

Lake Erie trout and salmon

Handling and preparation

It's your first salmon, not big enough for a trophy mount, but just right for two fish dinners for the family. How you handle the fish from now on will determine whether your family will applaud your fishing prowess, or propose going to McDonald's for dinner. To be sure of maintaining top quality, handle your catch properly. To allow it to deteriorate to an inedible state is a waste of the resource and not sporting.

Proper handling

All fish begin to decompose immediately after death. Bacteria found in the protective slime layer, gills, intestines and other locations in the fish begin the decomposition process as the body temperature increases after death. This process not only lowers flesh quality but also creates a strong fishy taste.

Salmonids (trout and salmon) are high in body fat, with a range of 3.7 to 15.6 percent depending upon the size and species. Once dead, these fats begin to oxidize giving the flesh a strong fishy flavor.

A living fish has stomach secretions which prevent gastric juices from digesting the stomach walls while food is being digested. After death, however, these secretions cease but the gastric juices keep working. Once the stomach walls are eaten away, gastric juices escape and taint the flesh.

Ideally, fish should be kept alive until they are cleaned; however, salmonids usually die quite rapidly. Even so, with proper handling, excellent quality can be maintained. Keep the fish alive as long as possible, then, after it dies, keep it cool by placing the fish on ice in a cooler. By keeping the body cool, flesh decomposition and fat oxidation are discouraged. For better results, remove the gills and viscera, pack the body cavity with crushed ice and place it in the cooler belly down.

If an ice cooler is not available or is impractical, secure the fish to a stringer. Run the stringer point through the lower jaws, not through the gills, since this causes the fish to die quicker. When death occurs, remove the gills and viscera. Stuff the body cavity with wet grass and place it in the shade on shore then cover it with wet grass. This will keep the flesh cool from one to three hours, depending upon the air temperature. If the fish are small enough to be placed in a large wicker creel, be sure to place damp grass or moss in the bottom of the creel.

Cleaning

Many methods exist for cleaning fish. Salmonids are generally prepared whole (gills and viscera removed), dressed (head, viscera and fins removed) or steaked (head, viscera and fins removed and body cut through the backbone into "steaks"). Salmonids may also be filleted although this is not a common practice. Scaling is not necessary since salmonids have minute scales. The protective slime layer can be removed by wiping the fish with a damp towel or rubbing it with salt and rinsing with cold water.

Freezing

The best way to preserve quality for long periods of time is to freeze the entire fish, steaks or fillets in a block of ice. This prevents both loss of moisture and freezer burn, will increase freezer storage time, and maintains quality and taste. If this is impractical, package the fish in airtight, vapor-proof packages. Freeze the fish quickly at -10° F or below if possible and store the fish at 0° F or below.

Preparation

There are many recipes for poached, baked, broiled or smoked salmon and trout. However, because of the high fat and oil content of salmon and large trout, frying is not a good method of preparation. The following recipes may be used for any of the Lake Erie salmonids—coho, chinook, pink salmon and steelhead, brown and lake trout.

These recipes are from the Lake Erie Cookbook available from Ohio Sea Grant. The 130-page cookbook includes 123 recipes and information on nutrition, selection, handling and cleaning, cooking hints, and preservation and storage. To order a cookbook, send \$4.00 in U.S. dollars to:

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1314 Kinnear Road
Columbus, OH 43212-1194

Make checks payable to The Ohio State University

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Foil Baked Salmon

4-6 lbs. salmon
2-3 onions, chopped
1 large green pepper, chopped
1 large tomato, diced
1c. sliced mushrooms
3 strips bacon
2 T chopped parsley
salt and pepper to taste

Garnish
parsley
lemon juice
butter

Line a large baking dish with heavy foil. Butter foil well. Place cleaned salmon in foil and stuff with vegetables and butter slices. Sprinkle with salt and pepper. Secure body with toothpicks. Lay bacon on top, seal foil and bake in pre-heated 450° oven for 30-40 minutes, or until flesh flakes apart easily with a fork. Remove top skin, garnish with parsley, lemon juice and melted butter. Serves 6.

Wine Poached Lake Erie Salmon

1 dressed salmon or trout
3 bay leaves
2 onions, quartered
1 carrot, cut into pieces
2 stalks celery, chopped
1/2 C dry red or white wine
salt and pepper to taste

Salmon Sauce

1 C mayonnaise
1/4 C mustard
1 T lemon juice
1 t steak sauce
1/2 t dill weed
dash of salt and pepper

Garnish

lemon wedges
parsley
paprika

Wipe fish dry with towels then wrap in cheesecloth. Place all ingredients, except fish, in large roasting pan half filled with hot water. Cover, bring to boil and simmer for 15 minutes. Place fish into boiling liquid. Bring to boil again and cook for 10-15 minute per inch thickness of fish (generally 20-30 minutes). Turn fish occasionally. When fish flakes apart easily with a fork, it is done. While the fish is cooking, place all the salmon sauce ingredients in a bowl and mix until smooth. Remove fish from liquid, place on serving platter and peel skin from top side. Garnish with lemon wedges, parsley and paprika and serve hot with salmon sauce. Size of fish determines servings; allow approximately 1 lb. per person.

Oven Broiled Salmon Steaks

4 salmon or trout steaks, 1" thick

Marinade

3 T brown spicy mustard
2 T olive oil
1/2C dry red or white wine
1 clove garlic, crushed (optional)
salt and pepper to taste

Garnish

parsley

Mix the marinade ingredients in a bowl. Add fish and place in refrigerator, allow it to marinate for 2 hours. Remove, place steaks on buttered tray or foil and place under oven broiler. Broil for 10 minutes or until fish flakes apart easily with a fork. Brush fish with marinade often while broiling. Sprinkle with parsley. Serves 4.

Outdoor Grilled Salmon Steaks

2 lbs. salmon/trout steaks or fillets
butter or margarine
clove garlic, crushed (optional)
hickory flavored barbecue sauce (optional)

Cream butter or margarine. Beat in garlic and barbecue sauce, if desired. Cover grill with foil. Pierce foil so oil can drain away. Place grill 3 1/2 to 4 inches above coals. Place fish on grill, baste with butter mixture. Close grill and broil for 10-20 minutes, turning fish once and basting every 5 minutes. Serves 4.

For Italian barbecue, sprinkle fish with Italian seasoning and garlic salt.

Easy Salmon Patties

1 1/2 C flaked, cooked salmon or trout
1/2 t salt
1 egg
1 1/2 c mashed potatoes (instant may be used)
1 T minced onion
1 t parsley flakes
salt and pepper to taste
flour and cooking oil

Pre-cook salmon or trout by cutting flesh into pieces, place in boiling, salted water and simmer for 10 minutes or until fish flakes apart easily with a fork. Remove, drain, debone and flake apart. Then combine all ingredients except flour and oil. Shape into patties and roll in flour. Brown in oil. Serves 4.

For Italian style patties, add 2 T barbecue sauce, 1 T oregano and dash of garlic salt to mixture.

Smoking & Canning

Trout and salmon are excellent for canning and smoking. These procedures are easy yet lengthy in explanation. Two excellent publications are:

Freshwater fish preservation (MSG-94-501)
available from
Michigan Sea Grant Extension
Michigan State University
East Lansing, MI 48823

Fish smoked at home (OHSU-FS-032)
available from
Ohio Sea Grant
1314 Kinnear Road
Columbus, OH 43212