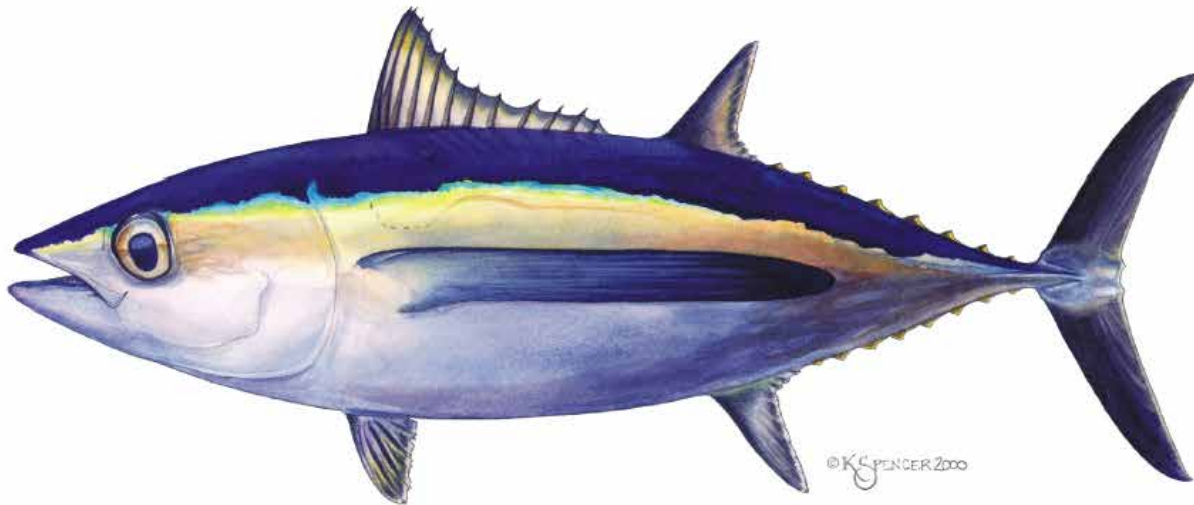


NORTHERN ALBACORE



5th Meeting of the Scientific Advisory Committee
La Jolla, 12-16 May 2014

IATTC Resolutions on Northern Albacore Tuna



Resolution C-05-02 supplemented by Resolution C-13-03 on the Conservation of Northern albacore tuna in the eastern Pacific Ocean requires that:

1. The total **level of fishing effort** for North Pacific albacore tuna in the Eastern Pacific Ocean **not be increased** beyond current levels;
2. The CPCs shall take necessary measures to ensure that the level of fishing effort by their vessels fishing for North Pacific albacore tuna is not increased;
3. All CPCs shall **report all catches** of North Pacific albacore tuna by gear type very six months;
4. All CPCs shall **report** to the Director by December 1st, 2013 a list of their **fishing effort** for those fisheries targeting North Pacific albacore;
5. The **status of the stock** be monitored.





Outline

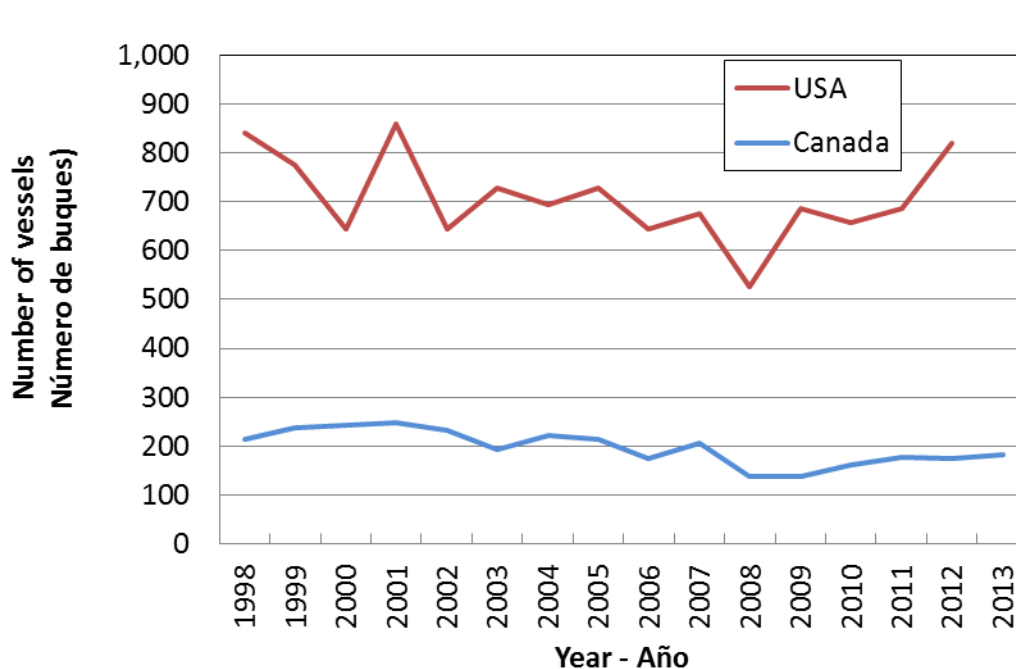
- Trends of fishing effort for those fisheries targeting North Pacific albacore in the EPO
- Monitoring of stock status



Number of vessels EPO



Year	USA	Canada	Both
1998	841	214	1,055
1999	776	238	1,014
2000	645	243	888
2001	860	248	1,108
2002	644	232	876
2003	729	193	922
2004	695	221	916
2005	729	213	942
2006	645	174	819
2007	676	207	883
2008	525	137	662
2009	686	138	824
2010	657	161	818
2011	687	177	864
2012	820	175	995
2013		183	



	USA	CAN	Both
10 yr avg	667	185	865
2002-2004	689	215	905
2010-2012	721	171	892

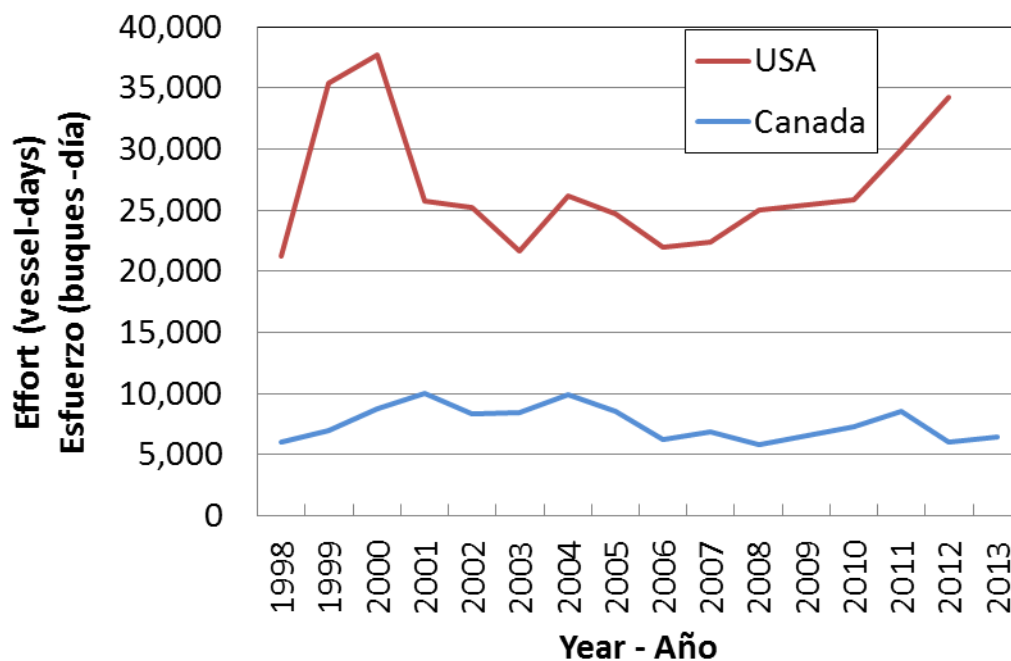
	USA	CAN	Both
Fmult			
=F_10yr/F_2010-12	0.93	1.08	0.97
1/Fmult	108.1%	92.3%	103.2%
F_2010-12/F_2-4	104.6%	79.4%	98.6%



Effort in vessel-days EPO



Year	USA	CAN	Both
1998	21,253	6,018	27,271
1999	35,454	6,970	42,424
2000	37,752	8,769	46,521
2001	25,771	10,021	35,792
2002	25,274	8,323	33,597
2003	21,621	8,428	30,049
2004	26,197	9,942	36,139
2005	24,731	8,563	33,294
2006	22,006	6,243	28,249
2007	22,439	6,901	29,340
2008	24,994	5,774	30,768
2009	25,429	6,540	31,969
2010	25,878	7,294	33,172
2011	29,921	8,602	38,523
2012	34,242	6,008	40,250
2013		6,470	



	USA	CAN	Both
10 yr avg	24,849	7,661	33,175
2002-2004	24,364	8,898	33,262
2010-2012	30,014	7,301	37,315

	USA	CAN	Both
F _{mult} =			
F _{10yr} /F ₂₀₁₀₋₁₂	0.83	1.02	0.89
1/F _{mult}	121%	98%	112%
F ₂₀₁₀₋₁₂ /F ₂₋₄	123%	82%	112%



Monitoring of stock status



- Stock assessment workshop held on 14-28 April 2014 in La Jolla, USA by the Albacore Working Group of the ISC (International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean)
- Report will be completed during the first semester of 2014
- Fishery data updates: Catch and size composition data updated for ISC, IATTC and WCPFC countries



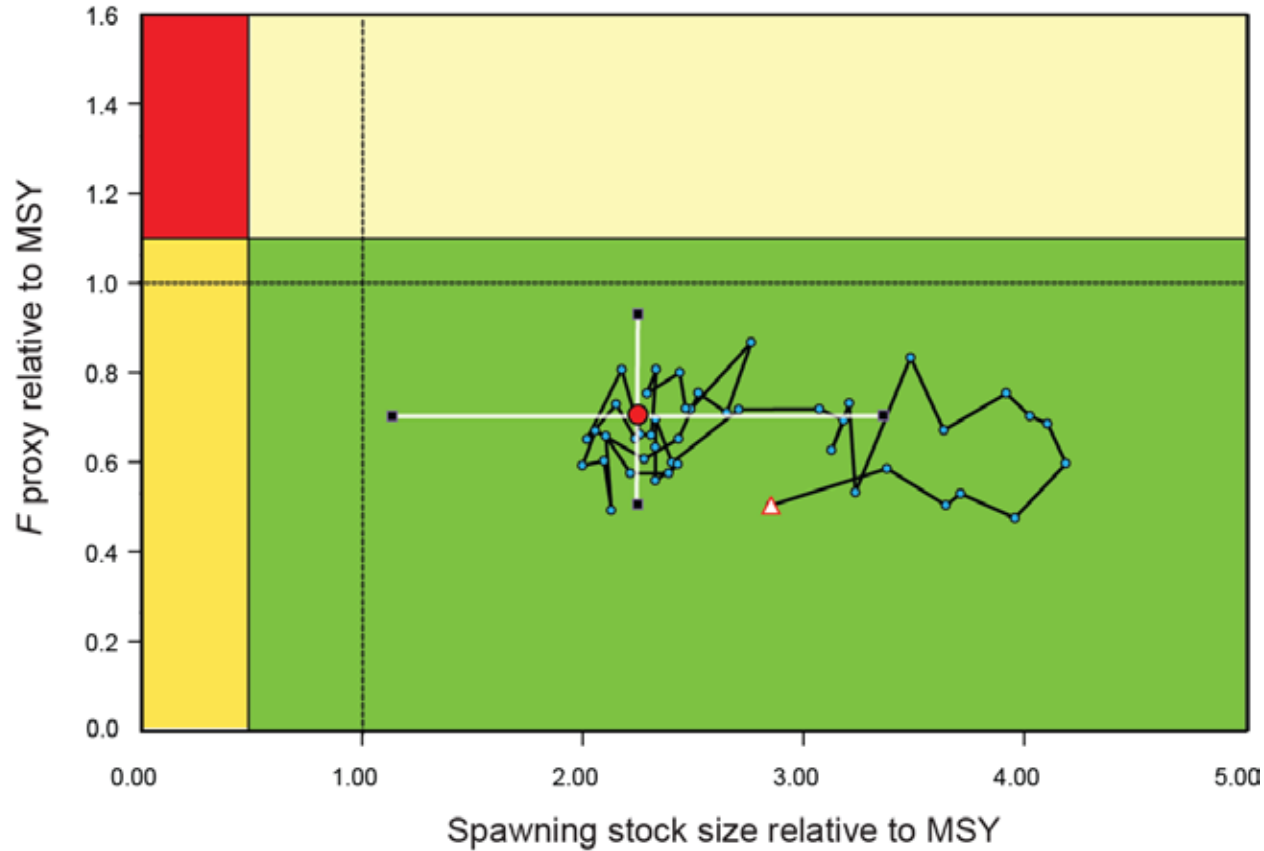
Monitoring stock status: Kobe plot



- Run from the model developed by the NP Albacore WG during the stock assessment workshop (model subgroup):
 - § Age-, length- and sex-structured Stock Synthesis seasonal model
 - § covers the 1966 to 2012 period
 - § 24 fleets defined according to gear, target species, area and quarter of operations
 - § Fit to cpue and length frequency data
 - § Steepness $h=0.9$
 - § Natural mortality $M=0.3$



Monitoring stock status: Kobe plot



F proxy computed as $(1 - (\text{SPR}[\text{year}] / \text{SPR}[\text{virgin}]))$



Conclusions



- Recent effort higher than historical levels for USA and lower for CAN
- Preliminary results with chosen assumption indicate that:
 - § the stock is well above the proposed IATTC limit biomass reference point
 - § the fishing mortality is well below the proposed IATTC limit fishing mortality reference point
 - § uncertainty is high



Thank you



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