Survey index replies:

* Migration timing mismatch hypothesis - Spring 3L survey abundance has been driven by numbers of immature fish. These fish are not likely to be undergoing spawning migrations. The shift in maturity composition seen post 1992 is a result of increase in maturing age 2 fish. NAFO Div 3L (survey) is primary area for fish of a certain size.
* Declines in spring numbers would have to reflect a change in migration of immature fish

Seasonal surveys in Trinity Bay in 2000s revealed no large overwintering aggregations, although most overwintering fish were juveniles. There is some evidence of shifting of biomass between bays and offshore, however inshore abundance not near the lost 6 million

* Southerly shift in distribution coincident with environmental variables but also truncated age composition.
* Spring surveys repeated in June in two years (1991 and 2003). In both cases the biomass intercepted was not significantly different from the May survey. Coincident surveys north and south of the survey area in 2010 located little capelin.
* Multi-stock comparisons. Norwegian survey is for both immature and recovering fish. Fixed in time. Icelandic survey has temporally fixed survey for immature fish and separate survey for pre-spawning aggregations. It is the survey for the pre-spawning adults which is frequently repeated as migration routes vary.
* Occurrence in fall 2J3K acoustic survey occurred year prior to spring survey decline. This is consistent with a mortality event occurring in the maturing population, as per mechanism suggested in Buren et al.

