

Areas fished by the commercial snapper fleet in the Gulf of Mexico.

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DESCRIPTION

The red snapper, as its name implies, is brilliant red in color and is one of the most colorful fish in a seafood market display case. It ranges in size up to 30 pounds in weight and $2\frac{1}{2}$ feet in length.

HABITAT

Although very little is known about the life history of the red snapper, commercial ishermen have learned that concentrations of snapper are usually found over certain types of bottom. Irregular hard bottom formations of rock and limestone covered with live coral and grass, called lumps or gullies, are especially preferred by snapper. Fish schools are isually located several feet off the bottom of these areas, where food material brought in by eddying currents settles out. Fishermen believe that the red snapper stays in shallow water during the summer months and moves offshore again as fall arrives. It is believed that the snappers spawn in deep water during the fall.

SNAPPER FISHING

Snappers are taken in water several hundred feet deep, and most of the catch is still made with hook and line. For several years, however, fishery research vessels operating out of BCF's Exploratory Fishing and Gear Research Base in Pascagoula, Mississippi, have sought to develop new and better fishing methods to improve the effectiveness of the fishing fleet. The Research Base is testing the effectiveness of a modified otter trawl, a large, flattened, cone-shaped net of nylon which is dragged along the ocean floor.

Improvements in electronic gear have also helped the fishermen. In early years fishermen relied almost entirely on trial and error navigation to locate fishing grounds. Hard bottom areas were often difficult to locate, and many hours were spent searching. As early as 1953, BCF tested a fish finder which utilized electronics to show the bottom composition and fish present under the boat. Today, depth sounding devices and fish finders are being used with great success in the fishery. One of these recorders graphically portrays the seabed, its consistency, and the fish concentrations on or above the bottom. With this instrument fishermen can locate gullies and lumps and actually distinguish between hard and soft bottoms. Fishermen have little difficulty in locating and staying over fishable pottoms.

USE OF RED SNAPPER

Red snapper is available year round in all parts of the country. Its meat is juicy, white, and of fine flavor. Red snapper is sold in several market forms including fresh dressed, fresh fillets, frozen fillets, and frozen portions. It can be served broiled, baked, steamed, or boiled in a host of imaginative ways which add even more appeal to this deep sea delicacy.

SNAPPER IS DAPPER WITH A SIMPLE SAUCE

Although we cherish the old, tried and true recipes that have won acclaim over the years it's exciting when we discover something utterly new and different. Why not be adventure some and soar into the 1970s with some bright new ideas for preparing seafoods? BCF ha thoroughly tested and found delicious a totally new approach to preparing everyone's favor seafood, red snapper. In this recipe, Dapper Snapper, the snapper is baked in a quick an

easy sauce that is made from gravy mix, of all things! The sauce is highlighted with a tang of lemon, and a lively base of chopped onion placed under the fillets further accents the taste. Just 20 to 25 minutes in the oven is all the time needed to flake the fish and blend the flavors, and this imaginative entree is ready to garnish with almonds and green pepper bits and serve.

Red snapper has long been considered one of the most delicious deep-sea delicacies on the market. Its brilliant coloring and attractive appearance is only exceeded by the juicy, white, fine-flavored flesh. Most of the snapper on the market is caught in the Gulf of Mexico and landed in Florida. Because of today's fast, modern transportation, this delicacy is available in most areas of the United States.



It is sold in several market forms including fresh dressed, fresh fillets, frozen fillets and frozen portions. Red snapper's tender, delicate flesh adapts readily to a host of imaginative preparation methods and is equally good broiled, baked or poached. <u>Dapper Snappe</u> offers a new flavor sensation that we think you'll like; why not try it today!

Many other exciting ways to prepare Florida's deep-sea bounty are contained in a colorfa booklet, Florida Fish Recipes. Red Snapper Floridian, Spicy Red Snapper, and Baked Re Snapper With Sour Cream Stuffing are just a few; this booklet also has many tasty ideas for mackerel, shrimp, lobster, crab, oysters, catfish, grouper, and mullet. For your copy, sen 35¢ to the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C 20402, and ask for Florida Fish Recipes (I 49.49/2:1).

DAPPER SNAPPER

2 pounds snapper fillets or other fish fillets, fresh or frozen

 $\frac{1}{4}$ cup chopped onion

1 package ($\frac{5}{2}$ to $\frac{7}{2}$ ounce) brown gravy mix

1 tablespoon olive oil

1 teaspoon lemon juice

1 teaspoon salt Dash pepper $\frac{1}{4}$ cup sliced almonds

 $\frac{1}{4}$ cup chopped green pepper

Thaw frozen fillets. Skin fillets. Cut fillets into 6 portions. Sprinkle onion in a wellgreased dish, 13 by 9 by 2 inches. Place fish, skinned side down, on onion. Prepare brown gravy mix according to package directions. Add oil, lemon juice, salt, and pepper. Pour gravy over fish. Bake in a moderate oven, 350° F., for 20 to 25 minutes or until fish flake easily when tested with a fork. Garnish with almonds and green pepper. Makes 6 servings (National Marketing Service Office, BCF, U.S. Department of the Interior, 100 East Ohio Street Room 526, Chicago, Illinois 60611.)



Salmon has nourished the human race since ancient times. Pliny, the Roman scholar, wrote in 77 A.D. that "the river salmon is preferred to all fish that swim the sea." Salmo is still preferred by many people today. The fact that canned salmon is 100 percent edible, easy to store and use, as well as being high in nutritional values, makes it one of the most can-venient items on the market.

DESCRIPTION

There are five species of Pacific salmon which occur in North American waters. They are:

- 1. Chinook salmon, also known as king salmon, is the largest of the five species, averaging around 20 pounds. A typical Chinook has silvery sides and a bluishgreen back marked with small dark spots. The flesh of the Chinook is very rich in oil, breaks into large flakes, and ranges in color from deep salmon to almost white. It is especially good in salads.
- 2. Sockeye or red salmon averages about 2 feet in length and 3 to 5 pounds in weight. The males, when spawning, assume a colorful attire with a bright red body and a green head. The flesh is deep salmon in color, firm-textured, has considerable oil, and breaks into medium-sized flakes, making it suitable for salads or other dishes where richness and color are important. The annual pack of canned sockeye is usually the most valuable.
- 3. Pink salmon, also known as humpback salmon because of the appearance of the males during spawning, is common to Alaska but is found as far south as Oregon. Pink salmon, named for its paler flesh, ranges in weight from 3 to 6 pounds. It is especially good in entrees, soups, and sandwiches.
- 4. Coho or silver salmon, a favorite with fishermen, weighs from 6 to 12 pounds and is from 2 to 3 feet in length. The flesh is deep salmon, but lighter than sockeye. Coho breaks into large flakes and is equally good in all recipes or as it comes from the can. Coho salmon have recently been planted in the Great Lakes and have shown tremendous promise as a fish for sportsmen.
- 5. Chum salmon, also known as keta or calico salmon, migrate in the autumn and are the last Pacific salmon to run the rivers. They reach an average length up to 3 feet and weigh about 10 pounds. The flesh is lighter in color than the other species and has less oil. It is especially suitable for casseroles or other cooked dishes where color is not important. Commercially, chum salmon is the least expensive.

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HABITAT

Pacific salmon spend most of their lives in the ocean. When mature, they return spawn in their stream of origin. Some go a short distance upstream or just above tidewat to spawn, others go as much as 2,000 miles upstream. All die after spawning. Months lat the new generation emerges from the gravel. Some of the young make their way downstrea immediately, others remain in fresh water for a year or two. Streams must have hig quality, well-oxygenated, cool water for salmon to survive. Pacific salmon range from Monterey Bay, California, to Alaska.

SALMON FISHING

Salmon are usually caught commercially in the ocean or in the river mouths as they of gin their spawning runs. During the spawning run the salmon does not eat. Nature has privided the adults with an abundance of fats and oils for the long, rugged journey. The salmon are therefore in their prime. There are many methods used to catch salmon, but the matcommon are purse seining, trolling, and gill netting. Once caught, salmon are dressed and iced and are either brought directly to the cannery or transferred to cannery tenders while bring them in for processing. Much care is exercised to see that quality is maintained.

CONSERVATION

Although dams, pollution, overfishing, and other factors have reduced the numbers i salmon, it is still one of the most valuable fishery resources in the United States. BCF at the State convervation agencies are working together to enhance and protect the remaining salmon resources. Research on salmon behavior patterns and survival and the influences i environment provides an understanding of the fluctuations in abundance of salmon stock. Research is also directed toward providing safe passage for migratory fishes at water-uprojects, such as hydroelectric and flood-control dams and irrigation systems.

In the critical international North Pacific fishery, unique research tools have been dveloped to distinguish Asiatic from North American stocks of salmon and determine the distribution. The basic aim of all fishery research is to ensure the wise use of a renewat resource.

USES OF SALMON

Salmon is packed mainly in three different types of cans: 1. The one-pound tall and one-pound flat, each containing two cups and serving four; 2. The half-pound flat containing one cup and serves two; 3. The "quarter-pound flat" can containing $3\frac{3}{4}$ ounces, is less comon, and serves one. Because canned salmon is ideal for large scale cooking in restaurant hospitals, institutions, etc., special four-pound cans are packed for this purpose.

Whole salmon is sold fresh or frozen for baking or barbecuing. Salmon steaks are avaa able as are a wide range of specialty products. (Source: National Marketing Services Off BCF, U.S. Dept. of the Interior, 100 E. Ohio, Room 526, Chicago, Ill. 60611.)

A 16-page, full-color booklet featuring salmon is available free from the Canned Salm Institute, Pier 89, Seattle, Washington 98119. Ask for "Quick and Easy Ways With Salmor

CAN-VENIENT SALMON SCORES AGAIN

Kids are playing baseball in the vacant lot, teen-agers are bicycling in the park, colege students are strolling on campus or philosophizing on the library steps, Dad is out of he office jogging, and Mom--what is Mom doing? Mom is trying to think of a way to get ut of the kitchen! Take heart, Mom, there is a way out, and the answer is seafoods! Any eason is right for protein-rich, quickly prepared and cooked fish and shellfish. Especially propriate, however, when Mom is in a hurry and wants out of the kitchen, is that versatile oduct, canned salmon.

Canned salmon is a fish for all seasons nd truly a treat for mankind. Ready at the ick of a can-opener, canned salmon is saory, satisfying, and summery. It's also aving of those valuable commodities -- time nd money. There is no waste in a can of almon. It is 100 percent edible, and even he soft, tiny bones add enjoyment and crunchy oodness. Nutritionists suggest that the enire contents in a can of salmon be used. Canned salmon adapts to many preparation methods, hot or cold, and may be eaten as it comes from the can or used in gourmet enrees.

Canned salmon varies in color from redlish to pink according to the type of salmon anned. The color helps to determine the price; the redder varieties are more expensive and have a little more oil content than



he pink. All canned salmon is nutritious, however, regardless of color. Consumer-sized cans available at the market include: one-pound containing two cups and serving four; onealf pound containing one cup and serving two; and quarter-pound containing $3\frac{3}{4}$ ounces and serving one.

"Salmon, either whole, steaked, or canned, provides complete protein. It is also a good ource of iodine, phosphorus, and vitamins A, D, and the B group," says Phil Roedel, Diector, BCF, U.S. Department of the Interior. Take A Can Of Salmon has 22 tasty recipes anging from appetizers to elegant entrees. For your copy, send 25¢ to the Superintendent Documents, U.S. Government Printing Office, Washington, D.C. 20402, and ask for Take Can of Salmon, Circular No. 60.

CRUNCHY SALMON SALAD

1 can (16 ounces) salmon Salad greens Sliced water chestnuts

Chopped peanuts

Curry Dressing

Drain salmon and reserve liquid. Remove skin and bones. Break salmon into large pieces. Arrange salmon on salad greens. Garnish with water chestnuts and peanuts. Serve with Curry Dressing. Makes 6 servings.

CURRY DRESSING

cup mayonnaise or salad dressing 1 tablespoon soy sauce cup sliced green onion cup chopped green pepper 2 tablespoons salmon liquid

1 teaspoon curry powder

1 teaspoon ground ginger

Combine all ingredients. Chill. Makes approximately 12 cups dressing.

National Marketing Services Office, BCF, U.S. Department of the Interior, 100 East Ohio Street, Room 526, Chicago, Illinois 60611.)

KING CRAB KRUNCH--ALASKA SPECIALTY

The Pacific coast offers great seafoods, and many of them come from Alaska, the 4th and biggest State, a land of superlatives and surprises. Superlative not only describes Alaska, it is the best word to describe one of Alaska's famous products, the king of crah. Caught in the cold waters of the Bering Sea off Alaska's rugged coastline, the huge king crabs are processed and packaged on board ship within minutes after being caught.

King Crab Crunch is a Bureau of Commercial Fisheries recipe that allows the homemaker to "go gourmet" with ease and convenience. All ingredients are refrigerator or shelf-ready, planned to save time in preparation. Big, tender, succulent pieces of king crabmeat are mixed with celery and pineapple pieces, then blended and heated together in a chickenbroth base. Add toasted slivered almonds and a little lemon juice just before serving over chow mein noodles -then sit back and take time to enjoy this crunchy, delicious seafood recipe. Great for entertaining or a special treat for the family, this king crab specialty offers real nourishment and is bound to be a nifty success every time it is served.

KING CRAB KRUNCH

1 pound king crabmeat, fresh or frozen 1 can $(8\frac{3}{4}$ ounces) crushed pineapple 3 tablespoons butter or margarine $\frac{1}{2}$ cup thinly sliced celery 2 tablespoons cornstarch 2 cups chicken broth $\frac{1}{2}$ cup toasted blanched slivered almonds 1 tablespoon lemon juice 1 can (5 ounces) chow mein noodles



Thaw frozen crabmeat. Drain crabmeat. Remove any remaining shell or cartilag Drain pineapple, reserving liquid. Melt butter in a 10-inch fry pan. Add celery, pineappl and crabmeat. Cook over low heat for 5 minutes, stirring frequently. Dissolve cornstain pineapple juice. Stir into crab mixture. Add chicken broth gradually and cook until thic stirring constantly. Add almonds and lemon juice. Serve over noodles. Makes 6 serving

King Crab Krunch is one of 25 mouth-watering, easy-fix recipes planned especially give you <u>TIME</u>--time to enjoy, time to relax, and time out of the kitchen. Cooking with image ination is so easy to do with 'Time For Seafood,' a full color booklet published by the Burea of Commercial Fisheries. For your copy send 45¢ to the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 and ask for Time For Seafood, Fisher Market Development Series No. 12 (I 49.49/2:12). (National Marketing Services Office, BCI U.S. Department of the Interior, 100 East Ohio Street, Rm. 526, Chicago, Illinois 60611.)

OYSTERS ARE IN A STEW AGAIN!

Oysters have been pleasing and nourishing mankind for hundreds of years. Coastal Indians enjoyed them in large quantities as evidenced by great piles of oyster shells found along the shorelines by early settlers. Oysters today are more popular than ever, and the old superstition of eating oysters only in the "R" months has long been disproved. Oysters are good to eat anytime they are available. Fortunately for oyster fanciers they can be enjoyed the year around thanks to today's modern freezing and canning processes. Right now, however, these tasty little gems are plentiful and available fresh, sweet, and ready to eat.

Oyster meats are excellent sources of protein, minerals, and vitamins, and they are easily digested. Because of the high mineral content, oysters are often recommended by doctors for patients with anemia. To retain the oyster's delicate flavor never overcook. Oysters should be cooked just long enough to heat through so they will remain plump and tender.

Soup is super--especially when oysters are in the soup. Oysters are delightful prepared in dozens of versatile ways, but now is the season to enjoy them in soups and stews. Poets have said that oyster stew nourishes the soul; whether it does or not is debatable, but we do know that it nourishes the body. Oyster-Mushroom Stew, a Bureau of Commercial Fisheries recipe, has all the goodness of the traditional oyster stew but with a modern touch. This recipe combines the succulent oysters with milk and canned cream of mushroom soup for a hurry-up snack, lunch, or first course. A last minute



addition of sherry adds a flavor fillip to make this easy combination one you'll repeat again and again. Served with a cling peach salad and your choice of crackers, this Oyster-Mushroom Stew is a boon to today's busy homemakers -- ready in minutes, tasty and filling, and bound to satisfy.

OYSTER-MUSHROOM STEW

2 cans (12 ounces each) oysters, fresh or frozen	$\frac{1}{2}$ teaspoon salt
1 can $(10\frac{1}{2}$ ounces) cream of	$\frac{1}{4}$ cup butter or margarine
mushroom soup	1 tablespoon sherry

2 cups oyster liquor and milk Paprika

Thaw frozen oysters. Drain oysters and reserve liquor. Combine all ingredients except oysters and sherry in a 3-quart saucepan. Heat, stirring occasionally. Add oysters. Heat 3 to 5 minutes longer or until edges of oysters begin to curl. Add sherry. Sprinkle with paprika. Makes 6 servings.

Fishery products from Washington, Oregon, and Alaska offer 38,340 miles of variety, flavor, and imagination. To call attention to these products the United States Department of the Interior's Bureau of Commercial Fisheries, in cooperation with eight fishery agencies in the Pacific Northwest, has produced a new, 32-page, full-color booklet that is chock-full of wonderful ways with seafoods. For your copy of this exciting recipe booklet send 60¢ to the Superintendent of Documents, U.S. Government Printing Office, Washington, D. C. 20402 and ask for Seafood Moods, Fishery Market Development Series No. 14. (Source: National Marketing Services Office, BCF, U.S. Department of the Interior, 100 East Ohio Street, Rm. 526, Chicago, Illinois 60611.)