

## HIGHLY MIGRATORY SPECIES MANAGEMENT TEAM REPORT ON INITIAL SCOPING OF BIENNIAL SPECIFICATIONS AND MANAGEMENT MEASURES

For initial scoping the Highly Migratory Species Management Team (HMSMT) provides information on one topic, recreational catch limits for bluefin tuna, as potential management measures to be implemented during this biennial process. The HMSMT may produce a supplemental report should new topics arise regarding other HMS fisheries, such as swordfish fisheries, which may warrant consideration during this biennial management process.

In response to notification that the stock of Pacific bluefin tuna is overfished, the Council reported to NMFS in its letter dated April 1, 2014 that it would evaluate current catch limits for west coast recreational fisheries as part of its biennial management process beginning in June 2014. A year ago, the Council requested information to inform its discussion on their response to the notification (Agenda Item D.4.b, HMSMT Supplemental Report 2, June 2013; [http://www.pcouncil.org/wp-content/uploads/D4b\\_SUP\\_HMSMT\\_RPT2\\_JUN2013BB.pdf](http://www.pcouncil.org/wp-content/uploads/D4b_SUP_HMSMT_RPT2_JUN2013BB.pdf)).

Specifically, the Council requested information on:

- Applicable recreational regulations and international conservation measures,
- U.S. catches by sector, and
- Recreational catches for the three West Coast states.

This report provides updates, as available, and supplements information the HMSMT provided in June 2013.

### **Current conservation objectives regarding Pacific bluefin tuna**

Pacific bluefin tuna (PBF) is managed through catch controls in the eastern Pacific Ocean (EPO) and through effort controls and juvenile catch controls in the western and central Pacific Ocean (WCPO). Consistent with Inter-American Tropical Tuna Commission (IATTC) Resolutions C-12-09 and C-13-02, the United States has undertaken rulemakings (78 FR 1810) to implement catch limits for U.S. commercial vessels fishing in the EPO. These limits included a Commission-wide limit averaging 5,000 mt per year and a minimum limit of 500 mt, notwithstanding the Commission-wide limit, for each member nation with historical catches in the EPO. Resolution C-12-09 was based on the results of the 2008 International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean (ISC) PBF stock assessment, which indicated that the stock was experiencing overfishing. Resolution C-13-02 extended the catch limits through 2014, and was based on a full assessment conducted by the ISC in 2012 (using data through 2010). Since the institution of these limits in the EPO, Mexico continues to account for the vast majority of PBF catch under the Commission-wide limit. In December 2013, the Western and Central Pacific Fisheries Commission (WCPFC) adopted CMM 2013-09 specifying that “total fishing effort by their vessels fishing for PBF in the area north of the 20 degrees north shall stay below the 2002-2004 annual average levels for 2014<sup>1</sup>. Such measures shall include those to reduce all catches of

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<sup>1</sup>Japan’s Fisheries Agency publicly announced its plan to cut its catch of juvenile bluefin tuna by half of its annual average in the years 2002 to 2004, starting in 2015. The plan was set by the agency to help protect the declining stocks

juveniles (age 0-3 (less than 30 kg)) [at least by 15 percent less than] the 2002-2004 annual average levels.” This measure is the similar to the CMMs adopted in 2012 and previous years, but is more constraining in requiring the 15 percent reduction in juvenile catches.

The ISC’s PBF Working Group, with contributions from NMFS scientists, updated the 2012 assessment of PBF in March 2014 with results very similar to their previous analysis indicating that the stock is still experiencing overfishing and remains severely overfished (spawning stock biomass (SSB) estimated to be about 4 percent of unfished SSB). Although no target or limit reference points have been established for the PBF stock under the auspices of the WCPFC and IATTC, the current fishing mortality rate exceeds all target and limit biological reference points commonly used by fisheries managers (except for  $F_{loss}$ <sup>2</sup>). Additionally, the assessment estimated that recruitment in 2012 was the eighth lowest in 61 years and the average recruitment level for the last five years may have been below the historical average level. Based on projection results, the ISC advises that current WCPFC and IATTC management measures for 2014, if continued, are not expected to increase the SSB if recent low recruitment continues.

### **Current recreational catch limits for Pacific bluefin tuna**

The current conservation measures for Pacific bluefin tuna do not apply to recreational fisheries; however IATTC scientific staff recently recommended that in 2014 the Commission adopt a commercial catch limit below 3,154 mt, which was the estimated commercial catch in 2013, and that the non-commercial catches be limited below 208 mt.

At the Federal level, daily bag limits for bluefin tuna in the U.S. Exclusive Economic Zone (EEZ) apply off California and are twice as high as those in neighboring Mexico (10 fish per angler per day versus 5 fish in Mexico waters), although the effort and catch in the U.S. EEZ is significantly lower than effort and catch in the Mexico EEZ. Daily catch limits (bag limits) and possession limits also differ among all three west coast states (Table 1).

**Table 1. Current maximum catch limits for recreational fisheries for Pacific bluefin tuna.**

<b>Regulatory Area</b>	<b>Daily Catch Limit</b>	<b>Possession Limit</b>
Mexico EEZ	5 bluefin	15 bluefin
U.S. West Coast EEZ	10 bluefin off California	30 bluefin off California
California	10 bluefin	30 bluefin
Oregon	Up to 25 in an aggregate offshore pelagic species limit	Up to 50 in an aggregate offshore pelagic species limit
Washington	2 bluefin	No limit

### **Commercial and recreational landings of Pacific bluefin tuna in the North Pacific Ocean**

The U.S. accounts for a relatively small percentage (<5 percent) of bluefin catches in the North Pacific Ocean. Annual landings of Pacific bluefin tuna in the North Pacific Ocean by country and by U.S. commercial and recreational gears for 2000 through 2012 are provided in Appendix Table A, excerpted from Table 14-2 in the ISC plenary report for 2013. Data from this ISC table are summarized below to compare commercial landings patterns among countries during the most

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of tuna in the Pacific Ocean. The agency is planning to submit the proposal to a subcommittee meeting of the WCPFC in September.

<sup>2</sup> The fishing mortality corresponding to the lowest observed spawning stock and associated recruitment.

recent decade and to show the relative magnitude of U.S. fisheries. These data show that landings by both the U.S. commercial and recreational sectors are relatively low, compared to most other nations, and each fishery has landed less than 700 mt annually during 2000-2012, often much less. Note that U.S. fishery landings reported in Table 1 (and in Appendix Table A) represent combined landings for the U.S. West Coast and Hawaii.

**Table 2. Range in annual commercial landings (mt) of Pacific bluefin tuna by nation during 2000-2012 and in 2012, the most recent year these statistics were available. U.S. recreational landings (mt) are also shown in the last row. (Source: ISC Plenary Report, Table 14-2, July 2013).**

<b>Nation (Commercial)</b>	<b>Landings Range (mt) during 2000-2012</b>	<b>Landings (mt) in 2012</b>
Chinese -Taipei	213 – 2,782	213
Japan	6,283 – 24,579	6,283
Korea	670 – 2,601	1,422
Mexico	863 – 9,927	6,668 <sup>1</sup>
United States	1 – 754	43 <sup>1</sup>
<b>All Nation Commercial Total</b>	14,629 – 29,106	14,629 <sup>1</sup>
<b>U.S. Recreational Total</b>	14 – 654	617 <sup>1</sup>

<sup>1</sup>provisional estimate

For the U.S. West Coast, annual commercial landings have been less than about 200 mt since 2001, except during 2009, when they reached 415 mt (see Appendix Table B).

### **West Coast recreational landings of bluefin tuna**

California, Oregon and Washington have dockside sampling programs for recreational fisheries. Recreational landings into California ports come from U.S. anglers fishing from private boats or commercial passenger vessels, fishing either in U.S. waters or off Mexico. Private recreational vessels returning from Mexico are sub- sampled through intercept surveys as part of the general random sampling frame. However, landings estimates for anglers fishing from private vessels off Mexico are not generated because sampling coverage is not sufficiently comprehensive to produce reliable estimates of landings. State sampling programs for Oregon and Washington recreational fisheries show that recreational landings of bluefin tuna off both states have been negligible. Since 2003, the highest catch by Oregon anglers (private and charter vessels combined) was an estimated 40 bluefin tuna taken during more than 12,000 trips targeting albacore in 2009 (see Appendix Table C).

Based on available information for 2001-2013, anglers fishing from California-based commercial passenger vessels (CPFV) commonly account for the majority of West Coast recreational landings of bluefin tuna. Landings into California from U.S. and Mexico waters ranged from a low of 1,030 fish in 2007 to a high of 63,588 fish during 2013 (Table 4). If these fish averaged approximately 30 pounds (13.6 kg) [Mr. Buzz Brizendine, personal communication], then anglers from commercial passenger vessels landed about 867 mt of bluefin tuna in 2013. Most of these fish were caught in waters off Mexico, as is typical. In most years since 2001, over 80 percent of annual landings from commercial passenger vessels were taken in waters off Mexico (Table 4). The higher U.S. landings of bluefin in Mexico waters in 2012 and 2013 may be attributed in part to the decreased Mexican purse seine effort in those years due to quota limitations imposed by IATTC resolution (C-12-09). The resolution established a Mexico flag quota for bluefin that was

fully exploited by the Mexican purse seine fleet in 2012 and 2013. The Mexican fleet ceased fishing when the quota was filled which resulted in increased opportunity by the U.S.-based CPFV and private vessels fishing in Mexico and the U.S. Favorable ocean conditions continued late into the summer and fall in both years and possibly due to these factors there were increased catches in northern Baja California and in the Southern California Bight.

**Table 4. Annual landings (number of fish) in California and Mexico waters by U.S. charter vessels during 2001-2013. (Source: California Fisheries Information System (CFIS), Commercial Passenger Fishing Vessel (CPFV) logbook data, extracted April 15, 2014).**

<b>Year</b>	<b>Landings from U.S. waters</b>	<b>% from U.S.</b>	<b>Landings from Mexico waters</b>	<b>% from Mexico</b>	<b>Total Landings</b>
2001	3,937	18%	18,416	82%	22,353
2002	13,269	40%	20,323	60%	33,592
2003	2,894	13%	19,803	87%	22,697
2004	506	15%	2,937	85%	3,443
2005	724	13%	5,064	87%	5,788
2006	1,356	18%	6,143	82%	7,499
2007	187	18%	843	82%	1,030
2008	3,245	31%	7,092	69%	10,337
2009	2,794	23%	9,357	77%	12,151
2010	327	4%	8,310	96%	8,637
2011	2,743	9%	28,830	91%	31,573
2012	5,689	14%	34,757	86%	40,446
2013	6,587	10%	57,001	90%	63,588

In addition to landings by anglers fishing from commercial passenger vessels, private anglers also landed bluefin tuna. Since 2004, annual estimates for private angler landings into California taken from U.S. waters only have typically totaled a few hundred fish, ranging from 2 fish in 2010 to almost 400 fish in 2008 (Table 5). The number of bluefin tuna caught by private anglers in waters off Mexico and brought back to the U.S. West Coast is not known.

**Table 5. Estimated recreational landings (number of fish) of Pacific bluefin tuna by California private/rental vessels fishing in U.S. waters, 2004-2013.<sup>2</sup> (Source: California Recreational Fisheries Statistics (CRFS); extracted April 29, 2014).**

<b>Year</b>	<b>Number of Fish</b>
2004	106
2005	91
2006	217
2007	6
2008	399
2009	244
2010	2
2011	57
2012	29
2013	243

<sup>2</sup>Data prior to 2004 are not provided because estimates from RecFIN during 2003 and prior federal sampling estimates are not directly comparable to data collected 2004 and later (California Recreation Fisheries Survey, CRFS) due to changes in sampling methods.

Based on information from 233 angler bags with bluefin tuna during 2007-2013, most anglers (95 percent) landed five or fewer fish per day (Table 6). Of these 233, nine anglers bagged between six and ten fish (the maximum daily bag limit in Federal and state waters off California). For this bag analysis, data were extracted for bluefin tuna landed with a bag limit of 10 fish (all subregions and fishing modes). Fish that were actually observed dockside by the sampler and fish reported by anglers (as distinguished from fish released alive) were included in the analysis.

**Table 6. Frequency of occurrence for bluefin tuna in angler landings on the West Coast during 2007 - 2013. (Source: RecFIN, extracted May 14, 2014).**

<b>Bag Size</b>	<b>Bag Frequency (number)</b>	<b>Bag Frequency (percent)</b>	<b>Cumulative Frequency (percent)</b>
1	184	47%	47%
2	20	16%	64%
3	7	16%	80%
4	9	10%	90%
5	4	5%	95%
6	4	1%	96%
7	2	2%	98%
8	1	1%	99%
10	2	1%	100%

## Appendix Tables

**Appendix Table A. Annual landings (mt) of Pacific bluefin tuna in the North Pacific Ocean by country and by U.S. gears, 2000-2012.** (Source: Table 14-2 in International Scientific Committee Plenary Report, July 2013).

Year	Commercial Landings (mt)						United States Recreational	GRAND TOTAL
	Japan	Korea	Taiwan	United States	Mexico	TOTAL		
2000	24,579	2,401	2,782	754	3,118	33,634	342	33,974
2001	14,211	1,186	1,843	340	863	18,443	356	18,800
2002	14,186	933	1,527	62	1,710	18,418	654	19,073
2003	10,406	2,601	1,884	40	3,254	18,185	394	18,580
2004	14,100	773	1,717	11	8,894	25,495	49	25,543
2005	21,668	1,318	1,370	208	4,542	29,106	79	29,186
2006	14,178	1,012	1,150	2	9,927	26,269	96	26,365
2007	14,706	1,281	1,411	44	4,147	21,589	14	21,603
2008	17,715	1,866	981	1	4,407	24,970	93	25,063
2009	14,598	936	888	415	3,019	19,856	176	20,032
2010	8,287	1,196	409	1	7,746	17,639	122	17,761
2011	13,787	670	316	120 <sup>1</sup>	2,731 <sup>1</sup>	17,624 <sup>1</sup>	499 <sup>1</sup>	18,122 <sup>1</sup>
2012	6,283 <sup>1</sup>	1,422	213	43 <sup>1</sup>	6,668 <sup>1</sup>	14,629 <sup>1</sup>	617 <sup>1</sup>	15,246 <sup>1</sup>

<sup>1</sup>provisional estimates

**Appendix Table B. West Coast commercial landings (mt) of Pacific bluefin tuna, 2001-2013 (all gears).** (Source: 2013 HMS SAFE, Table 4, unpublished, PacFIN, extracted April 26, 2014).

Year	Landings
2001	196
2002	10
2003	36
2004	10.1
2005	207
2006	1
2007	45
2008	1
2009	415
2010	1
2011	118
2012	43
2013	10

**Appendix Table C. Estimated recreational catch (numbers) of Pacific bluefin by all tuna anglers in Oregon.**  
(Source: Oregon Department of Fish and Wildlife).

<b>Year</b>	<b>Estimated Number of Tuna Angler Trips</b>	<b>Estimated Number of Bluefin Caught</b>
2003	2,248	0
2004	1,359	2
2005	3,023	0
2006	4,068	0
2007	2,456	15
2008	3,333	2
2009	12,029	40
2010	7,105	0
2011	10,353	38
2012	11,311	27
2013	9,434	11

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