ICCATSCRS Report
Panel 3 Temperate tunas South

2016

Global Report card for major temperate tuna stocks

B > Bmsy
and
F < Fmsy

B < Bmsy and F < Fmsy
or
B > Bmsy and F > Fmsy

B < Bmsy
and
F > Fmsy

Temperate tunas
- ◆ Bluefin
- ▲ Albacore
- ○ Not precisely estimated
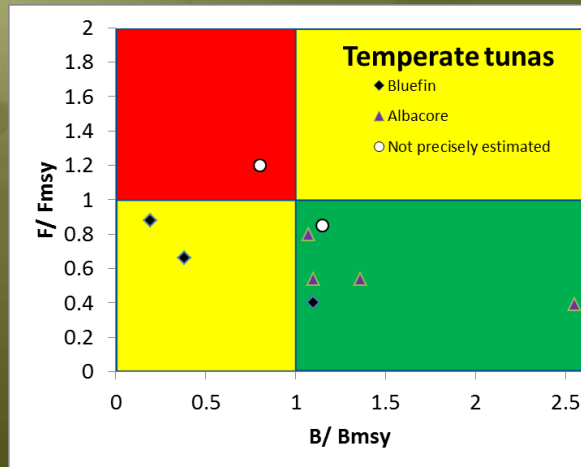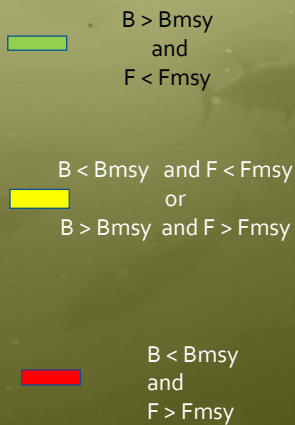
Data from Tuna RFMOs compiled by ISSF and updated for Atlantic by SCRS

ISSF. 2016. ISSF Tuna Stock Status Update, 2016: Status of the world fisheries for tuna. ISSF Technical Report 2016-05A. International Seafood Sustainability Foundation, Washington, D.C., USA.
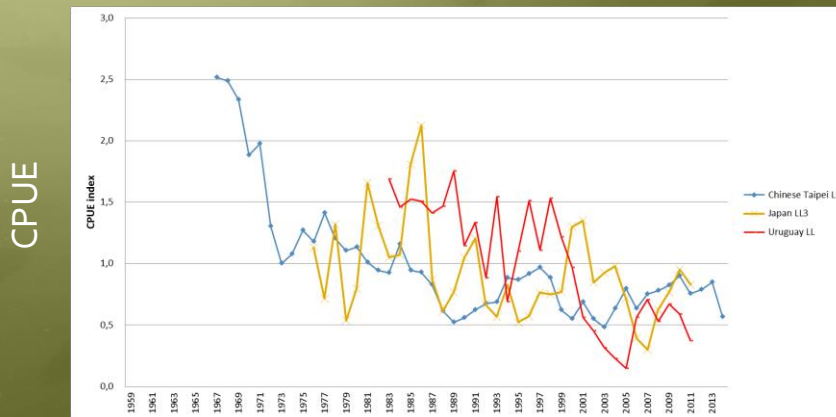
- ALB South: Catches   2016 Assessment (Madeira)
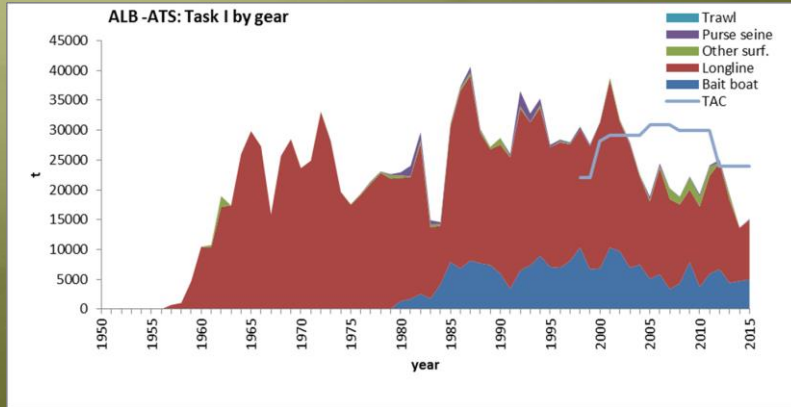
- Most of the catch came from LL (Chinese Taipei) and BB (South Africa & Namibia)
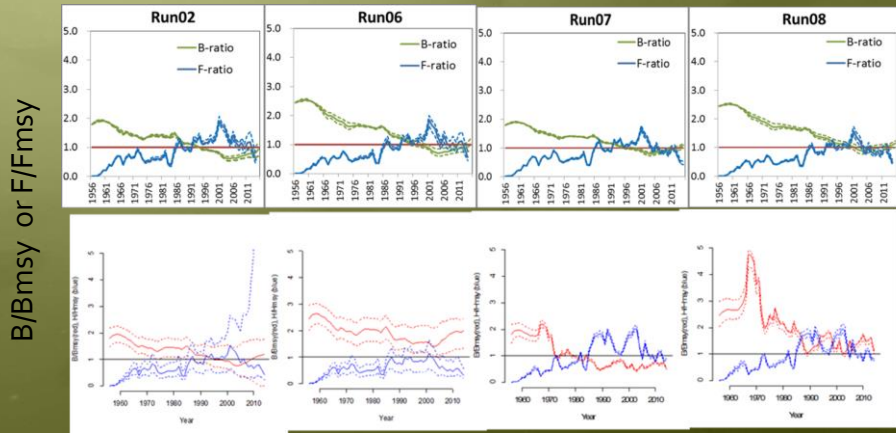- Catch below TAC in recent years

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- ALB South: relative abundance based on CPUE

CPUE

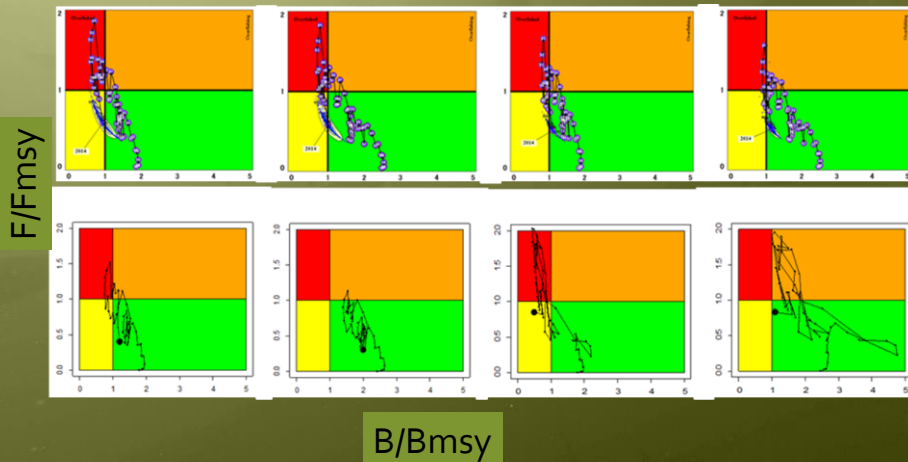- General decrease followed by stabilization and some increase

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- ALB South: stock status ASPIC and BSP

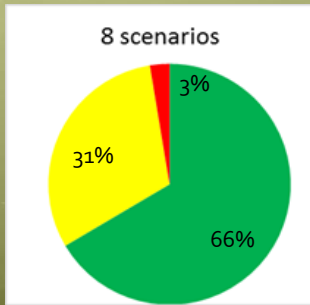- Consistent trends
- Larger c.i. for BSP (equal weights)

- ALB South: stock status

- Most scenarios predict green status, with higher B/Bmsy and lower F/Fmsy compared to last assessment.
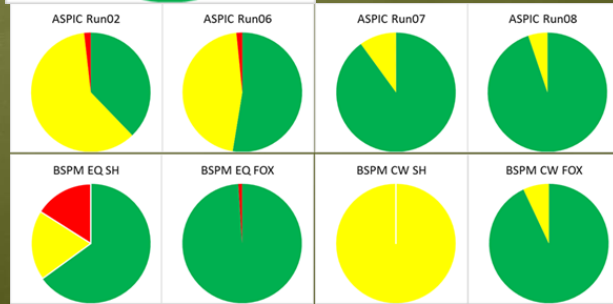
Slide 7

• ALB South: Stock Status

8 scenarios

3%
31%
66%

Improved stock status:

B/Bmsy= 1.10 (0.51-1.80)

F/Fmsy=0.54 (0.31-0.87)

MSY=25,901 (15,270-31,768) t

ASPIC Run02   ASPIC Run06   ASPIC Run07   ASPIC Run08

BSPM EQ SH   BSPM EQ FOX   BSPM CW SH   BSPM CW FOX

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• ALB South: Outlook

Catch (t)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
12,000	74%	80%	94%	95%	95%	96%	96%	96%	96%	96%	96%	96%	96%
14,000	74%	78%	93%	94%	95%	95%	95%	96%	96%	96%	96%	96%	96%
16,000	73%	77%	90%	93%	94%	94%	95%	95%	95%	95%	95%	95%	95%
18,000	68%	72%	83%	89%	91%	92%	92%	93%	93%	93%	93%	94%	94%
20,000	63%	65%	71%	81%	83%	84%	84%	85%	86%	86%	86%	87%	87%
22,000	62%	63%	65%	73%	78%	79%	79%	79%	80%	80%	80%	80%	80%
24,000	61%	60%	60%	63%	69%	72%	72%	72%	71%	71%	70%	70%	69%
26,000	55%	54%	53%	52%	52%	55%	56%	57%	56%	55%	54%	53%	52%
28,000	48%	45%	42%	40%	37%	35%	35%	35%	35%	35%	35%	35%	35%
30,000	39%	35%	33%	30%	28%	26%	24%	23%	21%	20%	19%	18%	18%
32,000	32%	29%	26%	24%	22%	19%	17%	16%	14%	13%	12%	11%	11%
34,000	28%	25%	22%	19%	15%	13%	11%	9%	8%	7%	7%	6%	6%

TAC

- Maximum catch that enables green zone in 2020 with probability >60%:

Model	Run	Catch
ASPIC	Run2	26,000
	Run6	24,000
	Run7	26,000
	Run8	26,000
BSPM	EQ SH	30,000
	EQ FOX	34,000
	CW SH	22,000
	CW FOX	18,000
Average		25,750
Median		26,000

- ALB South: Management recommendations

- Projections at a level consistent with the 2016 TAC (24,000 t) showed that probabilities of being in the green quadrant of the Kobe plot across all scenarios would increase to 63% by 2020.

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- Further reductions in TAC would increase the probability of being in the green zone in those timeframes.

- On the other hand, catches above 26,000 t will not permit maintaining the stock in the green area with at least 60% probability by 2020.

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- ALB: Recommendations on Research and Statistics

- Albacore Research Program (1.2 M Euros over 4 years)
- Increase participation by scientists of countries with important albacore fisheries
- CPUEs:
    - Try new indices: French MWT, Spain LL, Portugal LL, Korea LL
    - Recover Japanese LL historical period
    - Joint analyses of LL and SURF fisheries

- T2 data: document changes for France MWT and submit Chinese Taipei LL data.
- CPCs with major Mediterranean fleets: revise and submit T1 and T2 data.

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ALB Research Program (1.2 M€)

Research aim	Year 1	Year 2	Year 3	Year 4
Biology and Ecology				
Reproductive biology (spawning area, season, maturity, fecundity)	x	x	x	
Environmental influence on NE Atlantic surface CPUE	x	x		
Distribution throughout the Atlantic (e-tags)	x	x	x	x
Population structure: contingents	x	x	x	x
Monitoring stock status				
Joint Atlantic longline CPUE	x	x		
Joint NE Atlantic surface CPUE	x	x		
Feasibility of fisheries independent survey		x	x	x
Management Strategy Evaluation				
Observation error: CPUE error structures and age classes	x			
Management Procedure: delay difference models	x			
Operating models: regime shifts	x			
Management Procedure: HCRs with bounded TACs	x	x		
Observation error: changes in catchability over time		x	x	
Implementation error		x	x	
Operating models: changes in selectivity		x	x	
Operating models: autocorrelated recruitment		x	x	
Operating models: broader scenarios using MFCL or SS			x	x
Communication: performance indicators and plotting	x	x	x	x

Executive Summary Table

	South Atlantic
Maximum Sustainable Yield	25,901 t (15,270-31,768)[2]
Current (2016) TAC	24,000 t
Current (2015) Yield	15,144 t
Yield in last year of assessment (2014)	13,677 t
Yield in last year of assessment (2010)	
B_{MSY}	120,465 t (71,312-208,438) [2]
F_{MSY}	0.202 (0.119-0.373) [2]
B_{2015}/B_{MSY}	1.10 (0.51-1.80) [2]
B_{2015}/B_{Lim}[3]	
F_{2014}/F_{MSY}	0.54 (0.31-0.87) [2]
F_{2011}/F_{MSY}	
Stock Status	Overfished: NO
	Overfishing: NO
Management measures in effect:	[Rec. 13-06]: TAC of 24,000 t for 2014-2016