3-1-1995

Cleaning and Preparing the Cownose Ray

John Merriner
Virginia Institute of Marine Science

Joseph Smith
Virginia Institute of Marine Science

Follow this and additional works at: https://scholarworks.wm.edu/reports

Part of the Aquaculture and Fisheries Commons

Recommended Citation

This Report is brought to you for free and open access by W&M ScholarWorks. It has been accepted for inclusion in Reports by an authorized administrator of W&M ScholarWorks. For more information, please contact scholarworks@wm.edu.
Cleaning and Preparing the Cownose Ray

by John Merriner and Joseph Smith

Available by the thousands in the Chesapeake Bay area in summer, the cownose ray offers sport and excellent eating to those willing to try it.

ANYTIME A COWNOSE ray is caught by a fisherman, commercial or sport, it usually ends up being mortally wounded and tossed back overboard. The sport fisherman vaguely suspects that “nothing that looks like that could be good for anything.” The commercial operator knows the cownose damages clam and oyster beds and he doesn’t have a ready market for it. So it gets clouted or pitchforked or stabbed, and back it goes, fodder for the crabs and eels (there is a market for them). And that’s a pity, because this fish is good to eat, easy to clean and there’s plenty of meat (enough to feed a crowd) on every ray. If you’d like to be enlightened, catch and clean a ray and prepare a seafood feast for your family and guests this summer.

Thousands of cownose rays move into Chesapeake Bay in early May, initially going northward and westward. They enter the major rivers later in the month. By mid-June, schools of 10-100 rays are often sighted in the middle reaches of the major rivers. Sandy shoal areas near the river mouths (stingray Point in Deltaville is an excellent example) and upriver sandy-muddy bars, rich beds of soft clams and natural or planted oyster beds are frequent haunts of the cownose ray. These fish move into shoal water with high tide, returning to deeper waters at low tide. The rays retreat to the ocean in later September, typically with decreasing water temperatures.

HOW TO CATCH THEM

Sight casting to a school of feeding rays is the most obvious means of capture by rod and reel fishermen. The only requirement is that your
fishing gear be in good shape and stout enough to weather a strong fight by a 30-pound bruiser. The lighter your tackle, the longer the fight. Hooks of 1/0 and larger baited with cut fish, squid or clam have proved successful. A feeding school of rays will engulf virtually any morsel placed in its path. Just hang on!

Harpoon or bow and arrow fishermen can also enjoy battle with the cownose. Again, stout equipment is required. A heavy 3-barbed fish gig, preferably with about 20 ft. of line (125-150 lb. test) connecting it to a small inner tube or large plastic jug will keep the ray in sight until he tires. Large barbs are necessary to keep this very strong fish from tearing loose. Bow fishermen going after the cownose with anything less than 100-lb. line are going to lose some expensive harpoon arrows, unless they too, let the fish drag a float around until it tires.

CLEANING THE RAY

Whether you clean a ray on shipboard or do the job after returning home, here are a few tips to make the exercise easier and safer. Remember, the cownose has a sharp spine or “stinger” at the base of its tail. It’s a good idea to cut off the tail and barb before slicing off the wings. Wear a pair of cotton gloves while cleaning your fish: the ray’s skin is slick and the gloves will make it easier to maintain a good grip.

The following instructions for filleting ray wings involve very little effort beyond that used in cleaning bluefish, weakfish or flounder. Cleaning a ray requires no special tools: A sharp butcher or fillet knife is adequate.

Figure 1. In preparing your ray for the table, your first cut should be to remove the tail and spine or “stinger.” Then cut close to the body on each side to free the wings.

Step 1: Place the ray, belly side down, on a flat cutting surface (preferably wood). Starting at the head end, cut the wings from the body (frame) staying as close as possible to the thickened middle portion, Figure 1. Halfway through the wing you will encounter a hard layer, composed of rodlike pieces of cartilage, which extends all the way out to the tip of the wing. Cut through the cartilage to continue severing the wing in its entirety. In this form, the ray meat will take up about as much room in your cooler as two large flounder. This is a convenient form in which to transport the meat over long distances or even store it in a freezer. You may want to remove the jaws or the barb

Figure 2. Note the thin band of lighter colored tissue running through the middle of each wing. This is cartilage, the function of which is to support the wing. A large fillet may be removed from each side of this layer.
from the tail to prepare as curios or conversation pieces. The frame or body may be cut up for crab pot bait or chum. You are now ready to clean and cut the wings. The band of cartilage (fin support) is plainly visible as a layer between the top and bottom muscle segments, Figure 2. You will find it very helpful as a guide in the filleting process.

Step 2: Place one of the wings on the cutting board and insert your knife along the cartilage. Cut the muscle away, keeping the knife blade sliding along the cartilage. Use the wing’s cartilage as a bearing plane for the knife, much as you would the backbone in a weakfish or bluefish, Figure 3. Continue your cut well out on the wing, holding up the freed slab of meat as you cut. Slice a stopping line across the wing tip where the fillet gets too thin for your taste. Continue cutting until the fillet lifts free, Figure 4. Turn the wing over and repeat to remove the bottom fillet. Repeat this operation on the second wing. You will then have four fillets with the skin attached, Figure 5. This is another convenient stopping point for packaging or freezing the meat.

Figure 3. Start your cut at the thick end of the wing, using the layer of cartilage as a bearing plane for your knife.

Figure 4. Lift the fillet free as you cut. Slice a stopping line out toward the wing tip, where the meat becomes thin.

Figure 5. The abundance of boneless fillet is evident here. This is a good stopping point for packaging or freezing.
Figure 6. After cutting the four large fillets into strips 3" - 4" wide, remove the skin as you would that of any common fish. Start at the thickest end and push the knife along while keeping tension on both meat and skin.

Figure 7. Ample proof that one cownose ray can feed a sizable crowd. The fish may be prepared as you would any other. The end result will be tasty, firm and white, with no bones to worry about!
Step 3: You can now remove the skin from the muscle. Proceed as though you were skinning fillets of bluefish, croaker, or other common species. Starting at the thickest end, insert the knife between the muscles and the skin and make a small "starting cut." Then, holding the skin taut push the knife against the skin and flesh while you pull the skin toward you, cutting as you proceed to separate the meat from the skin, Figure 6. This push and pull action swiftly separates flesh from skin. If you want to practice, try it on some blues, croaker or flounder to get the knack. This operation is simplified for ray wings by cutting the larger fillets into several strips 2 to 3 inches wide. This allows ample blade clearance and makes the entire operation a bit easier. This will result in a series of strips of skinless, boneless ray meat with virtually no waste remaining, Figure 7. The fillets may then be processed as per your favorite recipe or packaged for shipment or freezing as you would freeze other fish fillets for future consumption. No special processing is necessary for the meat prior to consumption. If the wing meat is iced or frozen with the skin on, there is an alternative way to skin it just prior to cooking. After thawing (if frozen), poach the fillet for about 5 minutes in about 3 parts water to 1 part vinegar, with a dash of white wine (enough fluid to cover the meat). Remove the fillets from the liquid. The skin can then be peeled off by grasping and pulling a corner of it with the thumb and forefinger. It can be used in almost any recipe for which you use common inshore fishes. Try it fried, baked, barbequed, curried or scalloped. Bon Appetit!

**Ray Recipes**

**RAY KEBOBS**  
(adapted from Better Homes and Gardens)

| 1 lb. ray fillets | 16 boiling onions |
| 2 green peppers, seeded and cut into 1 1/2-inch chunks | 1 1/2 t. lemon juice |
| Salt and pepper to taste | 16 slices bacon |
| 1/2 c. bottled barbecue sauce | 16 pineapple chunks |
| 16 cherry tomatoes |

Parboil onions in boiling water, covered, for 5 minutes, adding green pepper chunks the last 2 minutes of cooking. Drain and peel onions. Cut ray into 1-inch cubes; pat dry. Sprinkle ray with lemon juice, salt and pepper. Partially cook bacon; drain. Wrap 1 slice bacon around each ray chunk; secure with wooden picks. Thread wrapped ray, onions, pepper chunks and pineapple alternately on eight skewers, ending with tomatoes. Grill over medium-hot coals for about 15 minutes, turning and basting often with your favorite barbecue sauce. Makes 4 servings.

**BAKED DEVILFISH**

| 2 lbs. cow nose ray fillets | 1/3 c. vegetable oil |
| 3 c. soft bread crumbs | 1 1/2 t. salt |
| 1 1/2 T. grated Parmesan cheese | Dash cayenne pepper |
| 1/2 t. salt | 1/2 t. thyme |
| 1/2 c. melted butter, divided | 2 whole bay leaves |
| 1 1/2 T. Worcestershire sauce | 1 lemon slice |
| 1/2 t. prepared mustard | 1 can (8 oz.) tomato sauce |

Prepare roux by heating oil in large skillet and blending in flour over medium heat, stirring constantly until brown. Add water gradually and cook until thick and smooth. Add remaining ingredients except rice. Cover and simmer for 15 minutes. Remove bay leaves and serve over cooked rice. Makes 4 to 6 servings.

Preheat oven to 325 °F. In medium bowl mix bread crumbs, Parmesan, salt, 1/4 cup of butter, Worcestershire and mustard. Place fish fillets in a single layer in a greased shallow baking pan. Spoon bread crumb mixture evenly over fillets. Dribble remaining 1/4 cup butter over bread crumbs. Add water to barely cover bottom of pan (about 1/2 cup). Cover with greased foil. Bake until fish flakes easily when tested with a fork (about 15 minutes). Remove cover. Lightly brown under hot broiler. For extra zip, use Dijon style mustard. Makes 4 to 6 servings.

**RAY CREOLE**

| 1 lb. ray fillets, cut into 1-inch chunks | 1/3 c. vegetable oil |
| 4 cloves chopped garlic | 1 1/2 t. salt |
| 1/3 c. flour | Dash cayenne pepper |
| 1 c. hot water | 1/2 t. thyme |
| 1/2 c. chopped green onions, including tops | 2 whole bay leaves |
| 1/2 c. chopped green pepper | 1 lemon slice |
| 1/2 c. chopped parsley | 1 can (8 oz.) tomato sauce |

Prepare roux by heating oil in large skillet and blending in flour over medium heat, stirring constantly until brown. Add water gradually and cook until thick and smooth. Add remaining ingredients except rice. Cover and simmer for 15 minutes. Remove bay leaves and serve over cooked rice. Makes 4 to 6 servings.
CURRIED COWNOSE

1 1/2 lbs. fresh ray fillets, cut in 1-inch chunks
3/4 c. sour cream
2 T. butter or margarine
1 1/2 t. curry powder
2 T. chopped parsley
1 can (10 1/2 oz.) condensed cream of shrimp soup
1 can (10 1/2 oz.) condensed cream of mushroom soup

Rice

Saute ray in margarine for 3 to 5 minutes over low heat, stirring frequently. Add soups and stir until blended. Stir in sour cream, curry powder and parsley. Mix thoroughly. Cover and simmer for 10 minutes or until fish flakes easily when tested with a fork. Serve immediately over rice. Makes 4 to 6 servings.

OVEN-FRIED RAY

2 lbs. fresh or frozen ray fillets
1 c. dry bread crumbs
1/3 c. melted margarine
1/8 t. basil
1/2 c. rich milk
1/2 t. salt
1/4 t. pepper
2 T. parsley
1/2 t. dry mustard

Cut fillets into serving size portions. In a flat dish combine milk, salt, pepper and basil. Dip each fish portion into milk mixture, then into bread crumbs with mustard. Arrange fish in greased, shallow baking dish and pour melted margarine over fish. Bake at 350 F. for 20 minutes or until fish flakes easily when tested with a fork. Garnish with chopped parsley. Makes 6 servings.

RAY AU BEURRE NOIR

(Adapted from the Picayune Creole Cook Book)

Wings of a young ray (less than 10 lbs.)
1 pt. French vinegar
1 handful parsley, chopped fine
Juice of 1 lemon
1 T. butter
Salt and pepper to taste

Parboil unskinned ray wings in large pot for 10 minutes. Remove from water and peel skin off. Brown butter without burning in large frying pan. When butter is coffee colored, add parsley. Let brown for ½ minute. Add lemon juice. Pour over fish. Salt and pepper to taste. Makes 4 servings. Variation: Caper sauce--make a white sauce and add ½ cup finely cut French capers just before serving.