



# MARINE

# Management News



A newsletter for everyone interested in the management and conservation of California's living marine resources.

California Department of Fish and Game  
20 Lower Ragsdale Drive, Suite 100  
Monterey, CA 93940

August 2003  
Volume 5 No. 3



## Rockfish Sport Fisheries Opened July 1

by *Chamois L. Andersen, Information Officer*

Ocean sport fisheries for rockfish, cabezon, greenlings, scorpionfish (sculpin), ocean whitefish and lingcod opened July 1 in nearshore waters south of Cape Mendocino. Sport fishing opportunities in northern California (north of Cape Mendocino to the Oregon border) remain open year-round.

The six-month season will run through Dec. 31, or until annual harvest limits have been reached. Fish may be taken in waters less than 120 feet (20 fathoms) and bag and possession limits allow for up to 10 fish in combination. For geographical regulation details, check the 2003 Sport Fishing Regulation book, or log on to DFG's clickable map at [www.dfg.ca.gov/mrd/fishing\\_map](http://www.dfg.ca.gov/mrd/fishing_map).

The National Oceanographic and Atmospheric Administration (NOAA) Fisheries may also approve a recommendation made in June by the Pacific Fishery Management Council (PFMC) to move the fishing boundary from 20 fathoms (120 feet) out to 30 fathoms (180 feet) in waters south of Pt. Conception beginning Sept. 1 through Dec. 31.

Bocaccio, a federally managed rockfish species declared "overfished," is believed to be healthier than last year's science revealed. This year's estimate included

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## New Scientific Information Guides 2004 Fishing Regulations

by *Chamois L. Andersen, Information Officer*

A recent stock assessment suggests that bocaccio, a federally managed rockfish species declared "overfished," is healthier than last year's science revealed, prompting resource managers to consider some possible additional fishing opportunities for California's sport and commercial fisheries in 2004.

"Fortunately the estimates are much improved, and we are optimistic that there can be some easing of fishing restrictions for next year," said Marija Vojkovich, California Department of Fish and Game's (DFG) offshore ecosystem coordinator and state representative on the Pacific Fishery Management Council

*"2004 Regulations" continued on page 7*

## Sport Anglers Await NOAA Fisheries' Decision

by *Chamois L. Andersen, Information Officer*

In the next few weeks, the National Oceanographic and Atmospheric Administration (NOAA) Fisheries is expected to announce its decision on whether to approve the recommendation made in June by the Pacific Fishery Management Council (PFMC) to move the fishing boundary from 20 fathoms (120 feet) out to 30 fathoms (180 feet) in waters south of Pt. Conception. As of mid-August, the decision to allow fishing for rockfish out to 30 fathoms beginning Sept. 1 had not been made.

At its meeting on Aug. 1 in Long Beach, the California Fish and Game Commission approved an action to conform the state's fishing regulations for groundfish to federal regulation changes made for the current

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# DFG Proposes Closing San Francisco's Commercial Herring Fishery

by Mary Patyten, Research Writer

Concern for depressed herring stocks in San Francisco Bay has led the California Department of Fish and Game (DFG) to propose closing the bay's commercial fishery.

The Fish and Game Commission will hear public testimony and consider DFG's proposal to close the fishery during its regularly scheduled meeting on Friday, Aug. 29 at the City Council Chambers, 100 Santa Rosa Ave., in Santa Rosa. The proposed closure was first presented to the Commission during its June 20 meeting in Mammoth Lakes. The Commission also heard public testimony at its Aug. 2 meeting in Long Beach.

DFG has provided two options for regulating the 2003-2004 San Francisco Bay herring fishery. DFG's preferred alternative (Option 1) closes the roe fishery entirely – including the herring-eggs-on-kelp fishery – and the fresh fish market fishery. Another option for the Commission to consider (Option 2) provides a 2,200-ton quota for the fishery, which includes a 20-ton quota for the fresh fish market fishery.

If the Commission selects the second option, DFG has recommended decreasing the split fishing season by one month. The 2002-2003 season ran from Dec. 1 to Dec. 20, 2002 and from Jan. 5 to March 14. Proposed regulations for the Tomales Bay fishery are essentially the same as for last season, while the Humboldt Bay and Crescent City fishery regulations remain unchanged.

Closing the San Francisco Bay herring fishery, which accounts for about 90 percent of the state's herring catch, was not a proposal DFG made lightly. "We recognize the socio-

economic implications of closing this fishery," said Eric Larson, DFG bays and estuaries ecosystem coordinator. "However, this recommendation had to be made based on the biological data that the Department has collected over the last 30 years. Closure this season would help provide for the long-term sustainability of the fishery."

DFG believes that a fishery closure will give herring stocks in the bay a beneficial break. Even though the size of herring stocks can fluctuate widely due to ocean conditions and biological processes, continued fishing on a weakened stock may further depress the stock, or even cause a population crash.

Survey data, which are collected every year, suggest that the number of older, mature herring in the population has declined since the El Niño event of 1997-1998. This decline in older herring has been accompanied by an increased catch of younger herring that are first-time spawners. The overall population has been weak since the 1997-1998 El Niño event, with the spawning population remaining below average for the last six seasons.

"What we're looking for with this proposed fishery closure is to reduce the stress that the fishery may be contributing to the weakened herring population in San Francisco Bay," Larson said.

The DFG encourages concerned constituents to provide input at the public hearing scheduled for Aug. 29 at the City Council Chambers in Santa Rosa. For more information on herring, check out DFG's Web site at [www.dfg.ca.gov/mrd/herring/index.html](http://www.dfg.ca.gov/mrd/herring/index.html). Also visit the Commission's Web site at [www.dfg.ca.gov/fq\\_comm/html](http://www.dfg.ca.gov/fq_comm/html).



## Marine Management News Thanks Survey Participants

Thank you to all of our readers who responded to the April *Marine Management News* survey. Two winners randomly chosen from all survey respondents have received copies of *California's Living Marine Resources: A Status Report*. Also, a winner was chosen from everyone who signed up for the online version of *Marine Management News* during the survey period to receive an official DFG mug. Overall, the feedback we received concerning the content and readability of *Marine Management News* was very positive. Thank you again for helping us to improve this publication to better fit your needs.

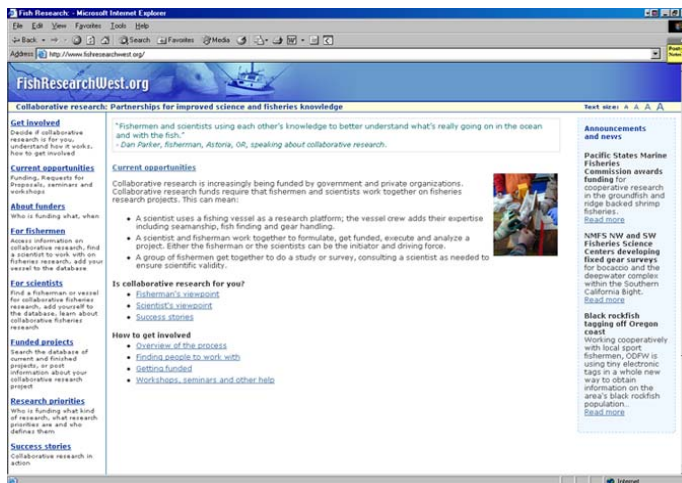
# New Web Site Brings Fishermen and Scientists Together For Fisheries Research

by Susan Giles, Scientific Aide

The tide is turning for the future of fisheries research with FishResearchWest.org, a new Web site bringing fishermen and scientists together for research projects to improve fishery science and support sustainable fisheries. FishResearchWest.org covers a lot of ground – from educating scientists, fishermen and fishery managers about the value of collaborative research and identifying funding sources, to providing assistance to help individuals get involved.

The lack of information to effectively manage fisheries is making collaborative research a popular choice for ocean studies. Research projects can range from fishermen and scientists working together on already designed projects (such as annual trawl surveys) to designing and developing an entire research project together. By utilizing fishing communities' knowledge of the marine environment and the scientific community's methodology, collaborative research has the potential to dramatically increase the quality and quantity of fishery science data.

The site was initially funded with a grant from NOAA Fisheries Northwest Science Center, the Pacific Marine Conservation Council and partners, including the Pacific States Marine Fisheries Commission. Through its website, FishResearchWest.org is seeking fishermen and marine scientists who are willing to work together to better understand what is really going on in the oceans. For more information, log onto [www.fishresearchwest.org](http://www.fishresearchwest.org)



FishResearchWest.org Home Page

## 2003 CalCOFI Conference To Be Held In Central California


by DFG Staff

The 2003 CalCOFI conference will take place Nov. 5-7 at the Asilomar Conference Center, in Pacific Grove, CA. The deadline for conference registration is Sept. 29, and the registration fee is \$150. Special conference rates for lodging at the Asilomar Conference Center are still available.

The symposium theme for this conference is "Environmental Variability and Its Influence on Invertebrate Fisheries." This symposium continues CalCOFI's rich tradition of revealing the links between ocean climate and productivity by examining how ocean conditions impact marine invertebrate fisheries.

In the eastern Pacific Ocean, environmental fluctuations on both interdecadal and interannual time scales can complicate fishery science and management. Population responses to short-term El Niño Southern Oscillation events have long been recognized for both fished species and the species they interact with. Pacific Decadal Oscillations, first described in 1997, are ocean "regimes" characterized by thirty year periods of either warm or cold ocean conditions. The impacts of these short- and long-term ocean conditions need to be further defined for invertebrate fisheries.

"CalCOFI" continued on page 7



**Get hooked on the Department of Fish and Game Marine Region Web site**

Log onto the Marine Region's Web site and find all the latest information on commercial and recreational fisheries. The Web site provides an easy way to catch up on new regulations, groundbreaking research, and public meetings. So log on today and see what hooks your attention...

[www.dfg.ca.gov/mrd](http://www.dfg.ca.gov/mrd)



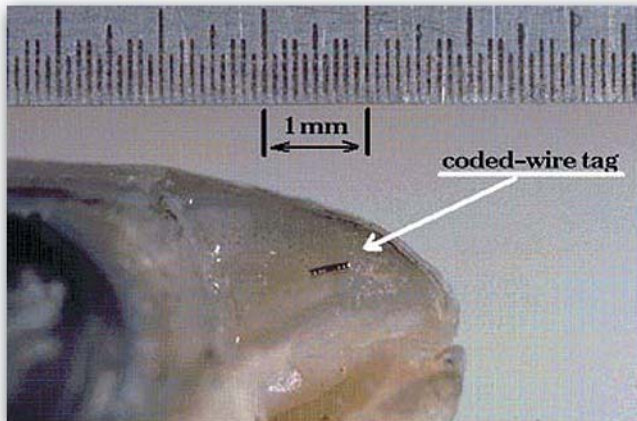
# Coded-Wire Tags Help to Document Increases in Salmon Escapements

by Scott Barrow, Associate Marine Biologist

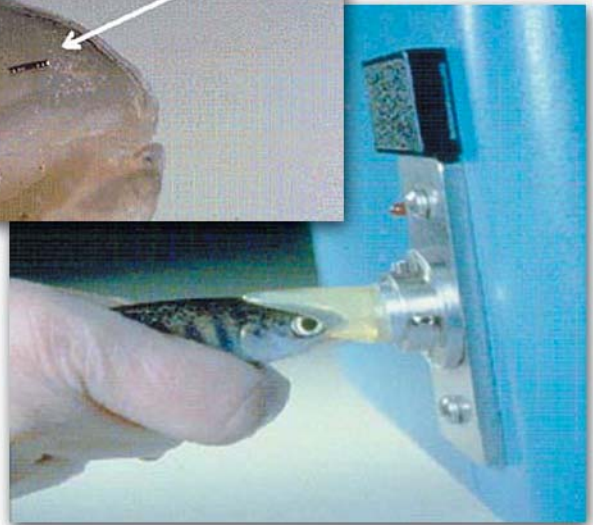
Central Valley chinook salmon make up the majority of the salmon caught in California's commercial and recreational ocean fisheries, and help sustain ocean fisheries along the coastline from California to Canada. As such, these fish are crucial to our commercial and recreational ocean fisheries.

Central Valley chinook salmon originate from the Sacramento and San Joaquin rivers and their tributaries. The annual Central Valley chinook salmon escapement (fish returning to spawn) has been on the rise in recent years. The natural and hatchery escapement averaged 507,000 adult fish for the past five years (from 1998-2002) with a high of 864,000 adult fish in 2002. The previous 10 years (from 1983-1997) had an annual average escapement of 212,000 adult fish with the 1997 high point of 356,000 adult fish. The recent escapement increases are the result of favorable ocean survival conditions likely coupled with improvements in juvenile out-migrant survival. Other factors responsible for increased Central Valley Chinook salmon escapements include ocean salmon harvest restrictions due to state and federal Endangered Species Act constraints on listed Central Valley chinook stocks, and a northern shift of the salmon populations off California to areas with restricted fishing.

Some of the young salmon released from Central Valley hatcheries are tagged with coded-wire tags, known as CWTs. These tiny tags, pieces of stainless steel wire 0.5 to 1 mm long, are injected into the snouts of salmon. Each CWT has a unique marking that provides specific information about the recovered fish such as brood year, release date, and whether the fish is wild or came from a hatchery. The adipose fin (the small fin behind the dorsal fin) is removed to indicate the presence of a CWT in the snout. Department of Fish and Game (DFG) samplers remove and collect the heads of adipose-clipped adult salmon during dockside sampling of commercial and recreational ocean salmon fisheries. The heads are processed at the Ocean Salmon Project's Santa Rosa laboratory, where information from the CWTs is entered into a CWT recovery database. The ocean CWT recovery data are combined with Klamath Basin and Central



*CWTs implanted in juvenile salmon*



*photos by DFG Staff*

Valley river CWT recovery data, and cross-verified with the respective catch and sample data. The CWT recovery databases and the associated catch/sample databases are then uploaded to the Pacific State Marine Fisheries' Regional Mark Information System for distribution via the Internet ([www.rmis.org](http://www.rmis.org)).

During recent years, the number of Central Valley ocean CWT recoveries has risen as the hatchery's CWT tagging rates increased. The Central Valley ocean CWT recoveries off Oregon dramatically increased in 2001, and remains high due to the northern shift of salmon stocks off California. Occasionally CWT recoveries of Central Valley chinook salmon are reported in the

*"Salmon" continued on next page*

*Due to State budget restraints, the **Marine Management News** will only be published electronically until further notice. Our sincere apologies for this inconvenience. Copies are available for viewing or printing on the Marine Region Web site, at [www.dfg.ca.gov/mrd/index\\_newsletter.html](http://www.dfg.ca.gov/mrd/index_newsletter.html). Subscribe now for automatic notification when new issues are posted.*

*“Salmon” continued from previous page*

Bering Sea groundfish fisheries off western Alaska. These recoveries are very sporadic, partially due to the sampling rate in Alaska. In addition, preliminary results from a 2003 Canadian salmon fishery genetic study indicate that 15-17 percent of the salmon caught off Canada are from Central Valley salmon stocks.

Ocean and river CWT recovery data are combined with other data covering fishing effort, catch, and natural and hatchery escapements to determine the ages of recovered salmon and the composition of ocean salmon stocks. This information is used by the Pacific Fishery Management Council in various ocean salmon harvest models. Harvest management measures and escapement estimation methods for Central Valley chinook salmon stocks are currently under review. This review will allow the Pacific Fishery Management Council and DFG to refine existing ocean salmon harvest models that forecast ocean salmon abundance and harvest impacts on ocean fisheries. 🐟

## UPDATE:

### Market Squid Fishery Management Plan

*by DFG Staff*

The Department of Fish and Game (DFG) presented the Fish and Game Commission with its draft Market Squid Fishery Management Plan (MSFMP) at the Commission's Aug. 1 meeting in Long Beach. The public review and commenting process will last until Dec. 4-5 when the Commission will consider adoption of the plan during its meeting in Sacramento.

The MSFMP will establish a management program for California's market squid resource, including procedures by which DFG will manage the fishery. There are several options for fishery management based on four management components: fishery control rules, harvest replenishment areas, restricted access, and ecological concerns. Within each option, a range of alternatives has been provided for the Commission to consider. The Commission may select any of these alternatives, modify the alternatives, or request new alternatives.

## Sea Urchin Fishery Advisory Committee Funds Projects

*by Kristine Barsky, Senior Marine Biologist Specialist*

In March, the Sea Urchin Fishery Advisory Committee (SUFAC) funded a proposal by Ray Hilborn of the University of Washington and Jeremy Prince of Murdoch University in Western Australia to develop a method for urchin divers to collect sea urchin size frequency and abundance data in conjunction with their fishing activities. The proposal also deals with data management and sampling protocols. Prince spent most of May and the beginning of June accompanying urchin divers coastwide on their fishing trips. Both Prince and Hilborn also had informal meetings with scientists, fishery managers, and industry members to develop potential fishery management models. The culmination of their investigation was a June 10 workshop where they presented examples of what has worked in fisheries from other parts of the world and a summary of potential methods for the California urchin fishery. Agency observers were asked to provide feedback on these ideas in light of existing regulations and data collection methods. Prince and Hilborn will present a final report in August.

SUFAC will be funding a referendum to decide on an industry marketing commission in October. A marketing commission would enable the urchin

*“Sea Urchin” continued on next page*

A table of the proposed options with alternatives is posted on the DFG Web page at [www.dfg.ca.gov/mrd/marketsquid/options.html](http://www.dfg.ca.gov/mrd/marketsquid/options.html). The entire draft MSFMP, which also includes a summary of potential environmental and socio-economic impacts related to the options and their alternatives, is posted at [www.dfg.ca.gov/mrd/msfmp/index.html](http://www.dfg.ca.gov/mrd/msfmp/index.html). To comply with California's Paper Reduction Act, only one hardcopy of the MSFMP, with appendices, will be available at each DFG office. Copies are also available on CD-ROM, in Braille, in large print, and on audio cassette. Contact Mary Ellsworth for copies of the MSFMP at (858) 467-4214, or e-mail [mellsworth@dfg.ca.gov](mailto:mellsworth@dfg.ca.gov).

For additional information on the MSFMP, contact Mr. Dale Sweetnam, Senior Biologist with the Department of Fish and Game, 8604 La Jolla Shores, La Jolla, California 92037, at (858) 546-7170. 🐟

## UPDATE: 2003-2004 Deeper Nearshore Species Fishery Permits Now

**Available** by Traci Bishop,  
Associate Marine Biologist

**D**eeper Nearshore Species Fishery Permits (DNSFP) are now available to commercial fishermen at all license counters. This permit allows individuals to take, possess aboard a boat, and land the following rockfish: black, blue, brown, calico, copper, olive, quillback and treefish. To qualify for a DNSFP, individuals need to have landed at least 200 pounds of the species listed above between 1994 and 1999. The cost of a DNSFP is \$125. DNSFP permits will be sold until Sept. 30, 2003, or Oct. 31, 2003 when accompanied by a \$50 late fee. For more information, go to [www.dfg.ca.gov/mrd/deeper\\_nsf.html](http://www.dfg.ca.gov/mrd/deeper_nsf.html) or contact Ms. Traci Bishop, Associate Marine Biologist, at (562) 342-7111. 🐟

## UPDATE: Commercial Greenling and Cabezon Fisheries Close

by DFG Staff

**E**xisting regulations adopted by the Fish and Game Commission (Commission) provide authority to the Department of Fish and Game (DFG) to close either or both recreational or commercial sectors of the California sheephead, greenling, and cabezon fisheries when their allowable harvest levels are projected to be reached.

Based on landing receipt information, the DFG closed the commercial greenling fishery on June 19, 2003, and the commercial cabezon fishery on July 10, 2003. These closure dates reflect the expected dates for reaching each species' commercial allocation. Through mid-May, the DFG estimated approximately 10,600 pounds of commercial greenling had been landed, and by mid-June an estimated 86,000 lbs of cabezon had been landed. Commercial landings of these species are now prohibited throughout the state.

Questions may be directed to Ms. Deb Wilson-Vandenberg, Marine Fisheries Research Manager, at [dwilsonv@dfg.ca.gov](mailto:dwilsonv@dfg.ca.gov).

*"Sea Urchin" continued from page 5*

industry, with oversight by the Department of Food and Agriculture, to undertake projects to maintain and expand the State's sea urchin markets. It would also undertake scientific research to enhance resource management and improve fishery practices, educate and train industry participants, and conduct public education. Self-imposed industry fees would support the commission's activities. The industry marketing commission will be established if 40 percent of the divers and processors vote, and two-thirds of the votes are in favor of establishing the commission. 🐟

## UPDATE: 2003-2004 Nearshore Fishery Permit Requirements

by Traci Bishop, Associate Marine Biologist

**N**earshore Fishery Permits (NFP) allow commercial fishermen to take, possess aboard a boat, and land the following species: cabezon, California scorpionfish, California sheephead, kelp and rock greenlings, and black-and-yellow, China, gopher, grass and kelp rockfishes. The only allowable gear is hook-and-line unless the individual has a trap endorsement. The cost of a NFP is \$500. The deadline for NFPs was June 30, 2003, or July 31 if accompanied by a \$50 late fee. The qualifying criteria for transferable and non-transferable NFPs and trap endorsements vary by region. Individuals not eligible for a NFP, but interested in getting into this fishery may purchase two NFPs, retire one and fish on the other.

Another commercial permit, the Nearshore Fishery Bycatch Permit, allows fishermen to use trawl or gillnet gear to take the species listed above. This permit is subject to all state and federal cumulative trip limits, as well as daily trip limits. In the South-Central Coast Region (from Point Año Nuevo to Point Conception) 25 pounds of nearshore species per trip is allowed, and in the South Coast Region (from Point Conception to the Mexico border) 50 pounds of nearshore species per trip is allowed. There is no take with trawl or gillnet gear allowed north of Point Año Nuevo. For more information, go to [www.dfg.ca.gov/mrd/restricted\\_access.html](http://www.dfg.ca.gov/mrd/restricted_access.html) or contact Ms. Traci Bishop, Associate Marine Biologist, at (562) 342-7111. 🐟



"2004 Regulations" continued from page 1

(PFMC). Despite a slightly healthier population of bocaccio, population estimates remain low for canary rockfish, another "overfished" species primarily found in northern and central California, she said.

DFG hosted four public meetings in July to hear comments on the 2004 groundfish management options being developed for review by the California Fish and Game Commission and the PFMC.

The broad range of options include allowing rockfish fishing in deeper depths (from 20 to 80 fathoms), and imposing a recreational fishing season of six to 10 months in waters south of Cape Mendocino in Humboldt County. Other options include allowing anglers to catch ocean whitefish year-round in waters south Pt. Conception, and providing for some shore-based fishing and diving during the closed recreational season.

For a detailed list of the management options under consideration, log on to DFG's Web site at [www.dfg.ca.gov/mrd](http://www.dfg.ca.gov/mrd).

Public comments will be used to narrow the range of fishing options and provide direction to the PFMC during its adoption hearing Sept. 18-20 Seattle, WA. 🐟

"NOAA Decision" continued from page 1

sportfishing season. If NOAA Fisheries approves the PFMC's in-season adjustment, the state and federal changes will take effect Sept. 1 through Dec. 31.

The recommendation to ease fishing restrictions mid-season was due to increased numbers of a depleted rockfish known as "bocaccio," which occupies the same ocean waters as healthy stocks targeted by saltwater anglers.

DFG will post the NOAA decision at [www.dfg.ca.gov/mrd](http://www.dfg.ca.gov/mrd) once a decision has been made by NOAA Fisheries, and after any adjustments are noticed in the Federal Register. 🐟

## Editorial Changes In The Air

It's been two and one-half years since I became editor for *Marine Management News*, and now the time has come for this grand responsibility to be handed over to Mary Patyten, a research writer for DFG. I will be working on a new project with the Marine Region's Fishery Independent Research Team. I would like to thank all of the MMN readers who have continued to be loyal subscribers and who have offered their input throughout the years.

*Briana Brady*

"CalCOFI" continued from page 3

In California, invertebrate fisheries have surpassed fin-fish fisheries in both volume and ex-vessel price, making them among the most important fisheries in the state.

For more information, contact the CalCOFI Registrar at: Bodega Marine Lab, P.O. Box 247, Bodega Bay, CA 94923.

Registrar fax number: (707) 875-2089.

Registrar E-mail: [rogersbennett@ucdavis.edu](mailto:rogersbennett@ucdavis.edu)

More information on the conference and housing options are available on the CalCOFI Web site at [www.calcofi.org/conference/conference.html](http://www.calcofi.org/conference/conference.html) 🐟

"Rockfish Sport Fishery" continued from page 1

fish born in 1999 that were too small to include in previous sampling methods and stock assessments.

The new scientific information prompted fishery managers to ease the rockfish depth-restriction "in-season." For more information regarding the rockfish sport fishing opener, contact Mr. Ed Roberts, Marine Biologist, at (562) 342-7199 or e-mail [eroberts@dfg.ca.gov](mailto:eroberts@dfg.ca.gov). 🐟

## Calendar of Events

### 2003 Fish and Game Commission Meetings

[www.dfg.ca.gov/fg\\_comm/2003mtgs.html](http://www.dfg.ca.gov/fg_comm/2003mtgs.html)

**Oct. 2-3** Redding      **Nov. 6-7** San Diego  
**Dec. 4-5** Sacramento

### 2003 Pacific Fishery Management Council

[www.pcouncil.org/events/future.html](http://www.pcouncil.org/events/future.html)

**Sept. 8-12** Seattle, WA  
**Nov. 3-7** San Diego

For the latest information on upcoming Marine Region meetings, please check out our Calendar of Events at [www.dfg.ca.gov/mrd/calendar/index.html](http://www.dfg.ca.gov/mrd/calendar/index.html) or contact our DFG office in Monterey at (831) 649-2870.

## Recreational Abalone Advisory Committee to Meet in September

by Mary Patyten, Research Writer

The Recreational Abalone Advisory Committee (RAAC) will have its regular meeting on Sept. 13 at the Health Education Center of Samuel Merritt College, 400 Hawthorne Avenue in Oakland. The meeting will be held from 9 a.m. to 3:30 p.m.

The RAAC is required to meet at least once every year to review proposals, recommend projects and decide how to spend funds collected through the sale of abalone stamps. The RAAC also makes recommendations to the Director of the Department of Fish and Game regarding abalone resource management.

For more information about RAAC, contact Kon Karpov, DFG senior marine biologist and RAAC chairperson, at 707-964-7298 or log on to the Marine Region Web site at <http://www.dfg.ca.gov/mrd/raac/about.html>. Directions to the meeting can be found at <http://www.samuelmerritt.edu/admission/visitor.cfm>.



## MARINE *Management News*

**M**arine Management News is published quarterly by the Marine Region of the California Department of Fish and Game for everyone interested in the management and conservation of California's living marine resources. Through this newsletter we hope to keep all associates and constituents interested in participating in and/or tracking the progress of the Marine Life Management Act (MLMA) informed of developments. The MLMA places a strong emphasis on an open decision-making process that involves people who are interested in or affected by management measures.

For more information on the MLMA or to sign up to become more involved, please visit our web site at [www.dfg.ca.gov/mrd/](http://www.dfg.ca.gov/mrd/)

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### The Marine Life Management Act

**C**alifornia's 1998 Marine Life Management Act (MLMA) is an innovative, collaborative, science-based approach to managing all of California's living marine resources. One of its major goals is the long-term sustainability of our resources and our fisheries. The MLMA recognizes and values the non-consumptive benefits of healthy marine life as well as the interests of those who are economically dependent upon them. Implementation and enforcement of the MLMA is the responsibility of the California Department of Fish and Game, whose mission is to conserve wildlife and the habitats upon which they depend through good science and informed citizen involvement. For more information visit <http://www.dfg.ca.gov/mrd>.

*"To protect, maintain, enhance, and restore California's marine ecosystems for their ecological values and their use and enjoyment by the public"*