

PACIFIC ISLANDS FISHERY NEWS

Newsletter of the Western Pacific Regional Fishery Management Council / Fall 2020

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Original WPRFMC members in 1976.



1986 Bottomfish FMP

Fishery Management Plan (FMP) for the Bottomfish and Seamount Groundfish Fisheries in the Western Pacific Region prohibited destructive fishing techniques such as trawl nets and bottom-set gillnets, including explosives and poisons. An amendment in 1988 implemented the first limited entry program in the Nation for bottomfish fishing within the U.S. EEZ around the NWHI.



2002 Seabird

Seabird bycatch mitigation measures implemented for the Hawai'i-based longline fishery under the Pelagic FMP, reducing interactions by over 90%. Additional measures implemented in 2006.

1976 MSA

Congress approved the MSA, which established the WPRFMC along with seven other regional Councils. Congress amended the MSA in 1990 to include highly migratory tuna species in the Pacific under WPRFMC's management authority.

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1987 Hawai'i Longline Fishery Management

Pelagic FMP prohibited drift gillnet gear within the U.S. EEZ. Amendments to the Pelagic FMP were implemented from 1991 to 1994 prohibiting fishing within zones around the NWHI and MHI, establishing a protected species zone, permit and reporting requirements, limited entry program and a vessel monitoring program.

Building on Successful Fisheries Management

The Western Pacific Regional Fishery Management Council (WPRFMC) is one of eight regional fishery management councils established by the Magnuson-Stevens Fishery Conservation and Management Act (MSA) of 1976. During its first 44 years, the Council's accomplishments have run the gamut from being the first Regional Fishery Management Council in the nation to prohibit bottom trawling affecting precious corals (1983) and bottomfish (1986), and develop an ecosystembased fishery management plan (2001), to being the pioneer of the vessel monitoring system for fishing vessels (1991), which is now being implemented in fisheries worldwide.

The Council has effectively managed commercial fisheries in the Western Pacific Region through spatial closures to fishing since the mid-1980s:

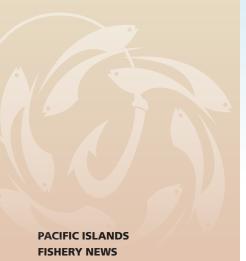
 Implemented a moratorium on the seamount groundfish stocks in the Northwestern Hawaiian Islands (NWHI) (1986). CONTINUED ON PAGE 2



2009

Ecosystem-Based Fishery Management

FMPs restructured as four Archipelagic Fishery Ecosystem Plans (FEPs) for Hawai'i, Marianas, American Samoa and the Pacific Remote Island Areas (PRIAs), and one Pacific Pelagic FEP, shifting WPRFMC's management focus from a species-based to ecosystembased conservation approach.



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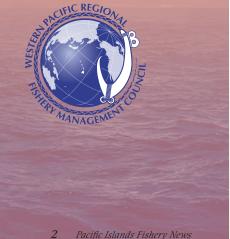
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Dedicated to ecosystembased fisheries management in the U.S. Pacific Islands.



Successful Fisheries CONTINUED FROM PAGE 1

- Established a longline exclusion zone around the main Hawaiian Islands (MHI) ranging from 50 to 75 nm, and a similar 50 nm longline exclusion zone around Guam and its offshore banks (1992).
- Prohibited fishing for pelagic species by vessels greater than 50 feet in length within U.S. exclusive economic zone (EEZ) waters 0 to 50 nm around the islands of American Samoa (2002).

To document the history of its fishery management, development and conservation efforts, the Council continues to publish a series of Pacific Islands Fishery Monographs. The latest monograph

- p. 7) and American Samoa, Guam and the Commonwealth of the Northern Mariana Islands (CNMI) (Catchit Logit app, p. 10) with local and federal fishery management agencies.
- Developing plans for species that are considered overfished and subject to overfishing (oceanic whitetip sharks, p. 3, and North Pacific striped marlin, p. 9) with domestic and international fishery management agencies.

The Council is also working with the Hawai'i fishing industry and National Marine Fisheries Service to reduce seabird interactions (tori lines, p. 4). The Hawai'i

This is a good example of the Council's unique adaptive management process—implement, monitor, review, revise and repeat.

(ninth in the series) spotlights the rise and fall of the NWHI lobster fishery (p. 12). Coming soon are monographs on the management of Pacific billfish, the Pelagic Fisheries Research Program, ecosystem-based management, education and outreach, the history of Pacific Island fishery data collection and the second decade of the Western and Central Pacific Fisheries Commission.

Collaboration is key to managing species that do not follow geopolitical boundaries. In this issue of Pacific Islands Fishery News, the Council updates readers on a few of its recently coordinated activities:

· Improving stock assessments and fishery management in Hawai'i (uku, longline fishery has had seabird bycatch mitigation measures since the early 2000s, which helped reduce interaction rates by over 90%. In the years following, the Council monitored the interactions annually and convened a workshop in 2018 to understand factors contributing to an increase that first occurred in 2015, as well as identify priorities for addressing it. This led to the development of the tori line research project to test different designs. The Council is now considering modifications to existing seabird bycatch mitigation measures and conducting additional trials to inform its decision-making process. This is a good example of the Council's unique adaptive management process—implement, monitor, review, revise and repeat.

Happy Holidays from the Council!



Kitty M. Simonds **Executive Director** M. Simonds



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Hau'oli Lānui **Edwin Watamura** Council Vice Chair, Hawai'i



la Manuia Vaitaimi o Fiafia **Howard Dunham** Council Vice Chair, American Samoa



Felis Påsqua Michael Dueñas Council Vice Chair, Guam as seemas



Ammeseighil Ubwutiwel Layúl Luugh Me Rágh Ffé John Gourley Council Vice Chair, CNMI

September Council Meeting Highlights

The Western Pacific Regional Fishery Management Council is staying busy during the COVID-19 pandemic, connecting through virtual meetings to manage fisheries in the Western Pacific Region. Here are some highlights from our September 2020 meeting.



Retention of oceanic whitetip sharks are prohibited in U.S. fisheries as well as under regional fishery management organization conservation measures in the Pacific. Source: NMFS.

Oceanic Whitetip Sharks: The Council requested the National Marine Fisheries Service (NMFS) Pacific Islands Fishery Science Center (PIFSC) to provide updates on its oceanic whitetip shark projects for the Council and Scientific and Statistical Committee (SSC) to consider at its December 2020 meetings. The species is considered overfished and subject to overfishing and is listed as threatened under the Endangered Species Act (ESA). The Council also recommended that the Oceanic Whitetip Shark Working Group proceed with analyzing longline mitigation measures and that updates be completed and reviewed by the Council's Plan Team before the March 2021 SSC meeting.

Hawai'i Shallow-Set Longline Fishery: The Council requested that NMFS Pacific Islands Regional Office work with it and Hawai'i shallow-set longline industry representatives to establish communication procedures that would provide permit holders and vessel owners with timely turtle interaction updates based on observer data. This would ensure that the fleet has access to all available information for the purpose of minimizing interactions with loggerhead and leatherback turtles and complying with new trip limit regulations of two leatherback and five North Pacific loggerhead turtle interactions.

President's Executive Order Promoting American Seafood Competitiveness and Economic Growth:

After consulting with advisory groups, NMFS and other federal and industry partners, the Council recommended 16 actions that were prioritized by laws such as the Magnuson-Steven Fishery Conservation and Management Act (MSA), ESA and Marine Mammal Protection Act. Among the recommendations are the following:

• Remove fishing prohibitions in the four Marine National Monuments in the U.S. Pacific and return management of federally regulated fisheries in these waters to the MSA. The Pacific monuments comprise half of the U.S. exclusive economic zone in the region.

- · Exempt man-made and degraded environments, such as harbors, from being classified as essential fish habitat, i.e., waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity. The exemption would address lengthy delays and unreasonable conservation actions that hamper harbor improvements and maintenance, and impede commerce and economic development.
- Streamline ESA consultations to ensure efficient environmental reviews within the required 135-day timeline and ensure any reasonable and prudent measures developed to ensure the continued existence of an ESA-listed species are indeed "reasonable" and commensurate with the relative impact to populations.
- Revise ESA listings where populations are increasing and threats do not pose immediate danger of extinction. This would apply, for example, to the North Pacific loggerhead sea turtle population, which has been increasing by more than 2.4% annually.

Join us at the Council's next quarterly meeting, which will be held by web conference Dec. 2-4, 2020.

The agenda includes topics such as the American Samoa bottomfish annual catch limit (ACL) specification and the American Samoa and Guam bottomfish rebuilding plans. PIFSC released a Territorial bottomfish stock assessment in 2019, which described the American Samoa bottomfish stock complex as experiencing overfishing. Based on this assessment, the Council shall consider specifying a more conservative ACL, which still allows a cultural harvest of bottomfish. The assessment also concluded that the American Samoa and Guam bottomfish stocks are overfished. The MSA requires the Council to develop rebuilding plans for stocks that are overfished and need to be rebuilt within 10 years. The Council will take an initial action to address this by reducing the catch level. The Council is increasing outreach to fishermen to improve catch data collection. It is generally agreed that the current stock statuses may reflect deficiencies in the collection of accurate and complete catch and effort data.

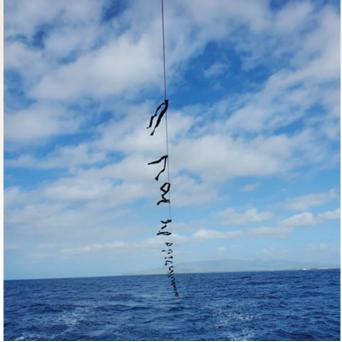
An agenda, meeting documents and a link to Webex will be available on the Council website at www.wpcouncil. org/event/184th-council-meeting/?instance_id=169.

Cooperative Research Project Provides Promising Results for Seabird-Scaring Tori Lines

In 2019, the Council initiated a joint cooperative research project to test tori lines in the Hawai'i longline fishery with the Hawai'i Longline Association, the National Marine Fisheries Service (NMFS) Pacific Islands Fisheries Science Center and Pacific Islands Regional Office. Tori lines, also known as streamer lines or birdscaring lines (tori means "bird" in Japanese), typically consist of a towed line with streamers suspended above the area where fishing gear enters the water, which creates a barrier that prevents seabirds from accessing baited hooks while longline gear is deployed.

The project was implemented in response to a 2018 Council workshop on seabird mitigation measures, following several years of higher black-footed albatross interactions in the Hawai'i longline fishery. Based on the workshop report, the Council recommended research and development for alternative seabird bycatch mitigation measures, with high priority placed on tori lines.

Since 2001, the Hawai'i longline fishery has been required to use mitigation measures to minimize accidental interactions (hookings or entanglements) with seabirds, such as weighted branch lines, sidesetting and blue-dyed bait. Tori lines were previously tested in the Hawai'i longline fishery in the late 1990s and showed that the deterrents were effective in reducing seabird contact rates with bait and gear. However, these early studies also identified issues with practicality and crew safety resulting from tori line entanglement with gear.



In September, the Council considered a preliminary report on demonstrations and field trials to evaluate the practicality and efficacy of tori lines for mitigating albatross interactions in the Hawai'i deep-set longline fishery. Preliminary results indicate that tori lines are effective in reducing albatross contacts on baited hooks when used in conjunction with existing seabird bycatch mitigation measures. Photo: Holly Naholowaa.

The cooperative research project focused on developing a tori line design that alleviated these concerns and led to light-weight and streamlined designs. After testing five different tori line prototypes on seven Hawai'i longline

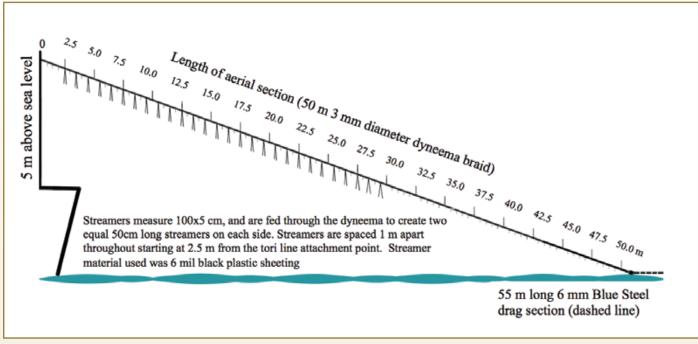


Diagram of the short-streamer tori line design chosen for commercial field trials in the cooperative research project. Source: Holly Naholowaa.

vessels, a "short streamer" design with a 50-meter aerial section using a light and durable material (Dyneema) backbone and a 55-meter blue steel in-water section was selected for commercial trials on four vessels. The field trials started in February 2020, shortly before the arrival of COVID-19 to Hawai'i's shores, but the project was allowed to continue since data was collected on electronic monitoring video cameras.

Preliminary results from the field trials presented at the September 2020 Council meeting indicated that tori lines are effective in reducing albatross contact with baited hooks when used in conjunction with existing seabird bycatch mitigation measures. Specifically, the results indicated that albatrosses are at least two times less likely to interact (attempt or make contact) with longline gear or bait when tori lines are used.

The Council asked NMFS to support at-sea trials for winter 2020/spring 2021 through an Experimental Fishing Permit that would allow testing tori line efficacy without the use of blue-dyed bait when fishing north of 23° N. This would allow additional data to collected, informing the Council's decision-making process, which is expected to continue throughout most of 2021. The Council is expected to review various tori line management options at its December meeting.

As part of the cooperative research project, the Council plans to distribute a limited number of free tori lines and poles to Hawai'i longline fishery participants. Contact the Council's Protected Species Coordinator Asuka Ishizaki (asuka.ishizaki@wpcouncil.org) if you are interested in receiving a tori line.

Hawai'i Swordfish Fishery Begins Operating Under New Sea Turtle Limits



On Sept. 17, 2020, the Hawai'i shallowset longline fishery (which targets swordfish) began operating under new sea turtle limits. The new rules implemented

Amendment 10 of the Pacific Pelagic Fishery Ecosystem Plan, which the Western Pacific Regional Fishery Management Council approved at its August 2019 meeting to manage the fishery's impacts to loggerhead and leatherback turtles while promoting year-round fishing opportunities.

Since 2004, the shallow-set longline fishery has operated under fleet-wide sea turtle interaction limits known as "hard caps" that require the fishery to close for the remainder of the calendar year when either the loggerhead or leatherback turtle limit is reached. The limit has changed over time, having previously been set at 34 loggerhead and 26 leatherback turtle interactions in 2012 until the loggerhead hard cap was temporarily reduced to 17 interactions in January 2019. Nearly all sea turtles incidentally captured in the fishery have been released alive. Additional handling requirements have been enacted to maximize their chances of survival.

Under the new rule, the leatherback turtle hard cap limit was reduced to 16 for consistency with the 2019 biological opinion (BiOp) issued by the National Marine Fisheries Service (NMFS). The rule also removes the loggerhead turtle hard cap limit based on the Council's decision to not set a fleet-wide limit for loggerheads that took into account the species' improving population status (increasing at 2.4% annually) and the establishment of individual trip interaction limits. NMFS' BiOp also concluded that the fishery is not likely to jeopardize the continued existence of loggerhead and leatherback turtles, and requires the consultation under the Endangered Species Act to be reinitiated to reassess the impacts if interaction levels exceed certain thresholds.

Species	Fleet-wide Hard Cap Limit	Individual trip limit
Leatherbacks	16	2 per trip
Example 2 Loggerheads	No limit	5 per trip

New measures and limits for the Hawai'i shallow-set longline fishery recommended by the Council. Individual trip limits include additional restrictions on vessels that reach a trip limit twice in a calendar year.

Sea turtle interactions had been relatively stable between 2004 and 2017 with no more than 17 loggerhead turtles and 16 leatherback turtles in a year, until the fishery experienced a higher rate of loggerhead turtle interactions in period of few months in late 2017 through early 2018. That period illustrated the limitations of using hard caps in managing sea turtle interactions, and the Council set out to develop a more responsive management approach that would provide an early response to higher interaction rates to further minimize impacts to sea turtles, while helping to ensure year-round U.S. domestic supply of fresh swordfish to meet market demand. Should the fishery interact with more than 37 loggerheads in any given year, NMFS would reinitiate consultation under the Endangered Species Act.

The resulting measure was the establishment of an interaction limit of five loggerhead and two leatherback turtles per trip, which would require vessels to immediately stop fishing and return to port if either of the trip limits is reached. The measure's intent is to allow sea turtle "hot spots" to disperse, while encouraging fishermen to take action to avoid sea turtle interactions before the trip limits are reached.

The Council will annually review the fishery's performance under the individual trip interaction limits in the annual Stock Assessment and Fishery Evaluation Report, and may make recommendations to NMFS to revise the limits upon review of the measure's effectiveness.

Main Hawaiian Islands Insular False Killer Whale Draft Recovery Plan Available for Public Comment

The main Hawaiian Islands (MHI) insular false killer whale (FKW) is considered to be a unique island-associated population, and has been listed under the Endangered Species Act (ESA) as an endangered distinct population segment since 2012. This insular population, with an estimated population of 167 animals as of 2015, is considered to be genetically different from FKWs that are seen offshore (known as the pelagic stock).

The National Marine Fisheries Service (NMFS) is currently seeking public comment on a draft recovery plan for the MHI insular FKW until Dec. 15, 2020. Recovery plans under the ESA identify recovery criteria, management actions needed to reach the recovery criteria and estimates of the time required and costs to implement the recovery action. The plan itself does not implement new regulations or restrictions, but rather lays out the roadmap for population recovery. NMFS works with federal, state and local agencies as well as public and local stakeholders to implement recovery actions.

The draft recovery plan identifies three primary threats to the MHI insular FKW population: small population size; incidental take



(hooking or entanglement) in non-longline commercial and recreational fisheries (e.g., troll, handline, shortline, kaka line); and inadequate

regulatory mechanisms for nonlongline commercial and recreational fisheries, including inadequate management and reporting requirements. NMFS proposes to address the fisheries issues through recovery actions to analyze and manage nonlongline commercial and recreational fishery interactions. Specific implementation strategies include the following:

- Analyze fishing gear and the mechanics of fishery interactions.
- Develop and evaluate gear modifications to deter/avoid/prevent depredation of catch and bait, and minimize occurrence and severity of interactions.
- Conduct targeted research on human dimensions of fishing-FKW interactions.
- Continue fine-scale analysis of state fishing data in relation to MHI insular FKW habitat use

with an increased sample size to address seasonal, inter-annual, and environmentally driven variability in MHI insular FKW spatial use.

- Work cooperatively with the State of Hawai'i to identify initiatives and projects that will enhance the conservation and management of MHI insular FKWs.
- Continue tracking fishing gear injury rates.
- Develop strategic outreach messaging, tools, and programs for the fishing community and other stakeholders.

NMFS is projecting at least a 50-year timeframe to achieve recovery of the MHI insular FKWs to the level that the population can be removed from the list of ESA species. The time horizon is based on a recovery target to have increasing or stable population trends over a two-generation time period.

For more information on the draft recovery plan and how to make a public comment, go to:

www.regulations.gov/docket?D= NOAA-NMFS-2020-0124

www.fisheries.noaa.gov/species/ false-killer-whale#conservationmanagement 🛶



Council Plans Ahead with Offshore Energy Policy

In September 2020, the Western Pacific Regional Fishery Management Council adopted an Offshore Energy Policy for the Western Pacific Region that will provide guidance when these matters arise. At its June meeting, the Council directed staff to draft a policy that considers the following: potential area closures around offshore wind areas would limit access to fishing grounds; wind turbines can act as fish aggregating devices and affect the annual migration patterns of yellowfin tuna; schools of juvenile fish around turbines can attract protected species such as seabirds; and undersea cables from offshore wind farms will impact the bottom substrate and may compromise benthic habitats.

The Council recognizes the need for efficient renewable power generation for the Pacific Island region. The policy's purpose is to inform potential energy developers

Progression Hawaii Offshore Wind submitted a lease application in 2015 to build a wind farm off O'ahu, with the location still to be determined. The company has partnered with Principle Power, Inc. to use their patented WindFloat floating platform. There will be between 27 to 50 platforms, depending on the technology available, with a target completion date of 2030. Photo: Principle Power, Inc., Dock90. www.boem.gov/renewable-energy/state-activities/progression-south-coast-oahu-project

and others with regulatory authority over these activities of the Council's interest in offshore energy development and to ensure early and full engagement in the review process. The Council's policy is to support offshore energy projects, provided social and environmental impacts to fishery and marine resources are minimized or mitigated.

The Council is particularly interested in the potential benefits and impacts offshore energy facilities may have on marine and human resources it is mandated to manage and conserve. These interests include the following: fishery resources, island fishing communities and access to traditional fishery sources and fishing grounds; Pacific Island fishing sectors (commercial and non-commercial); product supply to local, national and international seafood markets; and impacts to marine ecosystems, protected species and habitat, and water quality.

To address these concerns, offshore energy projects should, at a minimum, consider research and monitoring programs to analyze operational effects on fish and other marine life migration patterns, essential fish habitat, fishing activities and the fishing communities. These projects should coordinate with the appropriate agencies to ensure environmentally responsible siting and operations that minimize disruption to the marine environment. They should develop best management practices that address noise, access to resources and emergency events, among other impacts, and minimize conflicts with other ocean users. Projects should also consult with both the fishing and indigenous communities throughout planning and operation.

Quota Increased for Main Hawaiian Islands Uku Fishery



The Council selected a preliminary annual catch limit of 295,419 for main Hawaiian Islands uku for fishing years 2022 to 2025. Photo: Ed

At its September 2020 **meeting**, the Western Pacific Regional Fishery Management Council selected an annual catch target for main Hawaiian Islands (MHI) uku (Aprion virescens, grey snapper) at 36% risk of overfishing, which corresponds to an annual catch of 291,010 pounds for the commercial and non-commercial fisheries. This catch level is a 2.3 times increase from the current annual catch limit (ACL) of 127,205 pounds.

A June 2020 stock assess-

ment released by the National Marine Fisheries Service (NMFS) Pacific Island Fisheries Science Center showed that the MHI uku stock is not overfished nor subject to overfishing. The 2018 spawning stock was estimated

to be 1.8 million pounds, which is about 234 times the calculated sustainable threshold of 663,591 pounds. The harvest rate of uku in 2018 was about 57% of the sustainable harvest rate. The assessment also projected the annual catch per level of risk that would result in overfishing. This allows the Council to evaluate the level of risk it is willing to take for the uku fishery annually.

The commercial catch is monitored through the Hawai'i Division of Aquatic Resources Fisherman Reporting System. This monthly data collection system allows for a more stable near-real-time estimate of catch. The commercial and non-commercial fisheries in federal waters will close once the ACL for the commercial fishery is reached.

The State of Hawai'i needs to address existing regulatory gaps, mainly by controlling



the catch within State waters. Control measures should be put in place within State waters to avoid reaching and exceeding the ACL. The Council and NMFS will work with the State of Hawai'i to ensure effective ACL implementation for fishing years 2022 to 2025. ←

Community Stakeholders Discuss Issues Key to Sustainable Fisheries

The Western Pacific Regional Fishery Management Council recently convened three virtual meetings in its continued efforts to support regional and local fishing and seafood communities. The meetings highlight the Council's emphasis on collaboration among agencies and promoting stakeholder involvement in the fishery management process.

The Fishing Industry Advisory Committee (FIAC) is one of three advisory bodies to the Council required by the Magnuson-Stevens Act that provides input and recommendations on management and conservation actions from an industry perspective. Members include representatives from Hawai'i, American Samoa, the

Commonwealth of the Northern Mariana Islands and Guam in industry-related sectors such as fishing, seafood processing, distribution and marketing industries, fishing tackle and marine service and supply providers.

The Non-Commercial Fisheries Advisory Committee (NCFAC) has existed in a simpler form since 1999, but its purpose has now expanded from gathering recreational fishing data in Hawai'i to providing advice to the Council on non-commercial fishery issues, data collection and research. The Council also met with the State of Hawai'i and the National Marine Fisheries Service (NMFS) to discuss improving state and federal fishery management coordination and filling regulatory and monitoring gaps.

CONTINUED ON PAGE 8

Community Stakeholders

CONTINUED FROM PAGE 7

FIAC members emphasized the tremendous impact the COVID-19 pandemic has had on fishing and marketing. They put forward several recommendations to the Council, including supporting a Pacific Island-wide seafood promotion program, improving harbor safety and management, redesigning fish aggregating devices to be more environmentally responsible and ensuring industry representation on the national NMFS Marine Fisheries Advisory Committee.

The NCFAC meeting focused on the Council's current data collection efforts and needs and research priorities. Committee members noted that smart device applications and electronic monitoring could be incorporated into existing data collection systems. The voluntary Hawaii Marine Recreational Fishing Survey collects non-commercial catch data, but garnering participation continues to be an issue. Members suggested increasing outreach efforts to fishermen regarding data usage to demystify the fishery management process, encourage participation and instill a sense of pride that they are part of the solution.

At the Council meeting with the State of Hawaii and NMFS representatives, participants acknowledged continuing data gaps and identified several areas where federal and state rules could be better aligned, especially in the noncommercial small-boat fisheries. While accurate, timely catch and effort data from fishermen is important for improving stock assessments and to minimize management uncertainty, some discrepancies still exist. For example, the Hawai'i longline and bottomfish fishermen report their fishing trip information within 72 hours of landing, and fishermen with state commercial marine licenses catching pelagics, uku, Kona crab and other species continue to report on a monthly basis.

All three groups plan to meet regularly to continue to address fishing community needs.

Council Leads Initiative to Address International Overfishing of North Pacific Striped Marlin

The Western Pacific Regional Fishery Management Council will address the overfished and persisting overfishing condition of Western and Central North Pacific striped marlin at its December 2020 and March 2021 meetings. On June 4, 2020, the National Marine Fisheries Service (NMFS) notified the Council of the stock status based on reference points in the Pacific Pelagic Fisheries Ecosystem Plan (FEP). Per the Magnuson-Stevens Act, the Council is required to address, within one year, relative impacts of domestic fisheries on the international overfished stock and provide recommendations to the U.S. State Department to help end international overfishing.

A new stock assessment shows the stock continues to be overfished on an international level. U.S. fisheries harvesting striped marlin in the North Pacific primarily include the Hawai'i longline fleet and small-boat pelagic fleets operating out of Hawai'i, with some catches by small-boat fisheries in Guam and the Commonwealth of the Northern Mariana Islands. U.S. fisheries account for only 6% of total reported striped marlin landings since 1975.



Striped marlin. Image: Les Hata, Secretariat of the Pacific Community.

The overfished and overfishing status of the North Pacific striped marlin stock is not new. In 2010, the Western

and Central Pacific Fisheries Commission (WCPFC) adopted international conservation and management measures (CMMs) that advised a 20% reduction from the North Pacific striped marlin catch levels in 2000 to 2003. In 2014, the Council proactively recommended an annual catch limit (ACL) for U.S. fisheries of 1 million pounds (457 metric tons). As an accountability measure, once 95% of this amount (957,000 pounds or 434 mt) is harvested by the Hawai'i longline fishery, it would no longer retain striped marlin, whereas other fisheries would not be restricted. Recent landings have been variable but all U.S. fisheries combined have been around the recommended ACL.

An updated striped marlin stock assessment provided to the WCPFC in 2019 showed some recovery and reduction in fishing mortality. Unfortunately, the status of the stock remains unchanged, which is not surprising given the recommended catch limits were non-binding for international fishing fleets harvesting North Pacific striped marlin. The WCPFC adopted a new rebuilding plan for the stock at its December 2019 meeting, but without specific terms or criteria to rebuild the stock and reduce overfishing.

The Council has been working on this issue in 2020 in preparation for the December WCPFC meeting, which may again address CMMs for North Pacific striped marlin. In March, the Council recommended that the Pacific Islands Fisheries Science Center (PIFSC) include phased catch reductions in any proposal to the WCPFC for North Pacific striped marlin to allow fisheries time to adapt and develop ways to gradually reduce billfish bycatch. In September, the Council recommended that phased catch limits developed by PIFSC be used as a basis to propose a CMM, which would initiate a total allowable catch (TAC) of striped marlin among all nations in the North Pacific. The Council also recommended that of this TAC, 457 mt should be allocated for U.S. vessels, consistent with previous Council actions.

The U.S. Permanent Advisory Committee to the WCPFC endorsed the Council's proposal calling for catch reductions for all participating nations using 2015-2019 longline

catches reported to the ISC¹ as a reference to apportion a suggested TAC estimated by PIFSC projections. This would assign a catch limit to the United States of 456 mt, consistent with the September Council recommendation. However, this measure may not materialize and there are significant uncertainties with the amount of foreign-caught North Pacific striped marlin, while U.S. catches remain fairly well estimated. Former Council staff Paul Dalzell coined the phrase, "Every pound can be found" in U.S. pelagic fisheries in the Western Pacific Region, but competing foreign fisheries exhibit glaring inconsistencies in catch accounting.

Nevertheless, the Council is obligated to address the relative impact of U.S. fisheries, as the United States accounts for approximately 22% of the total North Pacific striped marlin caught in the last five years of the 2019 stock assessment. PIFSC has provided phased stock projections that demonstrably end overfishing immediately and provide a suggested TAC over four time periods from 2021 to 2034. This information may be adequate to address domestic overfishing, develop domestic measures to help rebuild the stock and for the United States to lead the way in rebuilding the North Pacific striped marlin stock.

¹ISC = International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean

Court Decision Released in American Samoa Large Vessel Prohibited Area Case



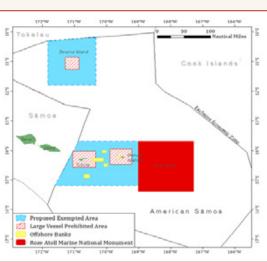
In 2002, the Western Pacific Regional Fishery Management Council developed a Large Vessel Prohibited Area (LVPA) to minimize competition between the large-vessel fishing fleet

and smaller longlining alia (traditional double-hulled catamaran) boats. At the time, the alia fleet, which was targeting bottomfish as well as longline fishing, had swelled to 40 vessels. The increase had the potential for gear conflicts and catch competition with the large fishing vessels. To prevent this, the Council recommended the prohibition of vessels larger than 50 feet in length from fishing for pelagic management unit species within areas seaward of 3 nm to 50 nm around the islands of American Samoa.

Since then, the alia fleet has contracted to only three active longline vessels. Meanwhile, the larger longline vessels began to face increased market competition from an influx of Chinese longline vessels in the South Pacific albacore fishery, resulting in financial difficulties and economic hardships. The fishery approached the Council to allow the large longline vessels to fish closer to port and away from the competition, which would also save on operating costs. In October 2015, the Council recommended an exemption to the LVPA for

U.S.-permitted longline vessels of 50 feet in length or greater, based in American Samoa, allowing the fleet to fish seaward of 12 nm around Tutuila, Swains and Manu'a Islands. In making its decision, the Council noted that the National Standards of the Magnuson-Stevens Fishery Conservation and Management Act require the achievement of optimum yield and the fair and equitable allocation of privileges. Allowing the vessels to fish seaward of 12 nm of the islands would also improve the efficiency of longline trips, reducing trip times, distances and costs. The Council also included a provision to conduct an annual review to consider any new small-vessel fisheriesdevelopment initiatives, small-vessel participation and catch rates.

After the National **Marine Fisheries** Service (NMFS) announced the final rule making the exemption effective on Jan. 29, 2016, the American Samoa Government (ASG) filed a lawsuit against the federal government, arguing that the amend-



The map shows the large vessel exempted areas (in blue)recommended by the Council in October 2015 seaward of 12 to 50 nm around Tutuila, Swains and Manu'a Islands.

ment to the LVPA for longline vessels violated the territory's Deeds of Cession. The Deeds of Cession are a pair of treaties signed in the early 1900s by the ranking chiefs in American Samoa, ceding sovereign rights to land and water to the United States. The deeds allowed American Samoa to retain its cultural land tenure system and said that the United States will protect the waters around the territory. A federal judge ruled in favor of ASG in March 2017, finding that the amendment was arbitrary and capricious in that it did not consider whether the rule was consistent with the Deeds of Cession to preserve and protect cultural fishing.

The federal government appealed the decision and in September 2020, a three-judge panel ruled unanimously in its favor, reversing the district court's ruling stating, "It is of little import that NMFS did not specifically cite the cessions when detailing the 'other applicable laws' it consulted, as NMFS considered the consequences of the rule on alia fishing boats, and rationally determined the effects were not significant." The judges also found that the Council and ASG are both developing strategies to increase and develop alia fishing, and noted that NMFS will review the effects of the rule annually, giving ASG an opportunity for further input and challenge.

Bottomfish Training Continues for Fishers in the CNMI





Left: Instructor Lino Tenorio describes the different types of bottomfish to workshop participants. Right: CNMI fishers received field training on bottomfish fishing techniques. George David proudly displays his catch of the day—a gindai (oblique-banded snapper) and blackjack. Photos: Floyd Masga.

The Commonwealth of the Northern Mariana Islands (CNMI) Bottomfish Fishery Development program, funded through the Western Pacific Sustainable Fisheries Fund since 2019, exposes community members to commercial bottomfish fishing operations and provides technical training on all aspects of pursuing bottomfishing as a professional trade. The CNMI Department of Lands and Natural Resources recently hosted two workshops and trained 43 fishers on specialized gear, commercial fishing methods and operations, vessel maintenance and operations, tackle, equipment and fish handling for commercial markets and seafood safety.

Catchit Logit App Launched in the **Mariana Archipelago**

CNMI

This summer and fall, the Western Pacific Regional Fishery Management Council launched its voluntary electronic reporting Catchit Logit app in a three-part training session in collaboration with local and federal fishery management agencies. The Commonwealth of the Northern Mariana Islands (CNMI) Division of Fish and Wildlife staff and Council Advisory Panel members were trained first in August 2020, followed by 40 fishermen and fish vendors in September. The third session will be to register and train additional fishermen and vendors and provide technical assistance, when needed.

The goal of the training is to improve fishery data collection efforts to better manage the territory's fisheries. The Catchit Logit app suite, which can be used on an Android



Council member John Gourley, CNMI vice chair, explains the importance of good catch data for fishery management to the Catchit Logit app training participants. Photo: Floyd Masga.

or Apple smartphone or tablet, is comprised of a Fisher, Vendor and Admin portion.

- The **Fisher** app allows fishermen to log their trips, catch, effort, bycatch and sales and share it in near-real-time with fishery managers, along with their fellow fishers.
- With the **Vendor** app, fish retailers can log fish purchased from fishermen and automatically summarize the cost of doing business.

• The **Admin** app is for the fishery managers to manage the Fisher and Vendor portions and summarize the data collected for analysis and feedback to the fishing and vendor community.

Guam

Quarantine restrictions due to the COVID-19 pandemic have hampered the Council's efforts to hold inperson Catchit Logit app training for Guam fishermen, originally scheduled to begin Aug. 22, 2020.

However, Council staff, along with the app developer and eReporting administrator, virtually trained Guam Council members, its Advisory Panel and Department of Agriculture Division of Aquatic and Wildlife Resources (DAWR) staff, who will support future fishermen and fish vendor training sessions.

Department of Agriculture Director Chelsa Muña-Brecht applauded the training effort, noting it will greatly enhance the quality of fish catch data and improve the understanding of Guam's marine resources. "This evolution of the eReporting app is timely," said Muña-Brecht. "It will provide feedback to fishers on their catch and create historical catch logs fishers can use to track overall data." Muña-Brecht laughingly added, "They can also use the data to compete for bragging rights based on facts."

DAWR and Senator Clynt Ridgell are working together to draft rules and regulations to make commercial licensing and catch reporting mandatory, which will complement the Council's initiative. Council staff produced and



Kim Ignacio at CU2 Fish Mart is ready to share information with her customers about the Catchit Logit app and the importance of annual catch limits. Photo: Felix Reyes.

widely distributed flyers, posters and handouts to raise awareness of the importance of data collection and the app training to tackle shops, fish stores, Council family, local and federal government agencies, village mayors and fishermen.

Due to the uncertainty caused by the pandemic,

the Guam team approached fish vendors first to describe the app and offer training. All were supportive and expressed their willingness to participate as soon as the lockdown is lifted.

Congressional Corner



The U.S. Congress has its hands full in 2020. The big issue that lawmakers face is responding to the COVID-19 pandemic and its effect

on people and the economy. If that wasn't enough, the passing of Justice Ruth Bader Ginsberg presented an opportunity for the Senate to confirm a new Supreme Court Justice. Add on that 2020 is a presidential election year, and not much regarding fisheries is expected out of the last few months of the 116th U.S. Congress. However, there are still a couple of bills getting attention that are of interest to the fishing community and the Western Pacific Regional Fishery Management Council.

The Advancing the Quality and Understanding of American Aquaculture (AQUAA) Act is a bipartisan bill that has versions in both the House of Representatives and the Senate.

The AQUAA Act is being pushed to support the aquaculture industry by providing a clear regulatory pathway for developing, permitting and investing in aquaculture projects in the United States. While critics of the Act note the limited public input,

lack of protection of wild fishery markets and potential impacts to the environment, supporters note the Act provides regulatory certainty while preserving the environment and local economy. Since both the House and the Senate have a version of this bill with bipartisan support, along with the urging from the seafood and aquaculture industries to support the bill, the AQUAA Act is a bill to watch.

There is also a push to address climate change impacts to the ocean and to better account for these impacts in federal management. The House of Representatives introduced the Ocean-Based Climate Solutions Act on October 20, 2020, based on the House Select Committee on the Climate Crisis' Climate Action Plan. This comprehensive package promotes American seafood by eliminating subsidies to illegal, unreported and unregulated fisheries and restricts trade until foreign fisheries produce stock assessments for their fisheries. It would also expand national fisheries science through improved monitoring and data collection.

The bill's goal is to protect 30% of the ocean by 2030 and looks to designate additional marine sanctuaries, particularly to protect deep-sea coral from

fishing gear. Council Science and Statistical Committee member Ray Hilborn testified at the congressional hearing for this bill Nov. 17, 2020, stating that climate change is the major challenge to U.S. fisheries. Even so, overfishing is not a major concern and if the United States fully exploited all of its underfished resources, it might increase yield by 40%.

Regarding no-take marine protected areas, Hilborn said, "Let Councils use the effective tools to protect 100% of U.S. oceans, not apply an ineffective tool to 30%. No take areas are an inflexible, static tool, whereas agency management we already have can respond to climate change in real time." In reality, 52% of the waters in the U.S. exclusive economic zone in the Western Pacific Region is already closed to commercial fishing, and 61% around Hawai'i due to the establishment of marine national monuments.

Natural Resources Committee Chair Raul Grijalva noted that both pieces of legislation will be reintroduced in Congress in 2021. To keep apprised of all of the bills in this session and to see what will be introduced in the 117th Congress, visit www.congress.gov.

"Fish to Dish" **Initiative Feeds** Hawai'i Families and Supports Local **Businesses**

The City and County of Honolulu's "Fish to Dish" program with the Hawaii Longline Association (HLA), Honolulu Fish Auction, Hawaii Seafood Council and seafood distribution companies have recently delivered more than 80,000 pounds of local fish fillets to the Hawaii Foodbank, resulting in 250,000 servings for kupuna and other hungry families in need across O'ahu.

As part of the program, CARES Act funds were distributed to more than 140 HLA vessels to help cover



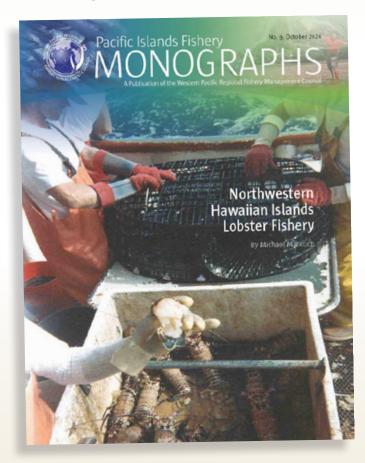
Fish is delivered to Hawai'i families in need. Photo: John Kaneko.

vessel operating fees over a threemonth period. Due to the COVID-19 pandemic's impact on seafood markets, the Hawai'i longline fleet has lost about \$35 million in revenue since March 2020.

According to the Hawaii Foodbank website, since the onset of the

pandemic, food insecurity in Hawai'i has grown by more than 60%—representing the fifth highest percentage increase in the United States. Nearly a quarter of a million Hawai'i residents are currently struggling with hunger. For more information, go to www. hawaiifoodbank.org/covid-19. 🛶

History of the NWHI Lobster Fishery





You've likely heard the quote from Maya Angelou, "If you don't know where you've come from, you don't know where you're going." To this point, the Western Pacific Regional Fishery Management Council is adding seven historical issues to its Pacific Islands Fishery Monographs series. The first of these (monograph #9), the Northwestern Hawaiian Island Lobster Fishery, was released in October. Written by Michael Markrich, it focuses on

what was once the most lucrative fishery in the State of Hawai'i. This fishery expanded rapidly concurrently with an unexpected oceanographic regime shift in the North Pacific and environmental campaigns in support of large marine protected areas, such as the marine national monument in the Northwestern Hawaiian Islands.

The monograph's findings and perspectives do not necessarily reflect those of the Council or the National Marine Fisheries Service. However, they hopefully will enlarge the reader's understanding of the divergent views of fishermen, scientists, managers, policymakers and environmentalists that impact federal fishery management. The author aimed to provide a captivating history that respects, as best possible, these multiple factions.

A limited number of printed copies are available on a first-come basis by contacting the Council. The publication and prior issues of the monograph series are also available online at www.wpcouncil.org/educational-resources/ education-library.

New Outreach Resources

The 2021 traditional lunar calendars are now available for American Samoa, the Commonwealth of Northern Mariana Islands, Guam and Hawai'i. The calendars aim to raise awareness about traditional ecological knowledge and enhance community involvement in fishery management. Council staff and regional Advisory Panels collaborated to highlight 13 popular fishing spots. Each location has historical and current information, species commonly caught, fishing methods, gear used and the reason it is important to fishermen.

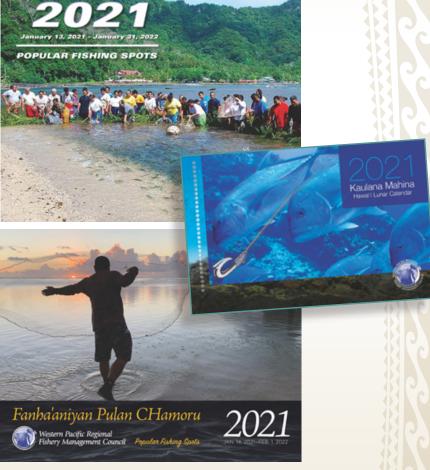
For more information or to request a print version of a calendar (available in limited quantities), please contact the Council at info@ wpcouncil.org. Calendars are also available to download and print at www.wpcouncil.org/educational-resources/lunar-calendars.

The 2019 Western Pacific Region Status of the Fisheries summarizes and provides key information from the annual archipelagic and pelagic Stock Assessment and Fishery Evaluation Reports, comparing trends to the 2018 data. This year the report describes factors that may affect the fishery statistics, along with stock statuses and fishery management and development projects in 2019. The report is available at www.wpcouncil.org/fisheries101, in the Fishery Profiles and Fact Sheets section.

Kaulana Mahina • Hawai'i Lunar Calendar







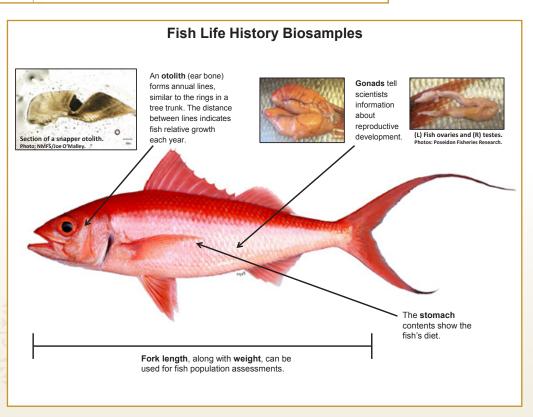
Science & Management 101: Life History Information

Life history characteristics play an important role in the management and assessment of a species. They provide information on how productive and resilient a species may be and how much harvest they can sustain. Examples of fish life history questions that provide important information to both the general understanding of the species' biology and stock assessments are provided in the table below.

Fish Life History Parameters	Management & Assessment Uses	
How long does it live?	To estimate natural mortality and set maximum age in assessment models.	
How large does it grow?	To set size limits and estimate total biomass.	
How fast does it grow?	Implications as to how fast it will reach the fishery's minimum size limit.	
Where does it live?	Identifies habitat needs and areas to protect.	
What is the age and size of first spawning?	To establish minimum size limits to ensure species reproduce at least once prior to being harvested.	
When, where, and how does it spawn?	Identifies areas and times of increased vulnerability to harvest; may lead to seasonal closures to protect spawning aggregations or specific habitat types.	
How many eggs are produced?	Helps to determine the reproductive capacity of the stock as well as develop egg per recruit estimates.	
How does it develop and what habitats does it rely on?	Identifies important habitats to protect during vulnerable life stages.	
What does it eat? How does it eat? What eats it?	Predator/prey, food web, and species interactions; multispecies and ecosystem management.	

A couple of ways scientists collect fish life history information is through the measurement of length and weight and assessing age by growth marks on hard structures such as otoliths (ear bones). Combined, these data help scientists determine lengthat-age, a key variable in stock assessments.

Source: www.asmfc.org/ fisheries-science/fisheriesscience-101.



Get to Know Your Council Members:

John Gourley

Learn about the people who balance competing interests while trying to make fishery management decisions for the overall benefit of the nation.

John Gourley, vice chair for the Commonwealth of the Northern Mariana Islands (CNMI), has served as a member of various Council advisory groups since 1995 and been a Council member for past six years.

After arriving on Saipan in 1989, he worked for the local CNMI Division of Fish and Wildlife as a Fishery Biologist until 1994, when he left to start Micronesian Environmental Services (MES), an environmental consulting business. Consulting services focus on environmental regulatory and permitting issues, terrestrial and marine research, and threatened and endangered species surveys. With initial funding from the National Marine Fisheries Service, MES developed a successful biosampling program that monitors commercial reef and bottomfish catches. MES is currently helping to establish a similar biosampling program on Guam.

You've been with the Council for a long time now. Why did you initially want to be part of it?

During my time volunteering in various Council advisory groups and attending Council meetings, I became very interested in regional fishery management issues and found the challenges and complexity of issues fascinating. The more I learned, the more I wanted to have an active role in the Council process.

How does your position with MES help you to bring a different perspective to fishery management in the Western Pacific Region?

My interest in fisheries and science started at an early age with my father's respect for the outdoors. I have always had a strong interest in both fisheries and the marine environment and pursued a formal



Gourley (left) explains the importance of gathering fish life history data, such as age information from otoliths (ear bones), for good fishery management. Photo: Floyd Masga.

marine science education followed by fisheries-related work in Virginia, Texas and the CNMI.

As owner and principal investigator of MES, I am able to rely on nearly 50 years of work experience in the environmental field. Over this time, I have worked on both sides of the "desk"—both as a biologist for a federal resource/regulatory agency and as a private sector consultant. With this experience, my personal approach toward fisheries resource management is based on utilizing the science-based decision-making process in concert with the needs of local fishing communities. However, in practice and as a Council member, I follow the Magnuson-Stevens Act as the mainstay for managing fisheries.

My broad-based science background has helped me to better understand the details of the management decisions that the Council must make in order to promote sustainable fishing practices and the conservation of habitat that supports these resources.

What are some challenges that CNMI fisheries are facing?

Fresh fish is provided to the CNMI residents by a relatively small artisanal fishing fleet. We don't have any active longlining boats or industrial fishing in our exclusive economic zone. In addition, the CNMI doesn't have an export market for local fishery products. Under these circumstances, our fishery management challenges are relatively

simple. However, it is still crucial to have a well-designed data monitoring system in order to identify potential fishery issues before they become serious.

I believe one of our biggest challenges is the collection of quality fisheries data. Good quality data is the foundation of a successful fisheries management program.

What does effective fishery management look like to you?

To me, this is when the local fishery management agency has the following:

- A good working relationship with fishers and community members.
- An active public outreach that explains the purpose of regulatory measures and asks for input in managing their fisheries.
- A robust fishery data collection program that closely monitors catches.

Also, local fish vendors should have a good assortment and supply of local fish that were caught legally under the existing management program.

Lastly, what is your favorite fish to eat?

My favorite eating fish is parrotfish, especially a medium-sized *Chlorurus microrhinos* that is prepared Hong Kong-style—steamed with onions, ginger and soy sauce.



2020-21 Council Calendar

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Council Family Updates

At the 183rd Council meeting, the Council supported the following advisory body changes:

Non-Commercial Fishing Advisory Committee changes:

- Hawaii Marine Recreational Fishing Survey Coordinator
- National Marine Fisheries Service (NMFS) Pacific Islands Regional Office Recreational Fishing Coordinator
- NMFS Pacific Islands Fisheries Science Center Recreational Fishing Coordinator
- Saipan Fishermen's Association Representative
- Pago Pago Gamefish Association Representative
- Guam Non-Commercial Shut Up and Fish Representative
- Hawaii Fishermen's Alliance for Conservation and Tradition Representative(s)
- Pacific Islands Fishery Group Representative(s)
- Hawaii Fishing Club Representative(s)

Fishing Industry Advisory Committee changes:

- Michael Goto United Fishing Agency, Ltd., Hawai'i
- Kerry Umamoto Hilo Fish Company, HI
- Josh Schade Ahi Assassins, HI
- Eric Kingma Hawaii Longline Association, HI
- Kenton Geer Commercial Seamount Fisherman, HI
- Carlos Herrera Hitman's Tackle, Guam
- Vince Haleck Tautai O Samoa Association, American Samoa
- Lino Tenorio Commercial Bottomfish Fisherman, CNMI
- Dean Sensui Hawaii Goes Fishing, Region

Council Scientific and Statistical Committee member **Ray Hilborn** was the lead author on a peer-reviewed article recently published in the *ICES Journal of Marine Science* on the trade-off between biodiversity and sustainable fish harvest with area-based management.

Hilborn R, Allen Akselrud C, Peterson H, Whitehouse GA. 2020. The trade-off between biodiversity and sustainable fish harvest with area-based management. *ICES Journal of Marine Science* fsaa139. https://doi.org/10.1093/icesjms/fsaa139

All meetings will be held virtually.

November

30-Dec 1 138th Scientific and Statistical Committee meeting

December

1 Pelagic and International Standing Committee meeting Executive and Budget Standing Committee meeting

2-4 184th Council meeting

7-1417th Session of the Western & Central Pacific Fisheries Commission*

February

18-25 North Pacific Fishery Commission annual meetings*

*Meetings are not hosted by the Western Pacific Regional Fishery Management Council.

Upcoming Events

The 138th Scientific and Statistical Committee meeting will be held Nov. 30 to Dec. 1, 2020, via web conference. Major agenda items include: Reasonable and prudent measures (RPMs) and/or reasonable and prudent alternatives (RPAs) for the Hawai'i deep-set longline (DSLL) and American Samoa longline (ASLL) fisheries (action item); North Pacific striped marlin catch limits (action item); American Samoa bottomfish acceptable biological catch for fishing year 2021-2022 (action item); and American Samoa and Guam bottomfish rebuilding plans (action items).

The 184th meeting of the Western Pacific Regional Fishery Management Council will convene Dec. 2 to 4, 2020, via web conference. Major agenda items include: RPMs and/or RPAs for the HI DSLL and ASLL fisheries (action item); North Pacific striped marlin catch and/or effort limits (action item); American Samoa bottomfish annual catch limits for fishing year 2021-2022 (action item); and American Samoa and Guam bottomfish rebuilding plans (action items).

The Council meeting will have the following host sites, which are subject to local and federal safety and health guidelines regarding COVID-19:

Cliff Pointe, 304 W. O'Brien Drive, Hagatna, Guam BRI Bldg., Suite 205, Kopa Di Oru St., Garapan, Saipan, CNMI Tedi of Samoa Bldg., Suite 208B, Fagatogo Village, AS

For more information on agendas, meeting documents, the web conference connection and any updates to the host sites, visit www.wpcouncil.org/meetings-calendars or contact the Council at info@wpcouncil.org or (808) 522-8220.

Mahimahi Chowder



Ingredients

2 cups cubed, pared potatoes 3 slices bacon ½ cup onion, chopped 2 tsp salt ½ tsp pepper 1 lb fresh mahi mahi fillet

2 cups milk 3 tbsp flour

Preparation

Cook potatoes in 2 cups water for 5 minutes (do not drain). Cook bacon until crisp. Drain and crumble. Reserve drippings. Cook onion in drippings. Add crumbled bacon, onion, salt and pepper to potato mixture. Cut mahimahi into 2-inch cubes, add to mixture and simmer for 5 minutes. Slowly blend milk into flour (separately) and add to chowder, stirring constantly until it thickens.