



New England Fishery Management Council

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To: Tom Nies, Executive Director
From: Scientific and Statistical Committee
Date: September 24, 2014

Subject: Overfishing levels (OFLs) and acceptable biological catch (ABC) recommendations for sea scallops

The SSC met on September 15, 2014 in Boston, Massachusetts, to address the following terms of reference (TORs):

1. Review and discuss results from the recent scallop benchmark assessment (SARC59) as they relate to new biological reference points
2. Provide the Council with OFL and ABC recommendations for fishing years 2015 and 2016 (default).

To meet these TORs, the SSC considered the following documents:

1. September 15, 2013 SSC Meeting Terms of Reference for Sea Scallops
2. SSC Final Report on OFL and ABC for Scallop Framework 25, December 2, 2013
3. Hart, D.R. Quantifying the tradeoff between precaution and yield in fishery reference points. *ICES Journal of Marine Science*, doi.10.1093/icesjms/fss204.
4. Sea scallop assessment summary for 2014 (SARC59, July 2014)
5. Draft Framework 26 measures under consideration
6. Scallop PDT recommendations for 2015-2016 (default) ABC – memo from the Scallop PDT to the SSC

The SSC received a detailed overview of the SARC59 outcomes, as well as a summary of recent survey results which occurred after the assessment, fulfilling TOR1. Several SSC members raised concerns about the potential for the assessment to overestimate biomass in light of the retrospective patterns observed and the poor fit with survey data in recent years. However, current spawning stock biomass is estimated to be more than 36,000mt, or 37% above B_{MSY} , which means resource status is very strong despite these uncertainties. Therefore, the SSC concluded that additional precaution beyond that incorporated into the current control rule is not warranted.

Accordingly, the SSC recommends the OFLs emerging from the assessment and the ABCs calculated by the PDT using the default control rule. These values, as presented to the SSC, are as follows:

	OFL	ABC
2015	39,127mt	32,119mt
2016	48,489mt	39,836mt

Note that the PDT reported to the SSC that a minor error in the data used for ABC calculations had been detected too close to the SSC meeting to adjust the values. Correcting this error will lead to a modest change in the values in the table above, likely on the order of a few hundred metric tons. The SSC is comfortable with the values above being modified after this correction is made, provided that the changes are indeed minor.

The SSC raised the following recommendation included in its sea scallop report dated December 2, 2013:

Research and updated estimates of incidental mortality of sea scallops should be guided by sensitivity analyses. If warranted by those sensitivity analyses, attention should be paid to changes in estimates since earlier studies due to evolution of fishing gear, as well as size- and substrate-specific rates.

The lead scientist for the assessment reported that sensitivity analyses had been conducted in SARC59, which showed modest effects of changes in incidental mortality rates. Nevertheless, three separate studies are underway to develop updated empirical estimates. The SSC wishes to commend the assessment team on addressing this recommendation.

Summary of recommendations

- 1. OFLs for sea scallops are 39,127mt in 2015 and 48,489mt in 2016.**
- 2. ABCs for sea scallops are 32, 119mt in 2015 and 39,836mt in 2016. Note that these values are likely to change slightly after the PDT correct an error detected recently. The SSC is comfortable with adjustments being made without further review on the assumption that the changes are minor.**