

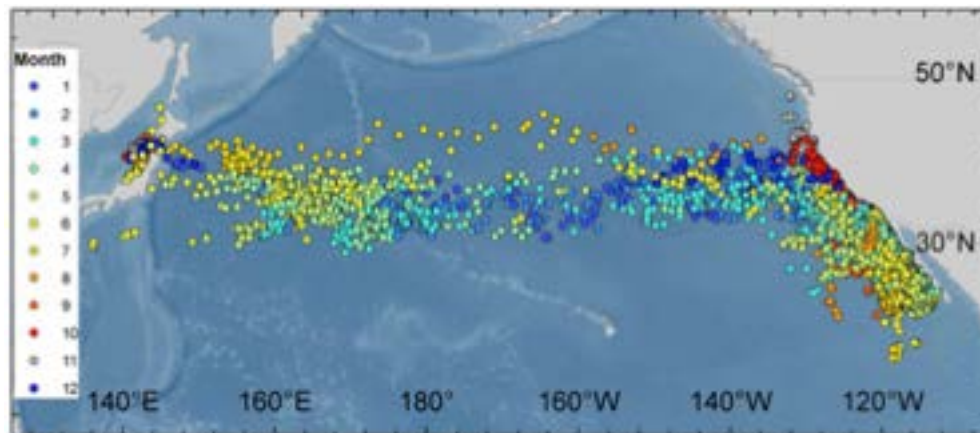


**NOAA
FISHERIES**

Southwest Fisheries
Science Center

NMFS Report SWFSC HMS Activities

Gerard DiNardo



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Presentation Outline

- Japan-U.S. MOU
- ISC Pacific Bluefin Tuna International Stakeholders Meeting
- Stock Assessments
- Pac. Bluefin Tuna Petition
- Future Meetings & Workshops



Japan-U.S. MOU – April 2017

MEMORANDUM OF UNDERSTANDING ON COOPERATION ON RESEARCH BETWEEN THE NATIONAL MARINE FISHERIES SERVICE OF THE UNITED STATES OF AMERICA AND THE JAPAN FISHERIES RESEARCH AND EDUCATION AGENCY

Seeks to encourage and support scientific cooperation in five topic areas:

1. Joint sponsorship of workshops or symposia on the scientific assessment of living marine resources of the northern hemisphere and aquaculture
2. Exchange of expertise and information
3. Extended visits of scientists
4. Cooperative research on common scientific issues and methodological problems
5. Coordination and planning



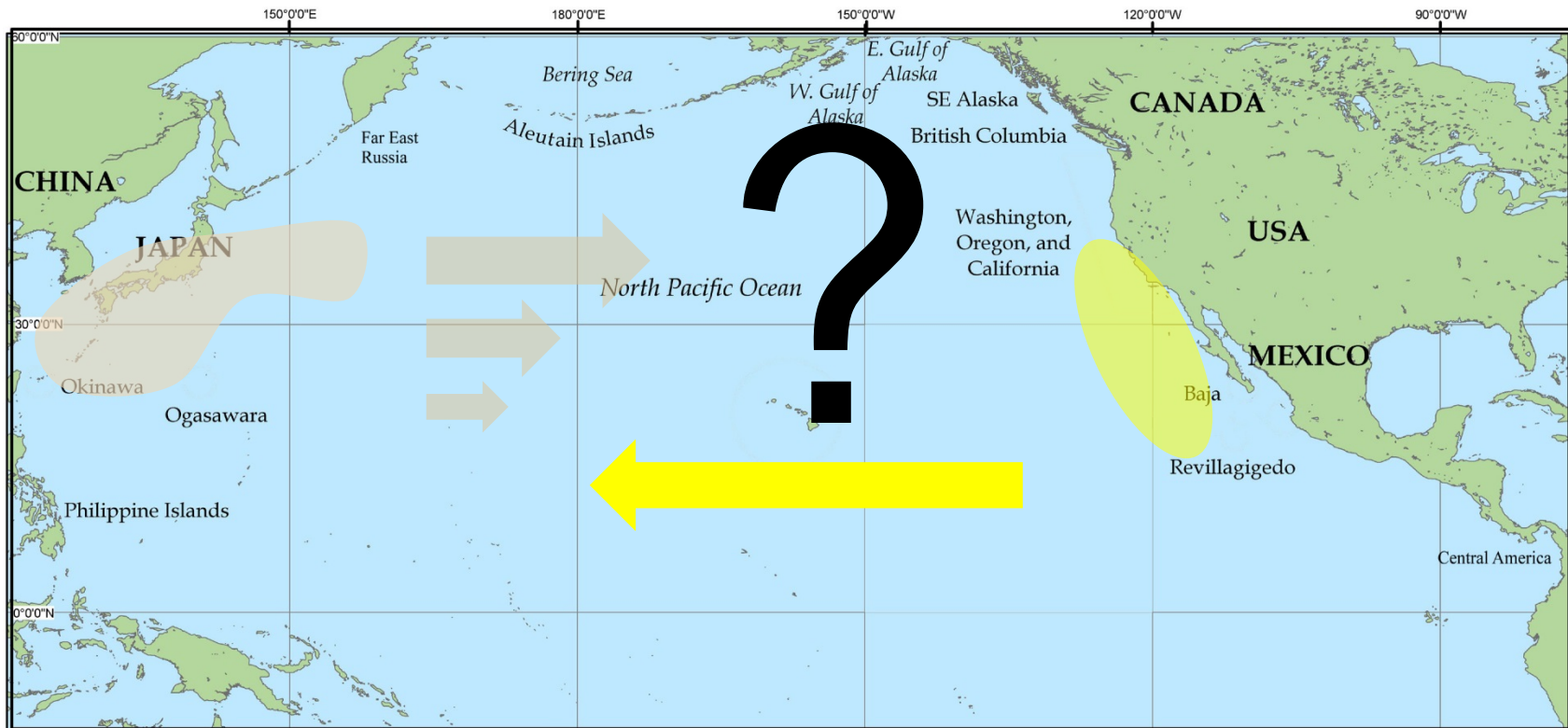
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SWFSC-NRIFS Joint Research

Chemical Tracers (Otoliths and Tissue)

Data Gaps

1. What is the natal origin of fish in the EPO?
2. How and why does rate of movement to EPO change across years?
3. How are movements west linked to spawning grounds?
4. What is the relative contribution of eastern fish to spawning stock biomass?



Chemical Tracers: Preliminary Results of Otolith Stable Isotope Microchemistry

- Model results indicate **correct classification success** ranged from **80-90%** each year, thus providing a proof of concept of the approach.

-In addition to trace elements, stable isotope analysis ($\delta^{18}\text{O}$ and $\delta^{13}\text{C}$) is underway on the same otoliths.

-Next step is to examine core of age-classed matched tuna from the EPO – **TAGGING STUDY**

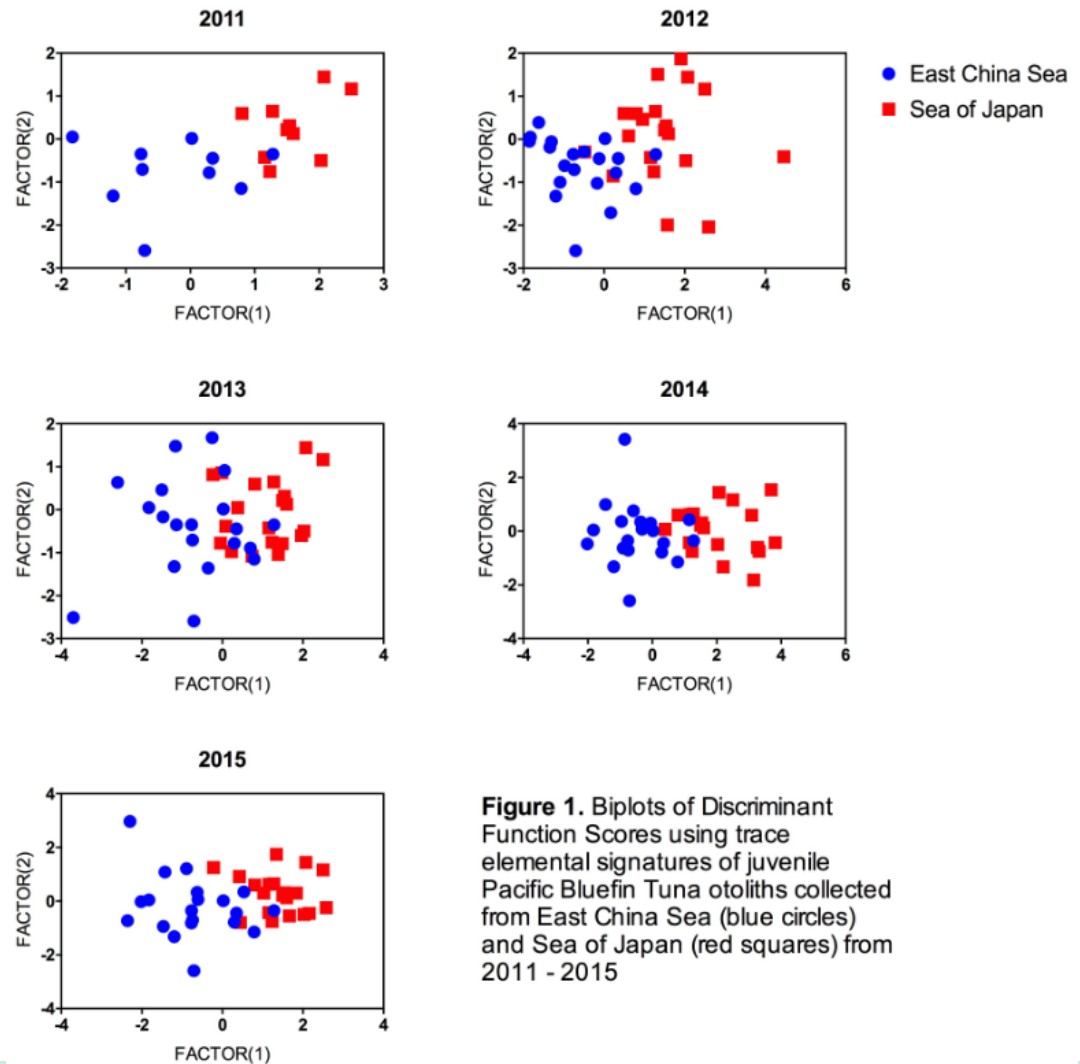


Figure 1. Biplots of Discriminant Function Scores using trace elemental signatures of juvenile Pacific Bluefin Tuna otoliths collected from East China Sea (blue circles) and Sea of Japan (red squares) from 2011 - 2015

ISC Stakeholders Meeting – Background

WCPFC and IATTC:

- Requested ISC to **evaluate** the expected **performance** of various **harvest scenarios** relative to 6 candidate **rebuilding targets** and **performance metrics**, under a range of assumptions regarding future **recruitment** (low, average and combined), and to present the results at the ISC Pacific Bluefin Tuna Stakeholders Meeting in April 2017
- Scenarios intended to provide information for developing **future** effective **conservation** and **management measures**.
- 19 harvest scenarios were tested

Briefing Book: Agenda Item H.5 Attachment 1



ISC Stakeholders Meeting - Participants

Chairs:

- **Gerard DiNardo (ISC Chair), Masanori Miyahara (WCPFC-NC Chair), Hideki Nakano (ISC PBFWG Chair)**

Participants:

- **Approximately 150 stakeholders**
 - **Country Managers – 15 (USA, Japan, Mexico, Korea, Taiwan)**
 - **RMFO – 2 (WCPFC & IATTC)**
 - **Scientists – 15**
 - **Fishers (com. & rec.) – 99 (Korea, Taiwan & Japan)**
 - **NGOs – 9**
 - **Media - 10**

ISC Stakeholders Meeting - Summary

No clear consensus on future rebuilding targets but significant expression of perceptions and personal beliefs:

- **Commitment** for the earliest feasible **recovery** and recognition that restructuring fisheries would be beneficial
- **Catch** limits should be **raised** when stocks have rebuilt (to what?)
- 2016 ISC **assessment** does **not reflect** actual fishing conditions
- Assess utility of **seasonal/area closures**
- Japan fishers are following proposed **voluntary measures** – economic hardships
- Uncertainty is high and **precautionary approaches** should be adopted
- Potential support for **20%SSB₀** as the next **rebuilding target**



PACIFIC BLUEFIN TUNA INTERNATIONAL STAKEHOLDERS MEETING

April 25-27, 2017
Mita Conference Hall (Mita Kaigisho)

Agenda

1. Opening and Introductions
2. Review of the 2016 Pacific Bluefin Tuna Stock Assessment
3. The ABCs of Fisheries Management
4. Results of the ISC Harvest Scenario Testing
5. Discussion on Future Rebuilding Targets
6. Next Steps – M. Miyahara

ISC Stakeholders Meeting – Next Steps

- Complete and **post** a **summary report** of the international stakeholders meeting
- Continue **discussions** between managers, scientists and other stakeholders leading up to the **2nd Joint IATTC-WCPFC-Northern Committee Workshop** in August 2017
- WCPFC to **decide** on the next **rebuilding target** by December 2017 (hopefully)

Current Conditions in CA Bight: April-May

Signs of a Recovery?



April 2017 – Japan increases catch limits by 200-500 mt

HMS Stock Assessments-Thresher Shark

Benchmark Assessment 2016 (Teo, Rodriguez, Sosa-Nishizaki)

- Independent Review June 26-28 – SWFSC

Status

- Stock **unlikely** in an **overfished** condition or experiencing **overfishing**
- Stock is currently close to **unexploited** levels



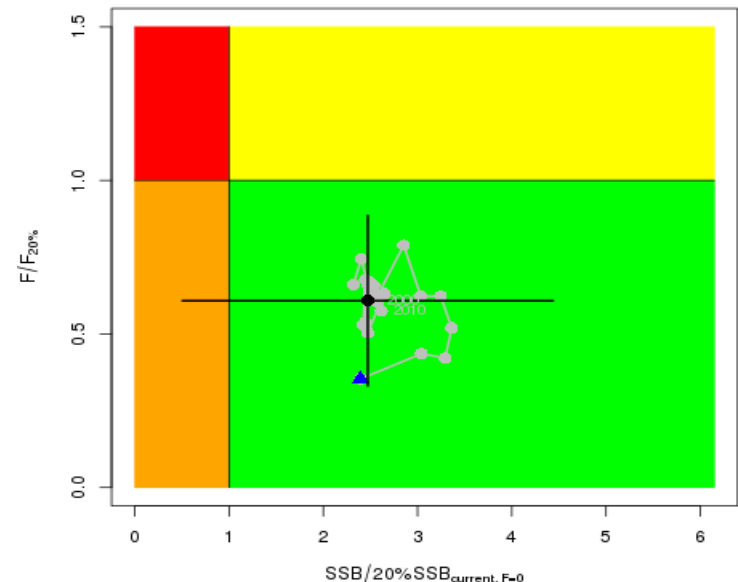
HMS Stock Assessments – North Pacific Albacore Tuna

Benchmark Assessment (ISC ALBWG July 2017)

- New procedure to standardize the Japanese longline abundance index (1996 – 2015)
- Start year of the base case model changed to 1993 (from 1966) to eliminated the influence of poorly fit data
- Natural mortality (M) changed to be more consistent with data-better fit to size composition **data**

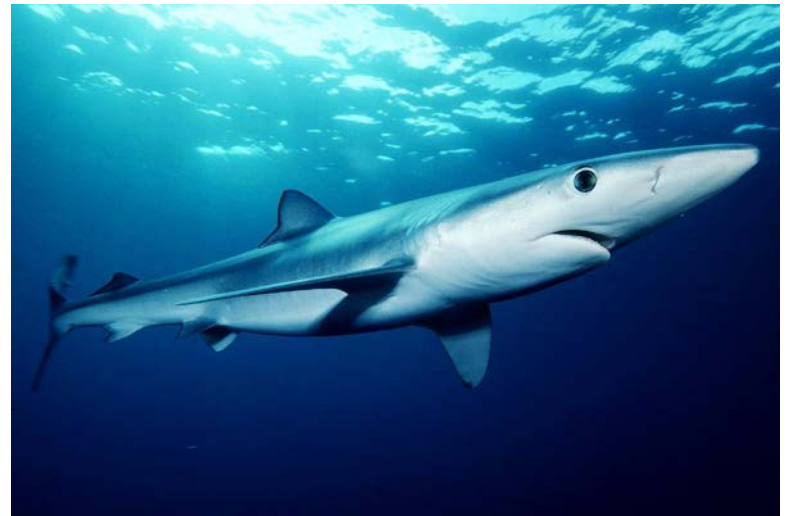
Status

- Stock is likely **not overfished**
- **Overfishing** is likely **not occurring**.



HMS Stock Assessments-Blue Shark

Benchmark Assessment (ISC SHARKWG July 2017)



However



Pacific Bluefin Tuna Petition

Process & Status

- June 20, 2016 NMFS received a petition from the Center for Biological Diversity and 13 co-petitioners requesting that Pacific Bluefin tuna be listed as endangered or threatened under the Endangered Species Act (ESA).
- October 11, 2016, NMFS publishes positive finding concluding that the petitioned actions may be warranted and announcing that a formal status review would be conducted as required by the ESA.
- Nov.-Dec. 2016 Status Review Team (SRT) formed and tasked to conduct the review
- May 2017 SRT finalizes report and forwards to WCRO.
- June 2017 - WCRO finalizing FR Notice

STATUS REVIEW REPORT OF PACIFIC BLUEFIN TUNA
(*Thunnus orientalis*)



Prepared by the Pacific Bluefin Tuna Status Review Team
for the
Department of Commerce
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
May 15, 2017



Other Research and Activities

- Prototype e-logbook Albacore Fishery – the Saga Continues
- SWFSC Cooperative Research – NP albacore, Opah, Pacific bluefin tuna
- Tuna Summits
- Advancing Assessment Models - Space

Future Meetings & Workshops (2017)

RFO-RFMO

- ISC Plenary Meeting (ISC17): July 12-17; Vancouver, Canada
- IATTC Commission Meeting: July 24-28, Mexico City, Mexico
- WCPFC Scientific Committee (SC13): Aug. 9-17; Cooks Island
- WCPFC Northern Committee (NC13): Aug. 28-Sept. 1; Busan, Korea
- ISC 3rd MSE Workshop: October; Vancouver, Canada (PENDING)
- WCPFC Commission Meeting (WCPFC14): Dec. 3-8, Philippines

SCIENCE-INDUSTRY

- Tropical Tuna Summit: Fall 2017; San Diego, CA
- Temperate Tuna Summit: Fall 2017; San Diego, CA

Thank You

Questions?



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