Report on the Joint Meeting of the Crustacean Plan Team & Hawaii Crustaceans Advisory Panel

October 21, 1996
Executive Centre Hotel
1088 Bishop St., Room 4003
Honolulu, Hawaii

Report on the 1996 NWHI Lobster Fishery Season:

Alvin Katekaru, NMFS PAO, summarized the management measures of FMP Amendment 9 which governed this year's lobster fishery. The fishery opened on July 1 and closed on July 26, with five vessels allowed to harvest a total of 186,000 lobsters. Fishing took place at Gardner Pinnacles and Necker Island, primarily at the latter site. The fishery closed with a total catch of 185,711 lobsters (based on at-sea reported catch) which was 99.8 percent of the harvest guideline established for the 1996 season. Team members asked if the at-sea reported catch data would be verified. It was explained to them that NMFS would cross-check these with the daily logbook catch data submitted by vessel captains, as well as sales (weigh-out) data provided by first level buyers.

Report on the 1996 NMFS Fishery-Independent Research Cruise:

A report of the 1996 NMFS NWHI fishery-independent lobster research cruise was presented. Objectives of the 1996 cruise were 1) to collect size-frequency and relative abundance data at Necker Island, Maro Reef, and Laysan Island, 2) to collect size-frequency and relative abundance data from shallow-water areas on the barrier reef and inside the Maro Reef lagoon, and 3) to conduct spiny and slipper lobster handling mortality studies.

CPUE (lobster /trap haul) for the 1996 survey (all species, sizes, and areas combined) was 2.4. Necker Island had the highest CPUE (3.1) followed by Maro Reef (1.9) and Laysan Island (0.3). Spiny lobster CPUEs (all sizes combined) were highest at Necker Island (2.6) followed by Maro Reef (0.1) and Laysan Island (0.1). Slipper lobster CPUEs (all sizes combined) were highest at Maro Reef (1.8) followed by Necker Island (0.5) and Laysan Island (0.2).

Spiny lobster CPUEs between 1988 and 1996 show no apparent trend at Necker Island, while CPUEs at Maro declined significantly after 1989 and remain low. Slipper lobster CPUEs at Necker Island, between 1988 and 1996, are consistently low and show no apparent trend while CPUEs at Maro increased significantly after 1989. The apparent switch in species dominance at Maro Reef may suggest replacement by slipper lobster as spiny lobster were fished down and habitat became available. However, causes for the apparent switch in species dominance will require further investigation.

The CPUE for spiny lobster collected from shallow-water areas on the barrier reef and inside Maro Reef were much greater than that obtained in the same locations last year, but is similar to CPUEs observed in 1993. The increase in CPUE between years (1995 vs 1996) results from a large increase in age one lobsters. Additional analyses are required to determine the significance of the observed increase in age one CPUE.

Industry Concerns with 1996 Season:

Sean Martin, a lobster permit holder, expressed concern over the current regulations that prohibit vessels from entering the NWHI permit area prior to opening of the season. The fishery is essentially forced to concentrate most of its fishing effort at Necker Island in order to maximize available fishing time. Similarly, it is not feasible for vessels to fish the distant lobster grounds, such as Maro Reef and Gardner Pinnacles, as this would cut short their fishing time, having to travel the added distance in order to exit the permit area when closure of the season is announced. The fishermen agree that the consequent intense fishing pressure at Necker is unhealthy for the local lobster resource. The group agreed that a solution should be found and recommends that vessel monitoring system (VMS) be investigated to possibly help remedy this situation.

Results of the Lobster Handling Mortality Experiment:

The experimental design, assumptions, and results from the lobster handling mortality experiment were presented. If the 3-hour dry experimental treatment represents current commercial fishing practices, then the handling mortality on commercial vessels would appear to be high, ranging from an average of 70% to 77% for spiny lobster, depending on how the data are pooled. The estimate of handling mortality of slipper lobster also appears to be excessive (31%) but is considerably less than spiny lobster handling mortality estimates. It was pointed out that handling mortality represents only a portion of the total mortality resulting from the capture and discarding of lobsters in the NWHI. Participants had no objection to the assumed commercial fishing practice.

Collaborative Research With Industry:

Recent overtures made by fishermen to assist NMFS in lobster research in the NWHI were presented. In general, industry thought this was a good idea and are willing to assist. **NMFS will produce a report identifying potential areas for collaborative priority research and present the report to industry for further consideration.**

Review of the Harvest Guideline Computation and Progress of Sampling the Commercial Landings:

A report reviewing how the harvest guideline is computed under Amendment 9 and computational assumptions of the harvest guideline equation were presented. The current risk-based constant harvest rate strategy used to establish harvest guideline under Amendment 9 assumes that no high-grading occurs (even though it is legal) and

that the total allowable catch for this fishery equals the harvest guideline. Harvest levels in excess of the established harvest guideline increase the risk of overfishing and are not consistent with risk levels adopted under Amendment 9. If high-grading is occurring the harvest guideline may need to be reduced accordingly to account for the estimated level of high-grading. Options to account for possible high-grading when establishing the harvest guideline were presented, discussed, and a recommendation crafted.

Shoreside monitoring of NWHI lobster landings to collect data on size, reproductive condition, and species is a valuable tool to monitor high grading and should be continued by NMFS Honolulu Laboratory staff.

Discarded lobsters are a source of additional lobster mortality. An annual estimate of high grading should be obtained and both the population estimate and harvest guideline should be adjusted to reflect this additional mortality to lobster stocks.

To facilitate shoreside sampling in the estimation of high grading, industry is asked, on a voluntary basis, to label lobster bags to indicate the bank where they were caught.

Mandatory VMS:

Alvin Katekaru gave an overview of the Council's interest in exploring the potential application of VMS in the NWHI lobster fishery. There are three types of VMS applications: monitoring of vessel position; reporting of catch/effort data by vessels; and messaging to and from the vessels. At this time, four alternative actions have been identified: 1) status quo; 2) mandatory VMS for monitoring vessel position and reporting of catch/effort data from at-sea; 3) mandatory VMS for monitoring but optional for reporting; and 4) optional VMS for both monitoring and reporting purposes. It was explained that VMS could allow vessels to operate under a set of revised fishing area entry/exit requirements which would address the concerns raised by fishermen regarding Necker Island. For example, vessels with VMS would be allowed to be in the permit area when the season is closed but cannot be closer than some distance, e.g., 50 miles, from the lobster fishing area. NMFS Enforcement would know the exact position of a lobster vessel and monitor its compliance with VMS no-entry requirements. In discussing the various alternative actions, the issue of who (NMFS or fishermen) would be responsible for purchasing and installing the units under a mandatory VMS program was brought up. The advisory panel felt that if fishermen are responsible, then VMS should be optional. Vessels that choose not to use VMS will have to operate under the current permit area entry/exit requirements, including designating a land-based contact for reporting daily at-sea catch information to NMFS. Vessels using their own-purchased and installed VMS would have the benefit of operating under revised, less-stringent entry/exit requirements..

Alvin pointed out that incorporation of VMS to the NWHI lobster fishery for the next season, if approved by the Council, would be undertaken as a framework regulating

process. At its upcoming November meeting, the Council could discuss the proposed alternatives and during its Spring 1997 meeting the Council could make the final decision on the proposed action.

The plan team and advisory panel agreed that optional VMS for position monitoring and reporting is the preferred alternative and recommends it as a proposed action for Council discussion and consideration at its 91st meeting in November. **Vessels with VMS should be allowed modified fishing ground entry and exit regulations which require they are outside the 50 nmi longline exclusion area at the beginning and end of the fishery, instead of the requirement to be east of the 160 Longitude line.**

Deep-water Shrimp:

The group discussed whether data on landings of the Hawaii deepwater shrimp should be added to the annual lobster report. **It recommends that it should not, since these data are already reported in the State of Hawaii annual fish catch report, much of the landings are taken within state waters, and there is no active Council management of the resource.**

Other Business:

Alvin Katekaru introduced the administrative processing fee for lobster permits. **There was no objection to a permit processing fee of $39 in the lobster fishery consistent with the current fee imposed in the longline fishery.**