

AGENDA
Recreational Abalone Advisory Committee (RAAC)
Saturday, October 13, 2007
10:00 A.M. to 4:00 P.M.

Location: Samuel Merritt College
Health Education Center
400 Hawthorne Ave.
Oakland, CA 94609

Contact Persons: Ian Taniguchi, Senior Marine Biologist, 4665 Lampson Ave. Suite C, Los Alamitos, CA.
90720 Phone: (562)342-7182 Email: itaniguchi@dfg.ca.gov

Committee Web Page: <http://www.dfg.ca.gov/marine/raac/index.asp>

1. 10:00 to 10:10 **Introductions –Announcements and Review of minutes** (Karpov/Taniguchi)

New appointments to RAAC

2. 10:10 to 10:30 **Enforcement report 2006-2007 activities** (Riske)
3. 10:30 to 10:45 **Proposed Budget 2007-2008** (Taniguchi)

Break [10:45-11:00]

4. 11:00 –12:00 **Abalone fishery assessments Updates (10-12 min each)**

Fishery Index Sites Surveys (Kashiwada)

Abalone Recruitment Modules, Reproduction, Nearest Neighbor (Rogers-Bennett)

Stornetta Ranch Abalone Survey (Hubbard)

Abalone Health Report (Moore)

San Miguel Island Red Abalone Snap Shot Survey (Taniguchi)

2006 final report

2007 survey preliminary summary

12:00- 12:15 **RAAC and (time permitting) guest questions to speakers**

Lunch [12:15 to 13:15]

5. [13:15 to 13:45] **SMI Fishery Consideration Process Update** (Taniguchi)
6. [13:45 to 14:00] **Proposed Abalone Tag system presentation** (Kashiwada)
7. [14:00 to 15:00] **Abalone tag system discussion** (RAAC)
8. [15:00 to 15:30] **Other Business**
 - a. **Reduction in daily bag limit**
 - b. **Import permits for abalone**
 - c. **Proposed paper for Calcofi**
9. [15:30 to 15:55] **Public Expression** (non-agenda items, please limit to 3 minutes per person)

[16:00] **Adjournment**

Meeting Summary and Outcomes
Recreational Abalone Advisory Committee (RAAC)
Saturday, October 13, 2007
Oakland, California

RAAC Members Present: Konstantin Karpov, Ian Taniguchi, Steve Campi, Chris Voss, Rocky Daniels, Richard Pogre, Steve Benavides, Brooke Halsey, Dr. Paul Dayton, Capt. Dave Fox (WLP alternate for Lt. Steve Riske), Ed Schulze (alternate).

Others Present: DFG staff - Dr. Laura Rogers Bennett, Dr. Jim Moore, Jerry Kashiwada, Kristin Hubbard.

Executive Summary

On October 13, 2007, the Recreational Abalone Advisory Committee (RAAC) conducted their annual meeting in Oakland, CA.

Key outcomes from the meeting were as follows:

- **Approval of draft minutes from previous year.**
- **Enforcement Report.** Capt. David Fox reported in place of Lt. Steve Riske on Wildlife Protection (WLP) efforts to enforce abalone regulations. The need to standardize enforcement of abalone regulations and the challenges of poaching were discussed. WLP is very appreciative of the \$50,000 in overtime provided by RAAC. Capt. Fox submitted a report written by Lt. Riske summarizing abalone enforcement efforts of the past year.
- **Budget.** The budget was overspent by \$31,000 last year. The proposed budget is \$681,000. Additional \$50,000 recommended to be spent on warden overtime.
- **Abalone Fishery Assessment Updates.**

Fishery Index Sites Survey. Van Damme State Park, Arena Cove, and Ocean Cove were surveyed in the past year. This is the first time all eight index sites have been surveyed over a 3-year period as outlined in the Abalone Recovery and Management Plan (ARMP). Average abalone densities for the sites are at levels similar to those when the ARMP was written. No change in the ARMP Total Allowable Catch was recommended.

Abalone Recruitment Modules, Reproduction, Nearest Neighbor. Reproduction is being studied by measuring gonad condition quarterly at Van Damme State Park. Abalone Recruitment Modules are used to monitor recruitment in northern California and the Channel Islands in southern California. These ongoing studies allow patterns of reproduction and recruitment to be examined. Aggregation is being studied by nearest neighbor data and group data..

Stornetta Ranch Abalone Survey. Stornetta Ranch was largely protected from abalone fishing pressure by the owners for many years but the ranch became open to the public in 2004 when the land was bought and turned over to the Bureau of Land Management. Subtidal and intertidal surveys were conducted before the ranch was opened. Subtidal abalone densities have dropped 62% and poaching is indicated since all sizes have been affected, not just legal-sized abalone.

Abalone Health Report. Red abalone from the Farallon Islands have been sampled for the bacteria causing Withering Syndrome (WS). Of the red abalone tested, 14-17% were found to have the WS bacteria but all of the infected animals appeared healthy. Experiments simulating strong El Nino conditions are being conducted on red abalone from San Miguel Island to evaluate the possible effects of warm water conditions on abalone populations. A high concentration of oxytetracycline can rid abalone of the bacteria that causes WS.

Abalone are proposed to be put on the list requiring importation permits. The permitting process would help control importation of live abalone which could introduce a virus currently devastating abalone populations in Australia and Asia.

San Miguel Island Red Abalone Snap Shot Survey. The final report for the 2006 survey was submitted to the Abalone Advisory Group (AAG) and California Fish and Game Commission. New members were added to the AAG which is working on the San Miguel Island fishery consideration process. Greg Sanders was added to the AAG to represent the nonconsumptive interests and Terry Maas will represent consumptive interests. The AAG selected Dr. Yan Jiao as the lead modeler/analyst for TAC development.

Other Business. Reserves which will be created under the Marine Life Management Act are a concern to fishermen since access would be restricted and fishing effort would be concentrated in remaining open areas. Konstantin Karpov resigned as RAAC chairman. Ian Taniguchi was named the new chairman. Karpov would remain on the RAAC as a science advisor. Next meetings are April 13, 2008 (telephone) and October 4, 2008.

Key Outcomes

1. Introduction and approval of last meeting minutes

Karpov opened the meeting. Members of the committee introduced themselves. New members were Chris Voss and Brooke Halsey and Ed Schulze is the alternate for Brooke Halsey. Karpov asked if there were any corrections to the minutes of the last meeting. No corrections were made and the minutes were approved.

2. Enforcement report 2006-2007 activities

Capt. Dave Fox substituted for Lt. Steve Riske in giving the enforcement report. He submitted copies of a written report by Lt. Riske which highlighted notable enforcement cases for the year. Capt. Fox addressed concerns of the RAAC members about problems fishermen have encountered with enforcement of abalone cards and poaching problems. Wardens recognize uniformity in enforcing regulations is important for maintaining credibility and make concerted efforts to address problems and inconsistencies. Earlier in the year some citations were given to fishermen who had not yet returned to their cars. The problem is a discrepancy between regulations which say cards need to be completed immediately after leaving water but also allow licenses to be kept within 500 yards. Fishermen are now being allowed to return to cars within 500 yards of fishing activity. Better communication of how regulations are being enforced is needed. WLP is very appreciative of the \$50,000 in overtime provided by RAAC.

3. Proposed Budget 2007-2008.

The budget was overspent by \$31,000 last year mainly on staff. Permanent employees covered by the budget are Ian Taniguchi, Jerry Kashiwada and Kristin Hubbard full time with Derek Stein and Jim Moore covered for half their time. A full time Special Operations Unit (SOU) warden is also covered.

\$15,000 extra is included in the new budget to cover overtime and fuel for use of warden patrol vessels in biological surveys. Karpov commented the efforts are cooperative and allows increased enforcement efforts while giving biologists a platform for their research.

A discussion on prudent reserve concluded the current reserve of about \$1,000,000 was excessive. Warden overtime is the most effective method of increasing enforcement efforts since it does not involve extra administrative costs associated with new positions. A motion to recommend spending an additional \$50,000 for warden overtime was approved unanimously.

4. Abalone fishery assessments Updates

- **Fishery Index Sites Surveys (Kashiwada)**

Kashiwada presented an update on dive surveys required for fishery management under the ARMP. This year the Department conducted dive surveys at Van Damme State Park, Arena Cove, and Ocean Cove. Van Damme and Arena Cove were surveyed previously and Ocean Cove was surveyed for the first time. Data collected included density and size frequency of emergent abalone. Abalone densities at Van Damme were much lower than the 2003 survey but some of the difference was likely due to reasons other than decrease in abundance. The 2003 survey had much less algae which would make abalone easier to find compared with this year's survey in which divers commented on the difficulty of finding abalone in dense algae. Preliminary results show overall abalone densities are at levels similar to those found at the time the ARMP was originally written. Recruitment levels have also been relatively low. No changes in the regulations were recommended based on survey data and the criteria outlined in the ARMP. This year was the first in which the triennial cycle for monitoring the eight ARMP

index sites was completed. A discussion concluded recording numbers and condition of empty shells would be helpful additional data for the surveys.

- **Abalone Recruitment Modules, Reproduction, Nearest Neighbor (Rogers-Bennett)**

Dr. Rogers-Bennett presented a summary of abalone reproduction work on the north coast, abalone recruitment work done with artificial modules and an initial effort to assess abalone aggregations. Reproduction work consists of sampling sport catch three times a year at Van Damme and a collection in the winter when the fishery is closed. Recruitment sampling is done using Abalone Recruitment Modules (ARMs) at Van Damme and San Miguel Island. Aggregations are being studied using nearest neighbor and group size data.

Reproduction studies include physical data such as water temperature to investigate patterns of reproduction associated with El Nino/Southern Oscillation (ENSO) events. Recruitment patterns in ARMs can also be studied in relation to ENSO. So far 2005 had the highest recruitment of juvenile abalone (< 50 mm size) in the ARMs at both Van Damme and in southern California.

Density might not be a good measure of aggregation. Work has started on an aggregation index which would use nearest neighbor distances and group sizes.

- **Stornetta Ranch Abalone Survey (Hubbard)**

Abalone surveys done this year at Stornetta Ranch are compared with surveys made before the Ranch was opened to the public. Stornetta Ranch was largely protected from abalone fishing pressure by the owners for many years but the ranch became open to the public in 2004 when the land was bought and turned over to the Bureau of Land Management. Subtidal and intertidal surveys were conducted. Subtidal abalone densities have dropped 62% and poaching is indicated since all sizes have been affected, not just legal-sized abalone. The depths at the site range from 5 to 25 feet in depth which means there is no effective refuge by depth.

- **Abalone Health Report (Moore)**

Red abalone from two locations on the Farallon Islands were sampled for the bacteria causing Withering Syndrome (WS) in July of 2007. The bacteria has been found in abalone from San Mateo County while abalone at Point Reyes are clean. Of the red abalone tested, 14-17% were found to have the WS bacteria but all of the infected animals appeared healthy. Abalone can have the bacteria without showing signs of the disease. Experiments simulating strong El Nino and La Nina conditions are being conducted on red abalone from San Miguel Island to evaluate the possible effects of water temperature on abalone populations. A high concentration of oxytetracycline in four baths can rid abalone of the bacteria that causes WS.

Abalone are proposed to be put on list requiring importation permits. The permitting process would help control importation of live abalone which could introduce a virus currently devastating abalone populations in Australia and Asia.

- **San Miguel Island Red Abalone Snap Shot Survey (Taniguchi)**

The final report for the 2006 survey was submitted to the Abalone Advisory Group (AAG) and California Fish and Game Commission. The survey is a snapshot of current conditions and there is not enough data from the past to accurately determine whether abalone populations have increased or decreased since the close of the fishery.

LUNCH BREAK

5. SMI Fishery Consideration Process Update (Taniguchi)

Draft Key Outcomes distributed for AAG meetings on June 22 and Sept. 6, 2007 to update RAAC members on AAG activities. New members added to the AAG by the Fish and Game Commission were Greg Sanders representing nonconsumptive interests and Terry Maas representing consumptive interests. A key activity is the development of a Total Allowable Catch (TAC) methodology by a technical panel. The AAG selected Dr. Yan Jiao as the lead modeler/analyst for TAC development. Dr. Jiao is an Associate Professor of fishery population dynamics at Virginia Tech. The Commercial Abalone Advisory Committee will cover the \$25,000 stipend.

The AAG is also working on allocation issues.

6. Proposed Abalone Tag system presentation (Kashiwada)

The proposed tag system for the recreational abalone fishery in northern California is part of a larger package before the Fish and Game Commission reviewing all the cards and tag systems. Abalone and sturgeon are the only fisheries that will have tags. The sturgeon tag is in its first year. One concern is to make regulations uniform for all the cards and tags. The new regulations would require everyone to have a card regardless of age and whether it is on a free fishing day. The sturgeon card and tag system has worked fairly well and is being used as a model for the abalone card and tags. One of the main reasons for the tags was for enforcement efforts to verify whether abalone were legally taken particularly in campgrounds and at checkpoints. The tags would be referenced to the cards which are issued. The proposed tags are numbered strips at the bottom of the cards which would be separated and attached to the shell by the fishermen who need to provide the material for attachment. Alternative types of tags could not be implemented in time for this year but were examined for possible use in future years. Current tag design would add about \$1 to printing costs while the alternative tags could add \$4 per card. The alternative tags are being considered because of concerns that the paper tags could be easily re-used. The alternative tags would present problems with distribution. Only about 4% of abalone cards are sold at Fish and Game offices. Vendors would have problems matching tags and cards so the distribution would need to be from a central office as is the distribution of some deer tags. There would be an estimated delay of two weeks from when a person submitted an application to when they received their cards and tags. The delay would probably have a negative effect on sales since people would no longer be able to buy tags on the spot.

7. Abalone tag system discussion (RAAC)

The alternative tags are favored within the Department because there is less chance they could be re-used. The Automated License Data System (ALDS) is scheduled to start implementation at Fish and Game offices in 2008 and would be used state-wide in 2009. The ALDS would make distribution of alternative tags easier. The tags will help wardens identify the person who caught the abalone and gave them away to others. Some testing has been done using sturgeon tags on abalone which was successful.

During the discussion RAAC members expressed the following concerns. The tag system will not work until sales are tracked by computer to prevent multiple purchases. The integrity of the tags needs to be checked to see how easily they fall off during transport and handling of the abalone. The tags seem to be too small to be able to remain attached to abalone through handling. Writing on the paper tag will not be possible if the tag gets wet and the writing could also wash off in transport. The amount of work required of fishermen to comply with cards is excessive and the tags are an additional burden. The value of abalone will continue to increase and these measures are needed. The money needed to make plastic tags should not reduce the funds available for enforcement. Increasing fees for plastic tags could prevent some people from enjoying a fishery they have enjoyed in the past. The focus should be on protecting the resource rather than emphasizing the costs. Rock-pickers are having more difficulty finding abalone. The money spent on plastic tags might be better spent on increased enforcement as a way to deter the poaching that the tags are supposed to control. Poachers will find ways to counterfeit or otherwise circumvent the tags. The ALDS should be in place before tag system is implemented. The discussions on the development of the tags were largely within the Department and dive groups and other public organizations were not consulted because of a shortage of time. Steve Campi will draft a letter offering RAAC resources in future development of the tag system.

8. Other Business.

Marine Life Protection Act also needs to be addressed in future meeting. Divers are concerned new reserves would limit already scarce access to shore and increase pressure on areas which remain open.

Konstantin Karpov resigned as chairman. The RAAC accepted his resignation and named Ian Taniguchi the new chairman. Both actions were part of a motion which passed unanimously. Karpov would remain on the RAAC as a science advisor.

Discussion on an adjusting bag limit to decrease incentives for poaching was conducted but no action was taken.

Next meetings are April 13, 2008 (telephone) and October 4, 2008.

Meeting Adjournment