%	71.5%	68.5%	72.5%	44.0%



What can we expect from the 2008 fall season?

This monitoring project is still in its infancy in terms of predictive value. This is now the second year that we have been able to look at the information collected and attempted to predict with some level of certainty the type of product landed come the last week of November.

Based on the pre-season sampling, it seems that this coming season should be very similar to the 2007 and 2006 fall commercial seasons in terms of quality and proportion of soft-shelled lobsters.

Overall, when comparing the information from 2006 and 2007 with the 2008 pre-season sampling, we notice that most locations have very similar numbers. However, some conspicuous locations are Yarmouth Outside and both Cape Sable Island Inside & Outside; these three locations still had a significant number of lobsters that were not categorized as 'hard-shell.' Additionally, the sample collected on October 28, 2008 in Yarmouth Outside showed only 32% of hard-shell lobsters while this figure was estimated at 57% for the same time of the year in 2007. Finally, the only location with some residual lobsters in active pre-moult in mid-October 2008 is Argyle Outside with 4% of the sample falling in that category, while none of the lobsters sampled in mid-October 2007 were in active pre-moult. It is expected that these lobsters would have been moulting shortly after the sampling date and therefore, could show up as soft shell lobsters if caught at the opening of the commercial season.

Note: Only the latest sampling dates are shown here. The overall pattern throughout the year for the parameters monitored was considered when predicting the quality of the LFAs 33/34 2008 fall season. Confidence is highest for those locations where sampling was done closest to the season start.



WWW.LOBSTERSCIENCE.CA/MOULT

AVC Lobster Science Centre
550 University Avenue - Charlottetown - PEI - Canada - C1A 4P3
Tel: (902) 894-2887 - Fax: (902) 894-2885 - Lobster@UPEI.ca - www.LobsterScience.ca