



California Department of Fish and Game  
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## Marine Protected Area Information Available Soon on Your Smartphone!

by Aaron Del Monte, Associate Information Systems Analyst and Marine Region Webmaster

Marine protected areas (MPAs) are designed in part to protect or conserve California marine life and habitat. There are currently 120 MPAs in California, and because of the work done through the Marine Life Protection Act Initiative (MLPA Initiative) planning process, new MPAs have been added and old ones retired or modified. Most of the 120 MPAs have in fact been designed or redesigned as part of the MLPA Initiative process.

After all these changes, you may have questions such as: Where are the MPAs in my area? Am I currently in a MPA? What are the boundaries of a specific MPA? What regulations apply in a specific MPA? Expansive information about MPAs can currently be found on the MLPA website at [www.dfg.ca.gov/mlpa](http://www.dfg.ca.gov/mlpa), but what do you do if you are at the beach or on your boat with only a phone in hand?

The Department of Fish and Game (DFG) is proud to announce the upcoming release of a website optimized for use on smartphones and other portable Internet-enabled devices. This website will allow you to quickly find current information about MPAs while you are traveling on or near the ocean, or anywhere away from your computer. This handy site will enable you to:

"MPAs" continued on page 2



## 2011 Groundfish Regulation Changes Still Pending

by DFG Staff

New recreational groundfish regulations for the California coast continue to be delayed. The new regulations are expected to go into effect pending action by the state—however, as of mid-May, the 2010 state regulations are still in effect. Until state regulations are in alignment with the 2011 federal regulations (possibly by early June 2011), the Department of Fish and Game (DFG) reminds anglers

bringing groundfish to shore in California they must follow state regulations.

The new state regulations will be based on federal rules that went into effect on May 11. Before targeting federally managed groundfish, fishermen are advised to check DFG website

at [www.dfg.ca.gov/marine/groundfishcentral](http://www.dfg.ca.gov/marine/groundfishcentral) or call a DFG office to find out whether the new state regulations have gone into effect. Recreational anglers may also call the DFG's Recreational Groundfish Hotline at (831) 649-2801.

The 2011 regulatory changes were developed in collaboration with other Pacific Coast states, the National Marine Fisheries Service, and the California Fish and Game Commission with considerable public input.

Once finalized, changes to recreational groundfish fishing regulations will include the following:

- Decrease the recreational lingcod minimum size limit from 24 inches to 22 inches
- Increase the recreational bag limit of cabezon from two to three fish
- Remove the recreational lingcod fishery winter closure in the months of January through March, and in December—so lingcod regulations are consistent with rockfish.
- Increase the California scorpionfish recreational fishing

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# New Individual Quota Program Begins for West Coast Groundfish Trawlers

by Melanie Parker, Marine Biologist



Crew members of the F/V San Giovanni bring in the net of an otter trawl. The net will be emptied onto the wooden deck, and the catch sorted by species into plastic bins. DFG photo by M. K. Parker

Since 2003 the Department of Fish and Game (DFG) has been participating in the development of the first trawl individual quota (IQ) program on the continental West coast, in conjunction with other Pacific Coast states and the Pacific Fishery Management Council (Council). The goals of the IQ program are to increase net economic benefits, create individual economic stability, provide for full utilization of the trawl sector allocation, minimize environmental impacts, and achieve individual accountability of catch and bycatch for many species of commercially fished groundfish, including rockfish, flatfish, and others.

Individual fishing quotas will replace most cumulative

landing limits as part of this complex program. The trawl program began initial implementation in early January 2011 and will cover approximately 170 permits coastwide.

The IQ program assigns individual quota shares (which correspond to quota pounds) to trawl fishery participants based on individual catch history. Under the IQ program, individuals have yearly quotas rather than bi-monthly trip limits. Once the quota has been reached, the individual must stop fishing for the year, or purchase or lease more quota shares/pounds (within allowable limits) from other participants to continue fishing. Onboard observers are required to monitor all trips, overseen by the West Coast Groundfish Observer Program and funded by the fishery participants.

After several years of development, the Council adopted the main program elements in Nov. 2008. In June 2009 the Council finalized fishery management plan amendments to implement the program. During 2010, the regulatory language was finalized, trailing amendments to the program were considered, individual catch histories were calculated and provided to fishery participants in preparation of assigning IQ, and applications for IQs were returned to the National Marine Fisheries Service. Development of trailing amendments to the program continues and includes, but is not limited to, defining Community Fishing Associations and determining what their role may be within the trawl fishery.

For more information on the IQ program, visit the Council's website at: [www.pcouncil.org/groundfish/fishery-management-plan/fmp-amendment-20/](http://www.pcouncil.org/groundfish/fishery-management-plan/fmp-amendment-20/). 🐟

## "MPAs" continued from page 1

- Search for any MPA by its name, by county, or location on a map.
- Find specific information about any current MPA, including boundaries and a summary of recreational and commercial fishing regulations
- View a map of any MPA, county or coastal area in California
- Track your location! Using the GPS capabilities on your mobile device, you can determine whether you are near or within a MPA.

The new website will be available later this spring on the DFG Mobile Web page at [www.dfg.ca.gov/mobile](http://www.dfg.ca.gov/mobile). There is no phone app download required—simply link to the website for up-to-date information on current MPAs. New MPAs will be added as they are approved (By the way, the DFG Mobile website can also be used to find information about inland and marine fishing locations, where to obtain hunting and fishing licenses, and when fish plantings are scheduled). DFG looks forward to providing you with this useful resource. 🐟

## October 2010 "Mystery Fish": Female Kelp Greenling

Our October Fish Identification Quiz drawing winner, Toru Nakamura of Redwood City, correctly identified last issue's mystery fish as a female kelp greenling, *Hexagrammos decagrammus*. The current bag limit for kelp and rock greenling is 2 fish per person (per CCR Title 14 Section 28.29).

Toru is an electrical test engineer, and most weekends can be found on his boat in Pillar Point Harbor. "My [favorite] hobby, of course, is fishing," he says. In addition to a DFG fish tagging cap, Toru received a copy of *California's Living Marine Resources: A Status Report* for also correctly identifying the sex of this fish. Congratulations, Toru! 🐟







## Marine Management News Fish Identification Quiz!

by Mary Patyten, Research Writer

Welcome to the Marine Management News Fish Identification Quiz for May 2011! Here's your chance to show off your fish identification knowledge and win an official Department of Fish and Game (DFG) fish tagging cap. To qualify for the drawing, simply send the correct answers via e-mail to [AskMarine@dfg.ca.gov](mailto:AskMarine@dfg.ca.gov) by June 1, 2011 correctly identifying:

- The species of the fish pictured below (scientific name and an accepted common name), and
- The new daily bag limit that goes into effect soon (provided in this issue).

Be sure to type "May 2011 MMN Fish Quiz" as the "Subject" of your e-mail. The winner will be selected during a random drawing from all correct answers received by June 1, 2011.

This fish begins life in California waters with many thousands of its fellow larvae in the fall and early winter. The silvery young fish drift with the currents for three to four months after hatching, sometimes hiding below mats of loose, floating kelp.

By early summer, the young fish reach about 1½ inches in length and begin to seek out shallow nearshore habitat such as rocky tidepools and kelp canopies. Around this time, they lose their silvery coloration and take on a mottled red, green, or bronze tone. Anecdotal evidence suggests this fish can change color to match its surroundings.

This fish moves into deeper water as it matures, though it may return to tide pools during high tides to feed. Adult fish may be found from shallow tidepools to 300 ft. depths in rocky habitat, however most of the commercial and recreational catch is taken in less than 120 ft. of water.

Young fish eat small crustaceans, such as shrimp and small crab, while adults consume abalone, small lobster, squid, octopus, and larger crab. In turn, this fish is preyed upon by rockfishes, lingcod, sculpins, seals and sea lions.

Both males and females of this species mature by the time they reach 18 inches in length and 7 years of age. In the fall and early winter, females lay sticky egg masses, called "nests", in rocky depressions on exposed reefs, sometimes several times per season. Males then fertilize and fiercely guard the nests for two to three weeks while the eggs develop and hatch.

This fish can reach more than three feet in length. The current California recreational hook-and-line record is 23 lb. 4 oz. – a record that has stood since 1958. Biologists believe this fish may live for 20 years or more.

This species' range extends from Sitka, Alaska in the

north to Point Abrejos, Baja California in the south, but it is most common between Washington state and southern California.

Records show that recreational fishermen began seriously targeting this fish in the late 1930s; it remains a popular sport fish today. Anglers in private boats take the lion's share of the recreational catch, but this nearshore species is also popular with shore-based anglers and spear fishermen. Current recreational fishing regulations for this species, which is part of the RCG Complex, seem


to be keeping the recreational harvest at a sustainable level.

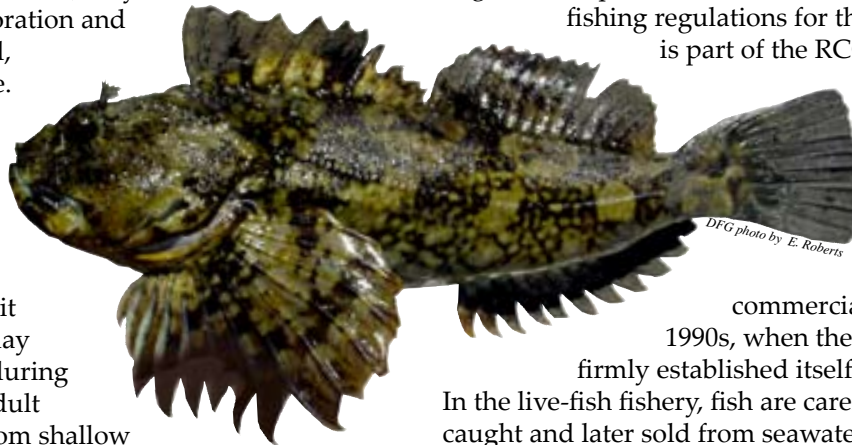
There was little impetus to target this species

commercially until the early 1990s, when the "live-fish" fishery had firmly established itself in the fish markets.

In the live-fish fishery, fish are carefully handled when caught and later sold from seawater tanks while still alive. In 1987, landings of this fish totaled only 8,800 lb; by 1998 landings had increased to nearly 373,000 lb due to live fish market demand. The price paid to fishermen also increased, from \$0.36 per lb in 1987 to nearly \$3 per pound in 1998 (this fish commands considerably more nowadays on the live fish market). Currently, harvest limits on the commercial catch have reduced landings, yet this fish remains one of the most highly prized in the live-fish fishery, ranking behind only rockfish, greenlings, and flatfish in price paid per pound. In 2006, nearly 90 percent of the 62,900 lb commercial catch went to live-fish markets.

If you think you know this species of fish, claim your prize by being the first to send an e-mail to DFG at [AskMarine@dfg.ca.gov](mailto:AskMarine@dfg.ca.gov) by June 1 with the correct scientific and common name, and **the new daily bag limit effective soon**. Again, be sure to type "May 2011 MMN Fish Quiz" in the "Subject" portion of your e-mail.

Answers to the quiz and winner's names will be provided in the next issue of *Marine Management News*. 





Coho (silver) salmon (right) have white gums around the teeth, while the inside of a Chinook (king) salmon's mouth (left) is all dark. photo by DFG Warden Bob Aldrich



Reading tags. DFG file photo

## Strong Winds and Salmon Opener Arrive Arm-in-Arm

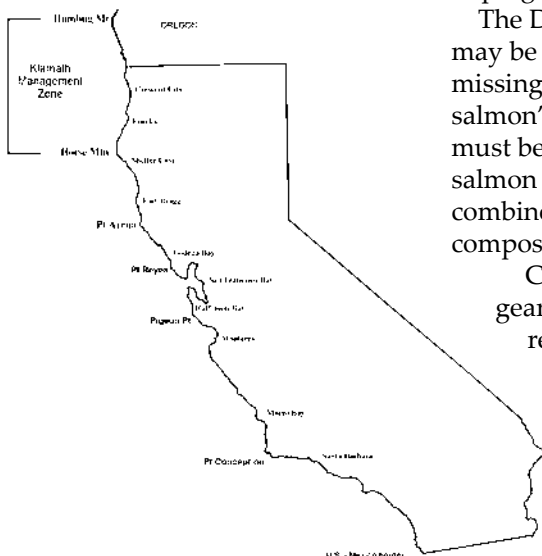
by Mary Patyten, Research Writer

Gusty winds and rough seas greeted many salmon anglers on April 2 during the official recreational ocean salmon season opener south of Horse Mountain. Department of Fish and Game (DFG) biologists are cautiously optimistic that this season will be better than the last, based on ocean population estimates for fall run Sacramento River Chinook that top 700,000 salmon—almost triple last year's forecast.

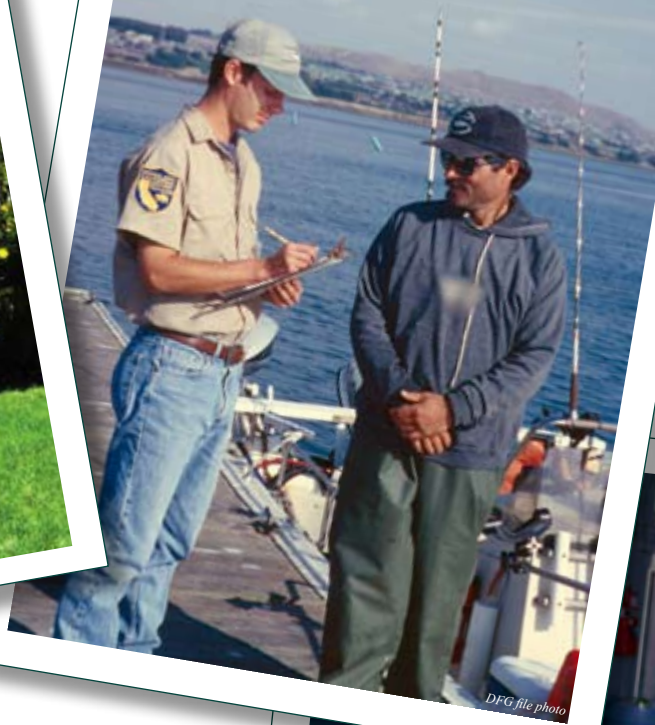
"Blustery weather kept most anglers off the water during the opening weekend, but the sheltered waters of Monterey Bay allowed some salmon fishing," said Jennifer Simon, an associate biologist with DFG's Ocean Salmon Project. "The Monterey Bay anglers had a lot of shakers (undersized released salmon), so we're hoping for a good ocean salmon fishing season this year."

The DFG salmon tagging program has tagged thousands of fish, some of which may be caught in this year's fishery. Tagged salmon are identified by checking for a missing adipose fin (the small, lobed fin between the dorsal fin and the tail fin, on the salmon's back), which is removed shortly after tagging. Legal-sized, tagged salmon must be kept when caught. DFG staff collects the heads from adipose fin clipped salmon to recover information from the tiny embedded tags. This information is combined with fishing effort, catch, and other data to determine the ages and stock composition of ocean-caught salmon.

Conservation of Chinook salmon is achieved in part through limiting fishing gear types to provide undersized salmon with the best chance for survival when released. Salmon may only be taken off California using hook-and-line gear, in both the commercial and recreational fisheries. Recreational gear restrictions include limits on sinker weight (dependent on gear setup), a limit on the number of single shank, single point barbless hooks (2) and fishing poles (1) that may be used per person north of Point Conception, and the type of hook that may be used (barbless circle hooks only) when fishing with bait between Horse Mountain and Point Conception (except when trolling). Commercial restrictions often include measures such as quotas,







prohibiting certain types of hooks and limiting the number of fishing lines. Commercial and recreational fishing regulation summaries may be found on the Ocean Salmon Season Web page at [www.dfg.ca.gov/marine/oceansalmon.asp](http://www.dfg.ca.gov/marine/oceansalmon.asp).

One species of salmon, the coho (silver) salmon, may not be kept in either the sport or commercial fisheries. The California coastal coho salmon is an endangered species listed under the federal and State Endangered Species acts. Although most coho salmon off California probably originate from the Columbia River basin in Oregon, some are protected California coastal coho. To preserve these endangered fish, no coho salmon may be taken off California. 🐟

### 2011 Recreational Ocean Salmon Season

#### **California-Oregon Border to Horse Mountain**

April 2-May 13: closed

May 14-September 5:

2 salmon per day, all species except coho

#### **Horse Mountain to Point Arena**

April 2-October 30:

2 salmon per day, all species except coho

#### **Point Arena to Pigeon Point**

April 2-October 30:

2 salmon per day, all species except coho

#### **Pigeon Point to U.S.-Mexico Border**

April 2-September 18:

2 salmon per day, all species except coho

**Minimum size limit:** 24 inches total length.

All salmon except coho; no retention of steelhead trout.

See [www.dfg.ca.gov/marine/oceansalmon.asp](http://www.dfg.ca.gov/marine/oceansalmon.asp) for further regulations.

### 2011 Commercial Salmon Season

#### **California-Oregon Border to Humboldt South Jetty (KMZ)**

July 2-6, 9-13, 16-20 or 1,400 Chinook quota

August 1-15 or 1,000 Chinook quota

#### **Horse Mountain to Point Arena**

July 23-27, July 29-August 29, September 1-30

#### **Point Arena to Point Sur**

May 1-31, June 25-July 5, July 9-13, 16-20, 23-27, July 29-August 29; September 1-30

**Point Reyes to Point San Pedro:** October 3-7, 10-14

#### **Point Sur to U.S.-Mexico Border**

May 1-31; June 1-24; June 25-July 5; July 9-13, 16-20, 23-27; July 29-August 29; September 1-30

**Minimum size limit:** 27 inches total length.

All salmon except coho; no retention of steelhead trout.



# UPDATES

## *Marine Management News*

### Selected “snapshots” of current Marine Region projects

by DFG Staff

#### *White Seabass*

From August through November 2010 an unprecedented occurrence of large, adult white seabass in southern Monterey Bay resulted in significant recreational and commercial hook-and-line fishing effort and catch of these highly desirable fish. A possible explanation may be the combination of favorable ocean temperature (58°F in late October-early November) and the continued presence of schools of market squid. This species is usually caught south of Point Conception, and while its occurrence in central California is not rare, an event of this magnitude certainly is. Anglers had several windows of exceptional catches during this period by drifting whole squid not far below the surface. Department of Fish and Game biologists sampled the catch at Monterey harbor and were impressed by the overall large size of the fish: it was rare to find one even close to the legal minimum size of 28 in. The average total length of 131 fish measured from the recreational fishery was 50 in.

#### *Sport Fishing Records*

A new sport diving record and two new sport hook-and-line records were established late last year and early in 2011. The sargo (*Anisotremus davisonii*) hook-and-line category gained its first entry with a 3 lb, 3 oz fish caught in December 2010 near Catalina Island by Dennis Tyler. Joseph Holt qualified as the new state hook-and-line

record holder for striped seaperch (*Embiotoca lateralis*) last January with his 2 lb, 6 oz fish caught off Monterey. Calico, rainbow, and walleye surfperch, along with Humboldt squid, are species recently opened for new state angling records. Applicants are welcome to apply for state record status with surfperch weighing at least 1 lb, and squid of 40 lb or heavier.

Freediver Galen O'Toole now holds the state diving record for blue rockfish (*Sebastes mystinus*) after he speared a 3 lb 6 oz fish off Eureka last August. In the diving category, starry flounder and pile perch (minimum weights 8 lb and 1 lb, respectively) are open and awaiting their first applicants. For more information about state record saltwater finfish and invertebrates, please visit [www.dfg.ca.gov/marine/records.asp](http://www.dfg.ca.gov/marine/records.asp). 🐟

#### *Error in 2011-2012 Ocean Sport Fishing Regulations Booklet*

An outdated version of **Section 27.50 - Cowcod Conservation Areas** was printed in the new regulations booklet. Flyers with the correct version of Section 27.50 have been distributed with this year's booklets. The online version of the booklet, available at [www.dfg.ca.gov/marine/sportfishing\\_regs2011.asp](http://www.dfg.ca.gov/marine/sportfishing_regs2011.asp), has been corrected.

*“Groundfish” continued from page 1*

depth constraint to 60 fm year-round in the Southern Management Area

- Remove the 10 fm depth closure around the Farallon Islands and Noonday Rock
- Change the names of some of the recreational groundfish management areas
- Combine the South-Central Monterey and the South-Central Morro Bay Groundfish Management Areas into the Central Groundfish Management Area
- Modify gear restrictions for recreational take of cabezon and greenlings so that no more than one line and two hooks may be used—consistent with rockfish
- Modify season structure and depth constraints for the California recreational groundfish fishery by management area

In addition, the commercial cabezon fishery trip limits have been modified for the 2011 fishing season as follows:



Yelloweye rockfish (adult, right, and juvenile, left) may not be taken in the recreational fishery in 2011. Visit [www.dfg.ca.gov/marine/pdfs/release.pdf](http://www.dfg.ca.gov/marine/pdfs/release.pdf) for successful rockfish release methods.

Illustrations by  
Amadeo Bachar

May–June: 500 pounds  
July–August: 500 pounds  
September–October: 500 pounds  
November–December: 300 pounds

Over 20 months of planning went into producing the new set of regulations that will govern recreational and commercial take of nearly 80 species of fish, including rockfish, lingcod, scorpionfish, greenlings, California sheephead and cabezon. 🐟



# Get Hooked on the Marine Region and MLPA Web Sites!

by Aaron Del Monte, Associate Information Systems Analyst and Marine Region Webmaster

For the latest information on fishing regulations, marine resources, and news affecting our California coastline, your first stop should be the Department of Fish and Game Marine Region website, located at [www.dfg.ca.gov/marine](http://www.dfg.ca.gov/marine). This comprehensive information source currently contains well over 2,000 web pages readily available to the public. If you are new to this website, we invite you to explore the valuable resources we have created. For those who have already visited the site, be sure to check back regularly, since new features, updates, and press releases are added every week. Here are some recent, noteworthy updates:

## 2011-2012 Ocean Sport Fishing Regulations Booklet

[www.dfg.ca.gov/marine/sportfishing\\_regs2011.asp](http://www.dfg.ca.gov/marine/sportfishing_regs2011.asp): This is the 2011-2012 Ocean Sport Fishing Regulations Booklet (in PDF format) distributed in March, 2011. The bookmarked PDF file identifies sections that have changed or are new for 2011. The page also contains links to groundfish regulations summaries, fish identification illustrations, and other helpful resources. *Coming soon...Current regulations will also be available in a user-friendly web page format, which will make locating a specific section of code even easier.*

## State Finfish Management Project

[www.dfg.ca.gov/marine/sfmp](http://www.dfg.ca.gov/marine/sfmp): The State Finfish Management Project (SFMP) focuses on fisheries that are recreationally, commercially and ecologically important to California, and managed by the State alone. California halibut, surfperch, nearshore basses, and hagfish are among the species for which the SFMP collects data. The data is collected to manage fisheries with the best available information and ensure their long term sustainability for economic and recreational benefits.

## California Grunion Facts and Expected Runs for 2011

[www.dfg.ca.gov/marine/grunionschedule.asp](http://www.dfg.ca.gov/marine/grunionschedule.asp): The

California grunion (*Leuresthes tenuis*) is the object of a unique recreational fishery. These fish are famous for their remarkable spawning behavior, which evokes an "I don't believe it!" from people seeing or hearing about it for the first time. Peak spawning is late March to early June. This page contains facts about California grunion and a schedule of expected runs for this year.

Here are some of our most popular pages:

## California Ocean Sport Fishing Regulations Map

[www.dfg.ca.gov/marine/fishing\\_map.asp](http://www.dfg.ca.gov/marine/fishing_map.asp): Going ocean fishing? This should be your first stop. Simply click the marine location where you plan to fish and you will access a compact list of sport fishing regulations for that area. The pages are printer-friendly, so you can print the regulations and take them with you on your next fishing trip. The pages are updated frequently, so you can be assured that they contain the most up-to-date information.

## Fishing Page [www.dfg.ca.gov/marine/fishing.asp](http://www.dfg.ca.gov/marine/fishing.asp)

One of our most popular pages of all, this page contains links to information on different species, laws and regulations, permits and licenses, record fish and invertebrate trophies, fish identification guides, and a number of annual reports and sets of data. Whether you are a recreational or commercial fisherman, you're sure to find some useful information here.

## Fish Identification Page

[www.dfg.ca.gov/marine/fishid.asp](http://www.dfg.ca.gov/marine/fishid.asp)

Do you need to identify a fish or shellfish? This page contains a useful collection of photos, brochures and other resources to help you correctly identify your catch. Be sure to check out the Fish Identification Quiz link, which opens a collection of interactive quizzes previously featured in *Marine Management News*.

Thank you for using the Marine Region website as a resource for news, information and regulations. We hope you will visit our site again soon! 🐟

## The Marine Life Protection Act (MLPA) Website

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

This partnership between government agencies and private entities is striving to achieve the original MLPA goals. The 1999 MLPA directed the state to design and manage a network of marine protected areas (MPAs) in order to, among other things, protect marine life and habitats, marine ecosystems, and marine natural heritage, as well as improve recreational, educational and study opportunities provided by marine ecosystems. This website contains up-to-date information about this exciting endeavor, including up-to-date meeting information,

public comments and documents for review. Current popular resources on the site include:

### • North Coast Region

[www.dfg.ca.gov/mlpa/northcoast.asp](http://www.dfg.ca.gov/mlpa/northcoast.asp) The MLPA Blue Ribbon Task Force (BRTF) unanimously voted to forward a community-based MPA proposal for the north coast to the Fish and Game Commission. The Commission asked for a revised MPA proposal that could accommodate traditional, non-commercial tribal gathering. Additionally, staff will address, to the extent possible, the shortcomings identified in the DFG feasibility analysis. Progress on these

# Creature Feature – Chinook (King) Salmon

by DFG Staff



Chinook salmon are native to California. All members of this family require cool or cold water. Prolonged temperatures higher than 70° F are usually detrimental to this fish, while temperatures over 80° F are often lethal.

In the ocean, chinook salmon are found statewide but they are most abundant from Monterey northward. Once they enter fresh water to spawn, they can be found in some astonishingly small tributaries. California's largest spawning populations are in the Sacramento-San Joaquin River system. Chinook salmon were also historically abundant in the Klamath, Eel and Smith river systems. Smaller runs occur in Redwood Creek, Mad River, Mattole River, and some other coastal streams. Landlocked chinook salmon may be found in the following lakes: Shasta, Berryessa, Almanor, Folsom, Spaulding, Del Valle, Isabella, McClure, Don Pedro, and Pine Flat.

## Distinguishing Characteristics

Prominent adipose fin. Ventral fins are abdominal with a scaly, fleshy appendage at the base of each. All rays of the dorsal fin are soft. Lateral line is prominent. Scales are small.

*At sea:* Bluish to gray on the back, silvery on the sides and belly. Numerous black spots on back, dorsal fin, and usually on both lobes of the tail fin (coho salmon have no spots on the lower lobe of the tail fin). Spots on the back sharply defined. Lining of the mouth is dark with no lighter area on the gums next to the teeth (as with coho salmon).

*Freshwater:* Silvery color becomes darker; females become nearly black. Larger males often have blotchy, dull red sides; smaller males turn dull yellow.

## Life History & Other Notes

Chinook salmon are members of the salmon family whose major characteristic is their ability to jump out of the water. This ability allows them to jump over barriers that might otherwise prevent their movements up rivers or streams. This gives chinook salmon a distinct advantage over other species of fish for growth and survival.

Chinook salmon are very strongly anadromous. Self-

maintaining landlocked populations are rare; they sometimes survive in lakes and reservoirs but usually fail to reproduce successfully. Landlocked chinook salmon are generally much smaller than their anadromous counterparts.

Most anadromous chinook salmon migrate to fresh water in the fall; the exact time varies from river to river. Fall-run salmon normally enter a stream late enough so that a suitable supply of cool water is available for spawning. Spawning usually occurs between October and January.

Some chinook salmon enter rivers in the spring. These salmon move upstream until they find a cool area, where they remain throughout the summer to spawn in the fall. Spring runs usually coincide with snow melt and spring runoff, which provide an ample supply of cold water that allows the salmon to reach the upper parts of a stream.

Chinook salmon spawn in cool to cold water streams with gravel bottoms. Females dig nests where they deposit a portion of their eggs. Waiting males immediately fertilize the eggs, which are then covered with gravel by the action of females digging another nest directly upstream. The adult salmon may live for up to two weeks after spawning, but all die afterwards.

The eggs hatch in 50 to 60 days. Most young fish migrate to the ocean during their first few months of life, returning to the stream of their birth to spawn when mature, at 3 to 6 years of age.

Sportfishing for salmon in the ocean is done primarily by trolling. Bait including sardines, herring, anchovy or squid can be used. Lures such as spoons or flashers with hoochies can also be used. Both private boats and partyboats are used for salmon fishing. The largest part of the salmon partyboat fleet fishes out of San Francisco Bay ports. The boats are operated by men and women who know their business and show their passengers how to catch salmon.

When salmon are biting well in the rivers they are pursued by anglers fishing from shore and boat. Wet flies, spoons and spinners are often successfully used by anglers when fishing for salmon in rivers. 🐟

## Chinook Salmon

### SCIENTIFIC NAME

*Oncorhynchus tshawytscha*

### OTHER COMMON NAMES

king salmon, spring salmon

### RANGE & HABITAT

ocean waters, majors rivers, streams

### LENGTH & WEIGHT

To 4+ ft. and 126+ lb

### LIFESPAN

To 6 YEARS

### DIET & SUGGESTED BAIT

Feeds on sardines, herring, anchovy, squid, Dungeness crab larvae, and krill. Try trolling with baitfish (above), spoons, flashers with hoochies, or mooching; cast wetflies, spoons, or spinners.

Excerpt from the California Finfish and Shellfish Identification Book. Single copies are available to California residents free of charge from [publications@dfg.ca.gov](mailto:publications@dfg.ca.gov)



"MLPA" continued from page 7

efforts were reported to the Commission at its April meeting.

- **South Coast Marine Protected Areas**

[www.dfg.ca.gov/mlpa/southcoast.asp](http://www.dfg.ca.gov/mlpa/southcoast.asp) The California Fish and Game Commission (Commission) has adopted regulations to create a new suite of marine protected areas (MPAs) in Southern California. The regulations will create 36 new MPAs encompassing approximately 187 square miles (8 percent) of state waters in the study region. The south coast MPA regulations are anticipated to go into effect later in 2011 after appropriate filings with the Office of Administrative Law and the Secretary of State. An official effective date has not been announced as of the publication of this newsletter.

- **North Central Coast Marine Protected Areas**

[www.dfg.ca.gov/mlpa/nccmpas\\_list.asp](http://www.dfg.ca.gov/mlpa/nccmpas_list.asp) California's North-Central Coast Marine Protected Areas went into effect May 1, 2010, from Alder Creek, near Point Arena (Mendocino County) to Pigeon Point (San Mateo County). The series of 22 marine protected areas (MPAs), three State Marine Recreational Management Areas, and six special closures, covers approximately 153 square miles (20.1%) of state waters in the north central coast study region. This page contains descriptions of all 22 MPAs, including maps, and also contains links to a printer-friendly guide and brochure.

- **Central Coast Marine Protected Areas**

[www.dfg.ca.gov/mlpa/ccmpas\\_list.asp](http://www.dfg.ca.gov/mlpa/ccmpas_list.asp) California's Central Coast MPAs took effect September 21, 2007. From Pigeon Point (San Mateo County) south to Point Conception (Santa Barbara County), the series of 29 MPAs represent approximately 204 square miles of state waters. This page contains descriptions of all 29 MPAs, including maps, and also contains links to a printer-friendly guide and brochure.



### Attention Salmon Anglers:

## SLOW DOWN FOR WILDLIFE



**Speeding boats are a danger to sea otters, marine birds and other wildlife.**

❖ The operators of boats that strike wildlife protected under the Marine Mammal Protection Act and Endangered Species Act are subject to criminal and civil penalties.

**Please observe speed limits and be on the lookout for surfacing wildlife.**

Thank you for your cooperation



**Have a question?  
Need help identifying a  
fish? E-mail:**

**[AskMarine@dfg.ca.gov](mailto:AskMarine@dfg.ca.gov)**



## Upcoming Commission and Council Meetings

### 2011 California Fish and Game Commission

[www.fgc.ca.gov/meetings/2011/2011mtgs.asp](http://www.fgc.ca.gov/meetings/2011/2011mtgs.asp)

June 29-30  
Stockton

August 3-4  
Sacramento

September 15  
Redding

October 19-20  
Monterey

### 2011 Pacific Fishery Management Council

[www.pcouncil.org/council-operations/  
council-meetings/future-meetings/](http://www.pcouncil.org/council-operations/council-meetings/future-meetings/)

June 8-13  
Spokane, WA

September 14-19  
San Mateo CA

November 2-7  
Costa Mesa, CA

For the latest information on upcoming fishery-related meetings, please go to our Calendar of Events at [www.dfg.ca.gov/marine/calendar.asp](http://www.dfg.ca.gov/marine/calendar.asp) or contact the Monterey DFG office at (831) 649-2870.

## **MARINE Management News**

**M**arine Management News is published three times per year 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 strongly emphasizes an open decision-making process that involves people 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/marine](http://www.dfg.ca.gov/marine).

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### **The Marine Life Management Act**

**C**alifornia's Marine Life Management Act (MLMA) of 1998 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 [www.dfg.ca.gov/marine](http://www.dfg.ca.gov/marine).

#### **DFG Marine Region mission:**

*"To protect, maintain, enhance, and restore California's marine ecosystems for their ecological values and their use and enjoyment by the public through good science and effective communication."*

*Alternate communication formats of this document are available upon request. If reasonable accommodation is needed, call DFG at (707) 964-5026. The California Relay Service for the deaf or hearing impaired can be utilized from TDD phones at (800) 733-2929.*