Catch Share Questions Answered

Given the recent attention to the use of catch shares in rebuilding fisheries, Louisiana Sea Grant offers the following information on this type of fishery management. This effort is intended to be descriptive rather than prescriptive, and our goal is to facilitate the progression of well-informed discussions.

What is catch share management?
Catch share management is an umbrella term which encompasses several programs including limited access privilege programs (LAPPs), individual fishing quotas (IFQs), and territorial use rights fisheries (TURFs). This type of management permits each catch share holder to harvest a percentage of the total allowable catch for a fishery.

Can catch share management function without limited entry?
Since a catch share is required for harvesting, catch share management does limit entry. However, most catch share programs allow transferability of catch shares through sales and/or leases, providing the opportunity for both entry into and exit from an industry.

What is driving the push for catch share management?
The Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006 (MSRA) mandates that annual catch limits be set to end overfishing for the following: all stocks subject to overfishing, by 2010; all other stocks, by 2011. In the National Marine Fisheries Service’s 2008 Status of U.S. Fisheries, 41 species are noted as being subject to overfishing. In the Gulf of Mexico, this included red snapper, greater amberjack, gag, gray triggerfish and pink shrimp. Building upon fishery management plans that were implemented under previous administrations, the current administration is encouraging the use of catch share management in an effort to reach the mandates of the MSRA.

Is catch share management new? If not, where has catch share management already been used?
Some confusion exists over whether or not this is a new type of management. However, various forms of catch share management have been in place in the U.S. since 1990. As of 2009, 13 programs under the classification of catch share management are in place in U.S. commercial fisheries, and an additional four programs are to be implemented in 2010. Related programs have been used since the 1980s in other countries, including New Zealand, Australia, Iceland, and Canada.
**Why are alternative management plans being sought?**
In addition to addressing overfishing per the MSRA, Fishery Management Councils may have additional objectives that will improve a fishery. For instance, a Council might be faced with eliminating the “race to fish” or derby style fishing that can occur when only a total allowable catch (TAC) exists for a certain stock. In that situation, many fishermen harvest with the thought process of “Whatever I don’t catch, someone else will” until the TAC is reached. Such a harvesting strategy can result in increased bycatch, flooding the market with the product at a very specific time of the year and willingness to harvest in dangerous conditions. By providing fishermen with a guaranteed portion of the TAC through use of catch shares, many of these consequences may be avoided, as observed in fisheries that have already adopted catch share management. As well, economic research has shown that fisheries with catch share management tend to be more profitable than when they were managed under other programs.

**What is the difference between a total allowable catch (TAC) and a catch share? Or, what sets a TAC, and what sets a catch share?**
Another source of confusion arises when differentiating between a TAC and a catch share. A TAC relies on biological stock data to determine the allowable catch or harvest, usually on an annual level. A catch share simply represents the proportion of a TAC that each catch share holder is permitted to harvest. For example, if a TAC for a species is set at 100 tons and an individual has a 2 percent catch share, that individual would be allowed to harvest two tons of that species.

**Is catch share management designed to reduce a TAC?**
No, catch share management pertains to the allocation of an existing TAC, which is based on existing stock assessment data. Generally speaking, catch share management should eventually lead to an increase in a TAC. As a fish stock improves, the TAC would increase, resulting in each catch share representing a greater portion of the total. This represents one of the novel aspects of catch share management, with regards to providing an incentive for a fish industry to not exceed its TAC. As a result, fishers directly benefit by adhering to fishery management and being good stewards of the resource. Referring to the example in the previous question, if the TAC increased from 100 tons to 200 tons, the individual with a 2 percent catch share would then be allowed to harvest four tons of that species. However, if a fish stock worsens, the TAC would decrease to reflect this, and so the amount available to harvest with a catch share would also decrease.

**What are some of the potential benefits and drawbacks of catch share management?**
Some of the benefits of catch share management, as with other types of management, are directly associated with a cost or drawback. Therefore, we address both benefits and drawbacks together. One benefit of these programs is the rebuilding of fish stocks. This includes not only the targeted species but also bycatch species, as fishing tends to be more selective and efficient. However, a greater incentive for highgrading occurs when harvesters are no longer in the “race to fish.” Also, initial allocation has been based on historical catches in many instances. Anticipation of catch share management can prompt fishermen to increase harvest levels, so they would receive a higher proportion of the initial allocation. These increased harvest levels only exacerbate existing stock conditions.

As mentioned, fishing tends to be more selective and efficient under catch share programs, and this potentially can result in increased revenues per boat and increased boat yields. Some of the increase in boat yields may be attributed to a decrease in the number of vessels operating in an industry. Nonetheless, excess fleet capacity is reduced, contributing to a more efficient industry.
With catch share programs, seasonal restrictions are often reduced or removed, and this contributes to more stable and full-time employment (FTE). However, while FTE may increase as fishermen are able to harvest with longer seasons, industries often observe job losses in the part-time sector. In addition, with a longer harvesting season, the cost of enforcement may increase in response. Finally, the reduction or removal in seasonal restrictions combined with the assurance of the ability to fish with catch shares allows fishermen flexibility in when to harvest, so the need to fish in unsafe conditions is minimized.

A final drawback to catch share management arises from confusion over catch shares as a property right. The draft NOAA Catch Share Policy sheds light on why catch shares are not truly a property right. “The granting of catch share privileges to an entity is not made in perpetuity. The MSA defines a LAP as a permit, issued for a period of not more than 10 years, which will be renewed if not revoked, limited, or modified.”

(http://www.nmfs.noaa.gov/sfa/domes_fish/catchshare/docs/draft_noaa_cs_policy.pdf)

How are catch shares allocated?
Catch shares are often initially allocated based on historic catch levels, referred to as a “granting” of a share. An annual participation fee, such as a license fee, is typically still required. Another allocation method is auctioning the shares. Some programs have combined the two approaches.

Why do some programs allow trading of catch shares?
Trading of catch shares, either through sales or leases, allows for entry/exit in the industry and the potential for a more efficient outcome than the initial allocation provided. Trading in these programs is optional, so the decision to remain in an industry rests with the catch share holder. As catch share management evolved, concerns over consolidation of shares arose, and newer programs are usually designed with restrictions on the total percentage of shares that one entity can hold.

Will catch share management be required for the recreational industry?
Currently, catch share programs in the U.S. have only been implemented in the commercial industry. NOAA recognizes that catch share management is not a one-size-fits-all tool, but the eight Fishery Management Councils are encouraged to consider catch share management as an option. Catch share management is not being federally required for either the commercial or recreational sector.

Where can additional information on catch share management be found?
On NOAA's Web site, information on current and proposed catch share programs is available. Also on the site, NOAA has posted a draft policy on catch share programs in December 2009, and individuals are able to comment on the policy through early April 2010.

- Matthew Freeman

For more information follow this link: http://www.nmfs.noaa.gov/sfa/domes_fish/catchshare/index.htm
These FAQs also appear in the Louisiana Sea Grant Forum - http://sg-server.lsu.edu/forums/
Applications for Special Bait Dealer Permits Due by April 30

The Louisiana Department of Wildlife and Fisheries (LDWF) is accepting applications for “Special Bait Dealer” permits through April 30. These permits allow commercial establishments to harvest and sell live shrimp and live croaker to the fishing public in that period between the end of the spring inshore shrimp season (generally in mid June to early July) and beginning of the fall inshore shrimp (generally in early to mid August).

However, changes to provisions in the current rule would allow the taking of live bait by qualified permit holders beginning May 1 of each year. This change would become effective no earlier than Jan. 20, 2010, when it is anticipated that the final rule would be published in the Louisiana State Register.

Louisiana saltwater anglers have shown increasing interest in and demand for live bait and the live bait fishery has grown to become an important industry in Louisiana. “This rule change is not only important to the bait industry, but to many saltwater anglers who have experienced problems with live bait availabilities during early May. Allowing permitted bait dealers to operate in May before the inshore shrimp season opens will improve angler’s access to live bait without adverse impacts to developing shrimp populations,” said assistant secretary Randy Pausina, LDWF Office of Fisheries.

During the 2009 permit period, bait dealers reported sales of approximately 322,000 live croaker and two million live shrimp with an estimated retail value of approximately $479,000. Bait dealers in Jefferson Parish led all others in sales of live croaker and the number of bait trips reported while those in St. Bernard Parish sold the most live shrimp.

Special Bait Dealer Permits are not for the direct use of recreational fishermen, charter boats, commercial fishermen who sell food shrimp or croaker or for any others that would like to harvest shrimp or croaker for their own use during closed shrimp season. In addition to a $110 permit fee, applicants must post a $1,000 cash bond, provide copies of all required LDWF commercial licenses, undergo a background check for previous wildlife and fisheries violations, inspections of their live bait holding facilities and display proper signage notifying the public that live shrimp and croaker are available for sale. Permitted bait dealers are also required to comply with additional regulations which restrict gear size and times of operation, display signs visible from the air which identify the vessel as working under the permit and submit logs detailing trip and catch information.

For information concerning special bait dealer permit applications, rules and requirements, please contact the LDWF Office of Fisheries at 225-763-5420.

Commercial Shark Fishing to Open in Louisiana Waters

Commercial fishing for non-sandbar large coastal sharks as defined by Louisiana rule (L.A.C. 76:VII.357) will open in Louisiana waters at 12:01 a.m., Feb. 4. The National Marine Fisheries Service (NMFS) will also open the federal waters of the Gulf of Mexico at this time.
The commercial seasons in Louisiana state waters will close at 12:01 a.m., April 1 unless a season closes in adjacent federal waters or is projected to close before that date, and the Louisiana Department of Wildlife and Fisheries (LDWF) secretary is requested by NOAA Fisheries to take action to enact consistent seasonal regulations. The commercial seasons will remain open in federal waters until 80 percent of the federal quota for a given fishery has been harvested in the Gulf of Mexico.

During the open season, commercial harvest of non-sandbar large coastal sharks and pelagic sharks shall be regulated by the existing federal and state rules regarding trip limits, allowable species, and requirements for permits and landings, as laid out in federal and state regulations. The non-sandbar large coastal shark group is composed of the great hammerhead, scalloped hammerhead, smooth hammerhead, nurse shark, blacktip shark, bull shark, lemon shark, silky shark, spinner shark and tiger shark. While sandbar shark are a member of the large coastal shark group, only specifically designated federally permitted vessels may take sandbar shark while operating under conditions of that permit.

The commercial fishery for small coastal sharks will remain closed, until a determination is made for the opening and rules for harvest of those species in federal waters off of Louisiana. There is no allowable harvest at any time for all prohibited species, which include basking shark, white shark, bigeye sand tiger, sand tiger, whale shark, smalltooth sawfish, largetooth sawfish, Atlantic angel shark, Caribbean sharpnose shark, smalltail shark, bignose shark, Caribbean reef shark, dusky shark, Galapagos shark, narrowtooth shark, night shark, bigeye sixgill shark, bigeye thresher shark, longfin mako, sevengill shark and sixgill shark.

**Remainder of Zone 1 Closed to Shrimping**

The fall inshore shrimp season closed in the remainder of Shrimp Management Zone 1 extending north of the southern shore of the Mississippi River Gulf Outlet (MRGO) at official sunset Jan. 14. The shrimp season in these waters was extended following Dec. 22 due to the presence of significant quantities of marketable size shrimp. However, current sampling conducted by Louisiana Department of Wildlife and Fisheries (LDWF) Office of Fisheries biologists has indicated that white shrimp in these portions of Louisiana waters are smaller than 100 count per pound minimum legal size.

Acting upon authority provided to LDWF Secretary Robert Barham by the Louisiana Wildlife and Fisheries Commission, this emergency action protects small white shrimp currently over-wintering in these waters and provides increased opportunity for growth to larger and more valuable sizes.

Effective with these closures, all state inside waters are closed to shrimping except for the open waters of Breton and Chandeleur Sounds as described by the double-rig line (LA R.S.56:495.1(A)2), which shall remain open to shrimping until 6 a.m., March 31. State outside waters south of the inside/outside shrimp line westward from the western shore of Freshwater Bayou Canal at 92 degrees 18 minutes and 33 seconds west longitude and eastward from the northwest shore of Caillou Boca at 29 degrees 03 minutes and 10 seconds north latitude and 90 degrees 50 minutes and 27 seconds west longitude shall continue to remain open to shrimping.

The opening dates for the 2010 spring shrimp season in inside waters will be considered by the Louisiana Wildlife and Fisheries Commission at its May 6 meeting to be held at LDWF headquarters in Baton Rouge.
Fisheries Recovery Program Launched

It is estimated that the total fisheries infrastructure and economic loss from hurricanes Katrina and Rita in 2005 and hurricanes Gustav and Ike in 2008 totaled more than $750 million. The Louisiana Department of Wildlife and Fisheries (LDWF) was charged with the coordination and distribution of federal recovery funds to the fishing industry for those storms. A $41 million Katrina and Rita program began in May 2008.

LDWF and the Louisiana Recovery Authority recently announced a $32.7 million program for fishing industry recovery from Hurricanes Gustav and Ike. Funding is through the Community Development Block Grant program from the U.S. Department of Housing and Urban Development. The program will include a grant and loan program for commercial fishers, an infrastructure repair program for coastal fishing communities, assistance for seafood dealers and brokers who received damage, and a fishing efficiency program aimed at making boats and fishing gear more fuel-efficient and cost-effective.

The grants and loans and the gear efficiency program will total $15.2 million; the coastal communities program is $8.5 million; and the seafood dealer program will be $9 million. The Gustav and Ike recovery program will be different from the Katrina/Rita program in that it will offer participants an opportunity to upgrade fishing gear which is more fuel efficient, more environmentally friendly, and produces a higher quality product. The goals of this new program are:

- To stabilize the Louisiana seafood industry by making harvesters and processors more efficient.
- To provide technology upgrades and training which will produce a higher quality product.
- To improve marketing of high quality Louisiana seafood.

This program is expected to be a long-term project which will revolutionize the Louisiana seafood industry by making it more competitive and sustainable in the global market. Anyone involved in the seafood industry is advised to sign up for this program by filling out a one-page registration form. The forms are available online at [www.wlf.louisiana.gov/disasterrecovery/](http://www.wlf.louisiana.gov/disasterrecovery/).

- Kevin Savoie

LDWF Conducts Survey of Commercial Wild Crawfish Harvesters

The Louisiana Department of Wildlife and Fisheries is conducting a survey of resident wild crawfish harvesters to measure their perspectives on a number of potential crawfish management practices. The LDWF Inland Fisheries Division and Socioeconomic Research and Development Section developed a brief questionnaire that asks for crawfishermen’s views regarding crawfish trap mesh size, commercial harvest seasons, crawfish trap tags, and other matters.

Questionnaires were mailed to all resident commercial fishing license holders who reported crawfish landings between June 2008 and July 2009. Participation in the survey is voluntary. All answers will be anonymous and confidential.
The LDWF expects to issue a summary report of the findings in time for the 2010 Louisiana legislative session.

Anybody with questions on the Louisiana commercial wild crawfish survey may call Jack Isaacs for more information at (225) 765 – 2605.

**Louisiana Shrimp Watch**

Louisiana specific data portrayed in the graphics are selected from preliminary data posted by NOAA on their Web site. All data portrayed are subject to final revision and approval by NOAA. Shrimp landings are ex-vessel prices, inclusive of all species harvested. Missing, inadequate or withheld reports are portrayed as ‘zero’ in these graphics. Price graphics reflect central Gulf states only (Texas and Florida are reported independently). For more information, please refer to: www.st.nmfs.noaa.gov/st1/market_news/index.html

- Rusty Gaudé
THE GUMBO POT

Renee Cosse’s Crawfish Pie

1 lb. package of crawfish tails
1 cup of breadcrumbs
1 cup shredded parmesan cheese (not the green shaker!), or ½ cup parmesan and ½ shredded mozzarella
½ teaspoon lemon juice
2 teaspoons chopped garlic
½ teaspoon garlic powder
¼ teaspoon cayenne
½ teaspoon Cajun seasoning
¼ cup parsley finely chopped
¼ cup green onion finely chopped
¼ cup bell pepper finely chopped
¼ cup celery finely chopped
½ to 1 stick butter, melted
1 “ready crust style” pie crust
1-2 eggs for “egg wash”

Preheat oven to 350 degrees. Combine thawed crawfish, lemon juice and seasonings in a bowl. Allow to sit while chopping vegetables. Combine chopped vegetables, bread crumbs and cheese. Add crawfish and stir well. Drizzle in melted butter until bread crumbs are slightly moist. Add more or less cayenne depending on level of spice you prefer. Put pie crust in a 9-inch pie pan. Puncture with a fork to prevent crust from puffing when baked. Brush on an egg wash and bake for 5-6 minutes. Allow the crust to bake partially. Do not allow to brown. Add crawfish mixture and firmly pat into cooled crust. Bake in preheated oven for 30-40 minutes until golden brown.
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