

HMSMT Report on Proposed California Drift Gillnet Fishery Management and Monitoring Plan Including Management Alternatives

Agenda Item H.4.b

HMSMT Report

Pacific Fishery Management Council Meeting

Vancouver, WA

March 2015

2 Statement of Purpose and Need, Goals and Objectives

- While the DGN fishery currently complies with the MSA, ESA and MMPA, the Council seeks to establish more stringent conservation standards with respect to these laws
- The proposed action is to implement management measures for the California large mesh drift gillnet (DGN) fishery to further reduce (1) bycatch including bycatch mortality, and (2) incidental take of ESA-listed species and other marine mammals

2.2 Goals and Objectives

- Goal 1: Reduce specified protected species takes
- Goal 2: Reduce finfish bycatch to the degree practicable
- Goal 3: Maintain an economically viable west coast swordfish fishery

3 Hard Caps Alternatives

- Alternatives 1-3 include 1-year and 5-year hard caps
- Alternative 4 (Council PPA) considers 1-year hard caps
- Caps relate to PBR (marine mammals) or ITS (ESA-listed species)
- HMSMT report Tables 1, 2, 4 and 6 are hard caps for annual M&SI
- Adding hard cap levels for incidental takes to the range of alternatives could require adjusting cap levels to reflect that not all takes are fatal

3.2 Implementation Issues

3.2.1 Determining M&SI Inseason

3.2.2 Expanding Observed Interactions (Takes or M&SI) to Estimated Annual Totals

3.2.3 Future Adjustment of Hard Caps

3.3. Fishery Performance under the Alternatives

- A bootstrap simulation methodology has been developed to analyze hard cap alternatives (HMSMT Report Section 3.3)
- Results to compare the no-action alternative to the Council's preliminary preferred alternative are in Tables 8 and 9
- Use of observer data since 1990-91 (Table 8) and also since 2001-02 (Table 9) for the analysis reflects a tradeoff between potentially better representation of rare event interaction rates due to a longer observation period, or a better characterization of recent (post-2001) fishery operation

4 Fishery Performance Objectives

- A range of alternatives for fishery performance objectives are provided in the HMSMT report
- Performance objectives are not hard caps
- Impacts of performance objectives would depend on the consequences of exceeding them

5 Alternatives for Fishery Monitoring

- The HMSMT report includes a range of alternatives for fishery monitoring
- The Council's PPA maintains the 30% target observer coverage level, removes the unobservable vessel exemption, and proposes to achieve 100% monitoring (human or electronic) by 2018
- The HMSMT estimates requiring DGN vessels to cover all costs of moving to 100% observer coverage would reduce variable profits per day from about \$700 down to \$200 (71% reduction in profits per day)

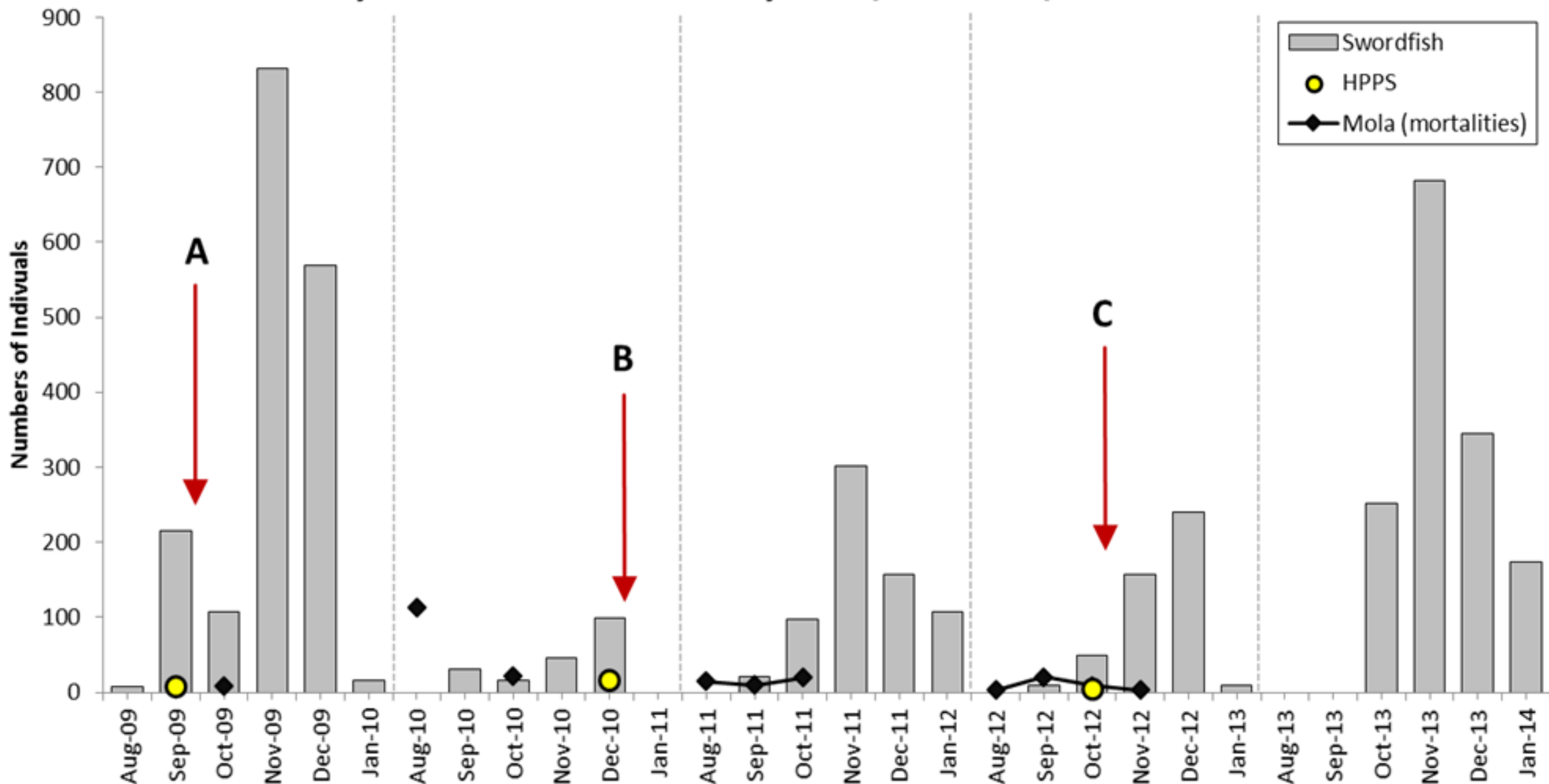
6 Comparison of Bycatch and Economic Metrics Across U.S. Fisheries Targeting or Retaining Swordfish

Fishery	Mt_{total} / take_{hp}	Mt_{total} / take_{total}	Profits / mt_{total}	Mt_{total} / vessel
CA DGN	129.5	4.6	2.3	13
CA DSLL	337	337	0.6	48.1
CA HPN	N/A	N/A	-31.5	2.3
HI SSLL	81.9	16.1	1.7	54.9
HI DSLL	147.1	29.7	2.8	67.7
ATL LL	5.4	4.3	2.6	44.6
ATL BG	N/A	N/A	2.9	1.9
CA SSLL [#]	7.2	2.9	2	47.9

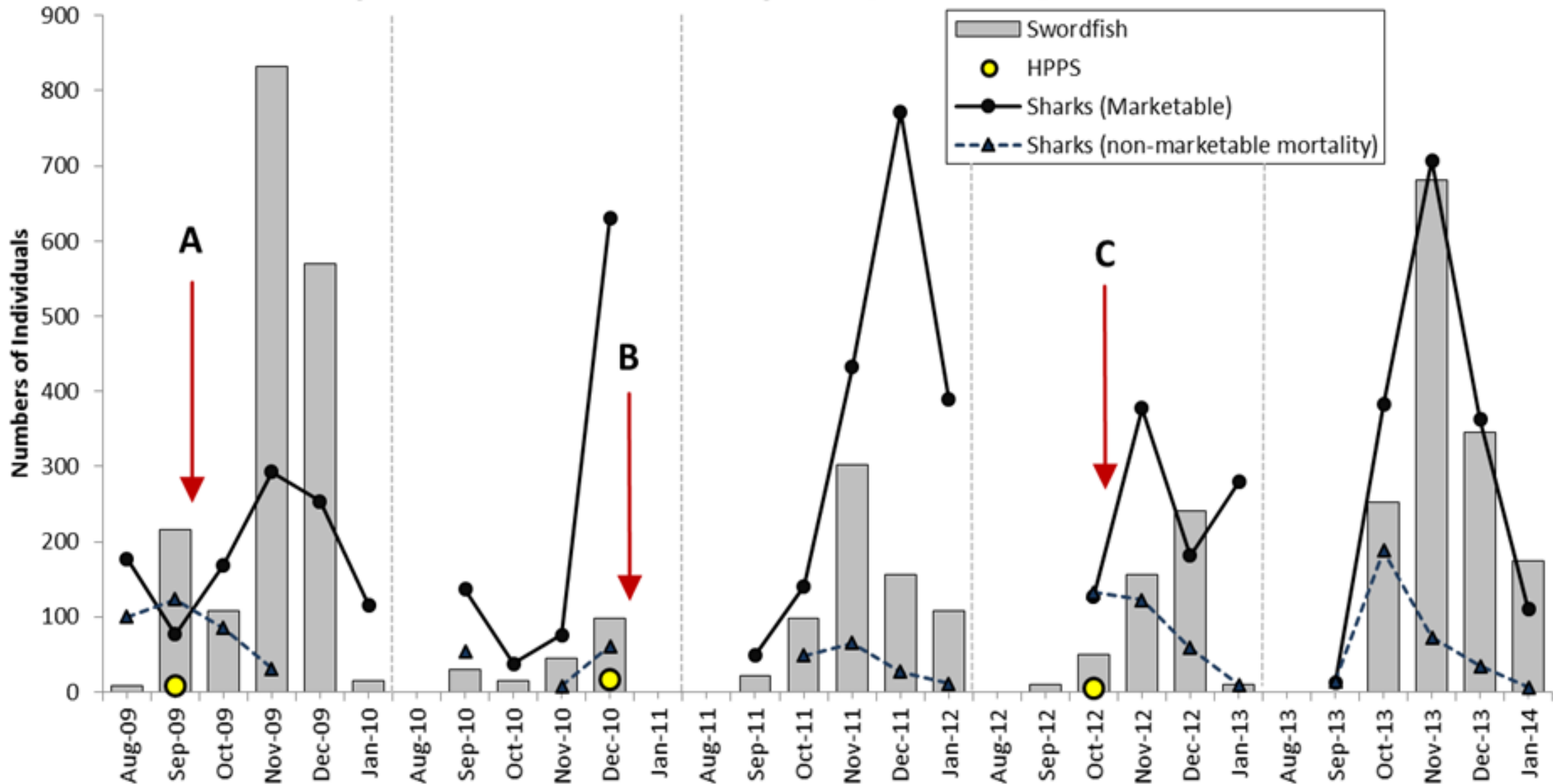
Swordfish Catch and Bycatch Analysis

- The Council requested a graphical comparison of swordfish catch to common mola, shark and striped marlin bycatch
- The analysis is in Supplemental HMSMT Report under H.4
- Label A - Interaction with a single leatherback turtle September 2009 (released alive)
- Label B - Interaction with two sperm whales December 2010 (one dead, one seriously injured)
- Label C - Interaction with a single leatherback turtle October 2012 (released alive)

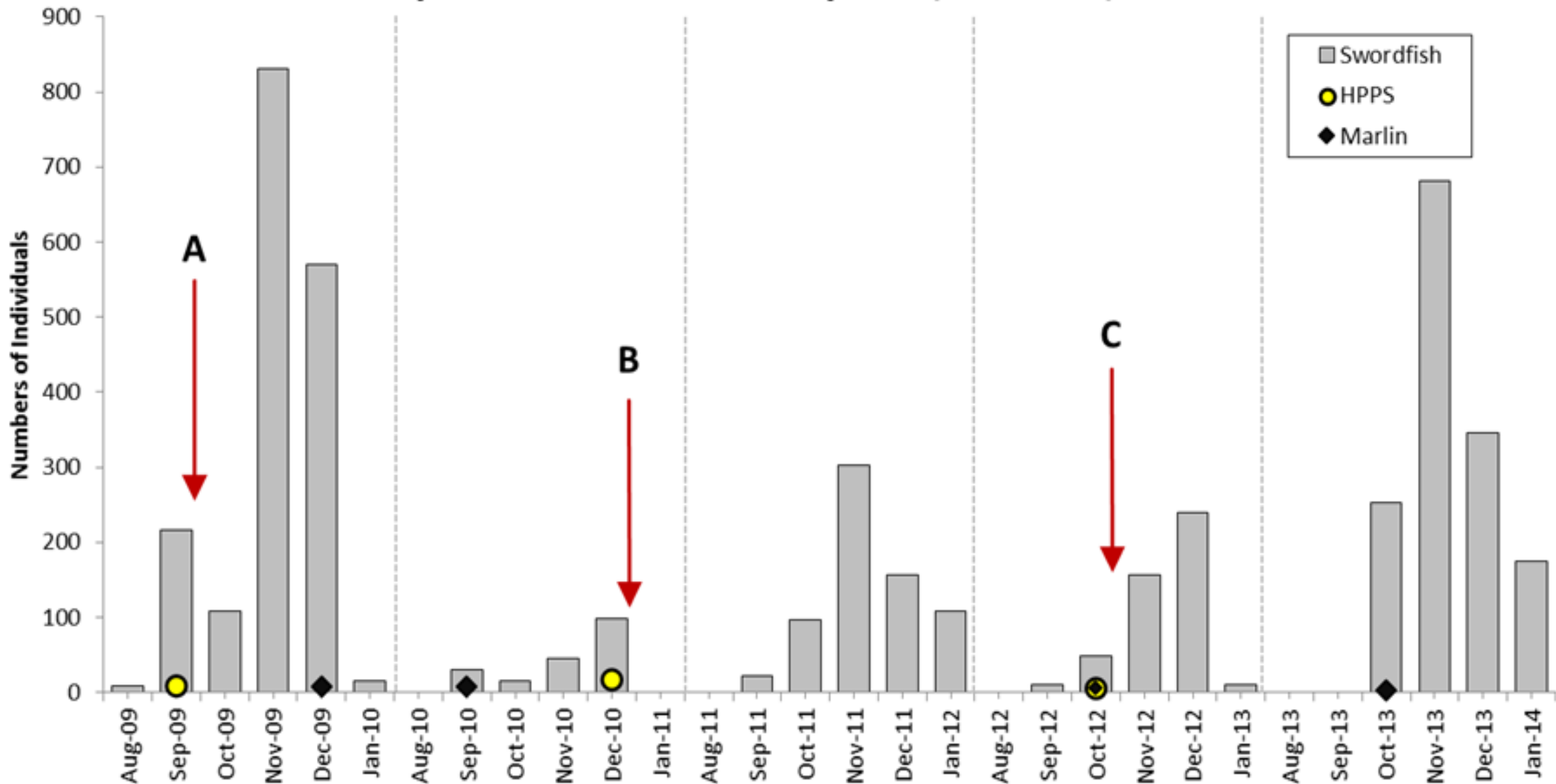
Expanded Swordfish Catch vs. High Priority Protected Species Takes vs. Mola Bycatch in the DGN Fishery 2009/10 - 2013/14 Seasons



Expanded Swordfish Catch vs. High Priority Protected Species Takes vs. Shark Bycatch in the DGN Fishery 2009/10 - 2013/14 Seasons



Expanded Swordfish Catch vs. High Priority Protected Species Takes vs. Marlin Bycatch in the DGN Fishery 2009/10 - 2013/14 Seasons



Moore and Curtis Presentation

- The supplemental HMSMT report appendix summarizes a presentation given at the February 2015 HMSMT Meeting by Jeff Moore and Alex Curtis of the SWFSC on a methodology they are developing to produce population-based reference points for leatherback turtles
- The presentation included some discussion of possible drawbacks with regulating rare-event bycatch using 1-year hard caps

HMSMT Recommendations

- Provide guidance on the process and schedule for completion of the DGN Management and Monitoring Plan
- Consider expanding the range of alternatives to include alternatives for hard caps on protected species takes
- In the event that the Council does not take final action at this meeting, provide guidance to the HMSMT on additional work to prepare for the June Council meeting