

# Global tuna purse seine fishing capacity: Regional distribution and implications for management

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TECHNICAL EXPERTS WORKSHOP ON THE  
MANAGEMENT OF THE CAPACITY OF THE TUNA-FISHING  
FLEET IN THE EPO

# Outline

- Update on number of large scale purse seiners globally (focus on tropical tunas)
- Distribution of vessels and capacity\* by flag
- Trends and changes
- EPO considerations



\*Number vessels and carrying capacity

# Data Sources (and issues)

Used T-RFMO and FFA vessel records; IMO database

- Disparate quality controls
- Duplicates, similar names
- Out of phase updates
- Last CLAV was done in 2012

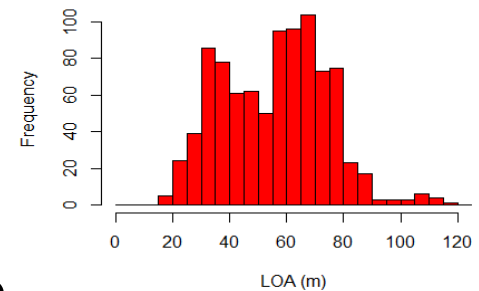
Selected all PS > 24 m and cleaned up



# PS vessels in RFMOs

- As of 3/2014: **1,101** vessels flagged to **50** countries

Distribution of PS vessel sizes



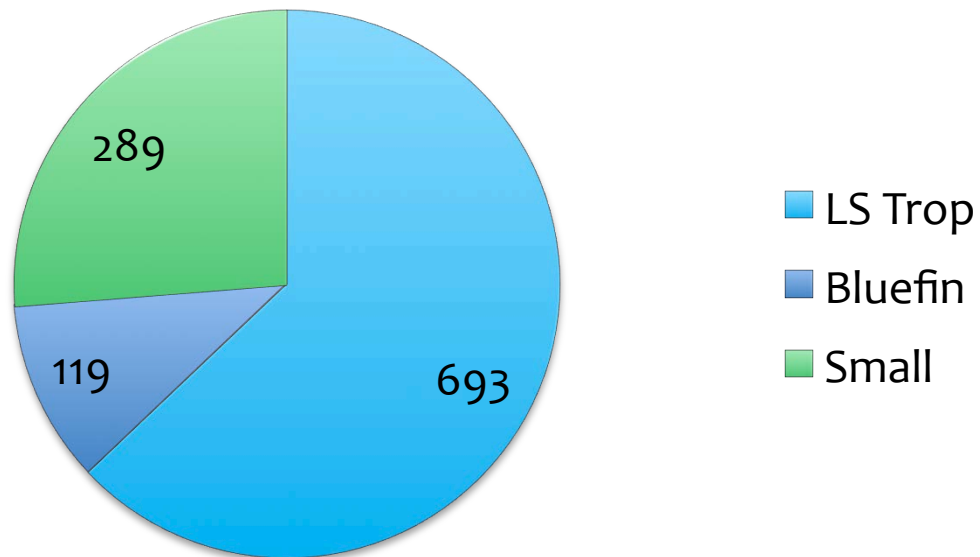
- Trimmed it:
  - Which are large-scale? Classes 5 and 6
    - 273 tons FCC (carrying capacity)
    - ~ 335 m<sup>3</sup> FHV (hold volume)
    - Many vessels without size and capacity attributes
  - Which are not Tropical, i.e., fishing for bluefin?
    - Mediterranean countries; FFA vs WCPFC records
  - Other potential caveats:
    - Active vs inactive
    - Non-PS misclassified (misreported)

# PS vessels in RFMOs

**1,101** PS vessels

**693 (63%)** Large-Scale Tropical Tuna PS

**PS vessels**



# Large-scale PS Fleet

693 vessels. 21% are registered in more than one RFMO (a total of 812 authorizations)

There is potential mobility between regions

	CCSBT	IATTC	ICCAT	IOTC	WCPFC
CCSBT	2			1	1
IATTC		191	18	4	23
ICCAT			105	44	34
IOTC				98	95
WCPFC					416

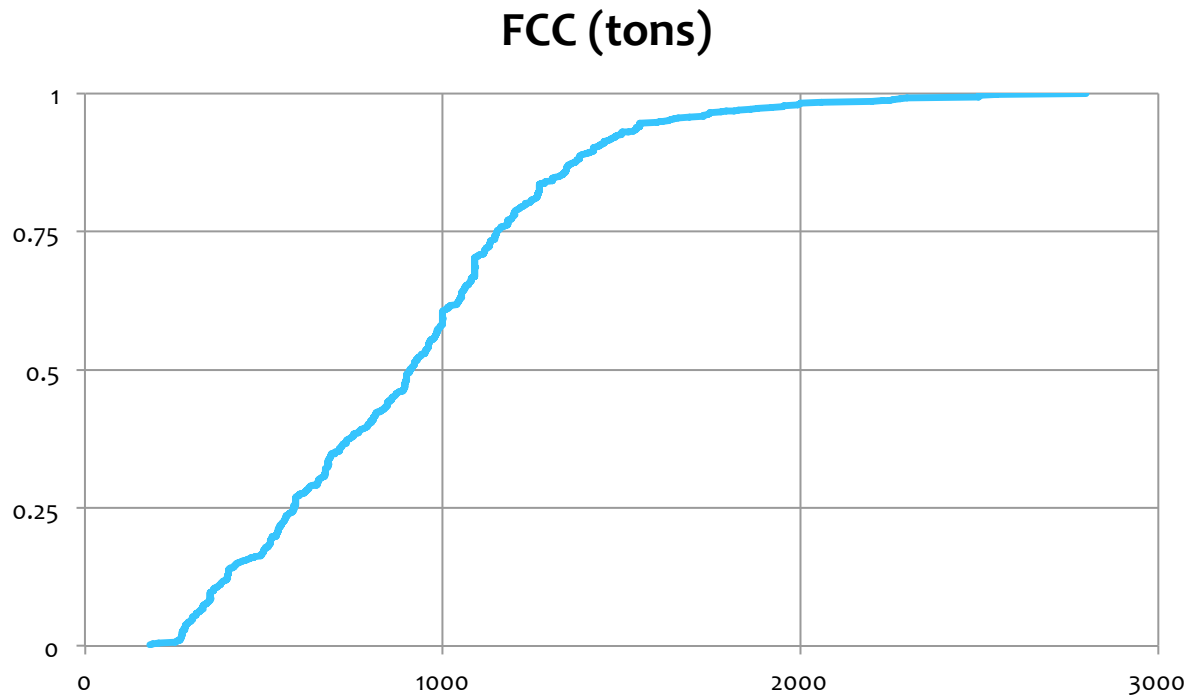
## Active (2012)?

- **WCPFC: 416** authorized. Tropical tuna fleet 20N-20S consists of about **295** vessels. Others catch tropical tunas seasonally or outside equatorial zone.
- **IATTC: 191** authorized. Probably all active; 211 PS vessels operated in 2012, including small ones.
- **IOTC: 98** authorized. **68** operated in 2012.
- **ICCAT: 105** authorized. Probably **75** operated in 2012.

While **693** purse seiners fish for tropicals, maybe **630** **targeted tropicals “full time” in 2012. There have been 35 new vessels since then (630+35) = 665 today**

# Large-scale PS Fleet

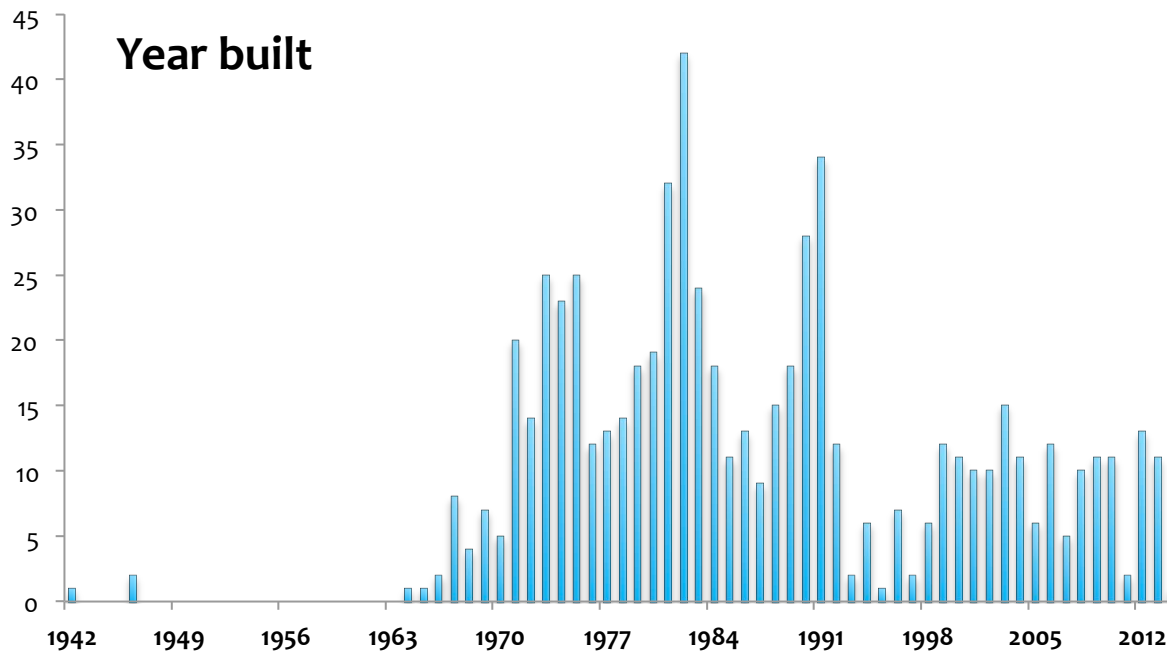
693 vessels. 50% are over 909 tons FCC





# Large-scale PS Fleet

686 vessels. Date of construction available for 94%  
Built between 1942 and 2014. Peaks in 1982 and 1991  
20% built since 2000



# Large-scale PS Fleet by Flag

Flag	Vessels	FHV(m3)	Flag	Vessels	FHV(m3)
KOR	57	83186	MHL	10	11608
ECU	83	81002	IRN	8	11193
PHL	90	66021	NIC	7	9966
USA	42	62002	FSM	8	8396
ESP	38	61080	SLV	4	7892
TWN	34	60657	BLZ	6	7450
MEX	42	49525	GTM	3	6179
JPN	33	39779	NZL	5	6129
FRA	23	33225	SLK	8	5686
VUT	15	28417	CUR	3	4904
VEN	22	27170	RUS	5	4400
CHN	20	23335	CPV	2	3502
PAN	15	21310	MAU	2	3260
KIR	13	19424	SLB	5	2199
GHA	17	18731	GIN	3	2025
SYC	9	17576	AUS	4	1986
IDN	26	15958	TUV	1	1937
COL	13	14590	PER	2	1182
PNG	14	14448	CIV	1	800

# New constructions

58 new vessels since 2009 (last 5.2 years)

<b>Flag</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014*</b>	<b>Total</b>
Chinese Taipei	1	1		4	4		<b>10</b>
Sri Lanka					8		<b>8</b>
Korea, Rep.		1		4	1	1	<b>7</b>
France	1	2		2			<b>5</b>
Japan	3		1	1			<b>5</b>
Marshall Islands		4					<b>4</b>
Ghana	3						<b>3</b>
Papua New Guinea					3		<b>3</b>
China, P.R.				2			<b>2</b>
Mauritius					2		<b>2</b>
Philippines		1		1			<b>2</b>
Belize	1						<b>1</b>
Ecuador		1					<b>1</b>
Fed. States							<b>1</b>
Micronesia		1					<b>1</b>
Mexico						1	<b>1</b>
Panama	1						<b>1</b>
Seychelles						1	<b>1</b>
Tuvalu	1						<b>1</b>
<b>Total</b>	<b>11</b>	<b>11</b>	<b>1</b>	<b>14</b>	<b>18</b>	<b>3</b>	<b>58</b>

- ⇒ Between 50 and 60 new builds scheduled for commissioning through to 2015
- ⇒ Maybe 25 to 30 classified as “replacements” (not necessarily same capacity)
- ⇒ **Potential for 30 genuine new additions globally**

# Summary

- Based on RFMO records, there are **693** large scale tropical tuna purse seiners. Perhaps **665** are dedicated
- 21% are registered in 2 or more RFMOs
- 58 vessels built since 2009
- Maybe 30 more will be built through 2015

# EPO considerations

- **191** of 693 (27%) large-scale purse seine vessels are registered in IATTC; **45** (24%) of these are also authorized in other RFMOs
- IATTC is the only t-RFMO with a closed register, limiting incoming capacity from other regions. But, global growth in capacity can put pressure on IATTC capacity management, especially if stocks outside EPO decline
- In the EPO there is potential for substantial growth by activating Inactive Capacity

Thank you!