

# Basic Fly Fishing



Life's better outside.®

*“Many men go fishing all of  
their lives without knowing that  
it is not fish they are after.”*

HENRY DAVID THORFAU

Fly fishing, like any other type of fishing, is more than just catching the fish.

Texas offers an array of fly fishing opportunities for all ages. Texans can fly fish anywhere: on a pond, river, lake or coastal bay. One can cast from the shoreline or wading in a river, from a kayak or boat; for sunfish, trout, bass, redfish or tarpon.

The TPWD Angler Education Program partners with many fly fishing clubs, organizations and enthusiasts who offer fly fishing and fly tying classes and events. Fly fishing clubs are located throughout the state and welcome beginners. Find one near you.



**Support the sport – buy a fishing license.**

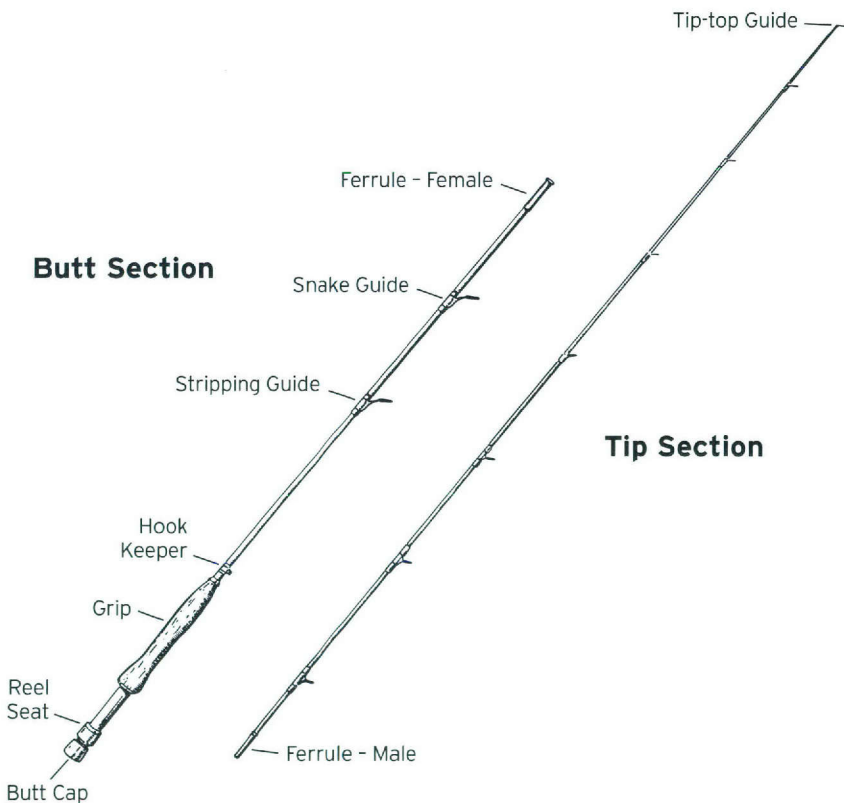
Your angler dollars help clean up rivers and streams, restore fish populations, and create public access to waterways. Every purchase of fishing tackle carries a tax that goes from the U.S. Fish and Wildlife Service to state fish and wildlife agencies for fisheries research, habitat improvement, aquatic resource education programs and fishing and boating access.

## Basic Equipment

Fly rods are very long, flexible rods. When fly fishing, you cast the line, not the fly. The reel and line guides are mounted on the bottom.

Fly rods and fly line come in different sizes known as "weights" (wt.). Lighter weight rods and line are used for smaller fish species; heavier weights are used for larger fish species such as saltwater fish. Fly rods also come in different lengths. The best beginner fly rod for freshwater fishing is a 5/6 weight that is 7-1/2 to 9 feet in length.

## Parts of a Fly Rod





## Basic Equipment

**Fly reels** are available in many sizes and various materials. A good beginner reel will have a good drag system and the size will match the rod size. For saltwater fishing, select a "sealed" reel made of anodized aluminum and stainless steel. The reel holds the fly line, leader and tippet.

**Backing** is an inexpensive cord that connects the fly line to the reel and provides extended line for fishing.

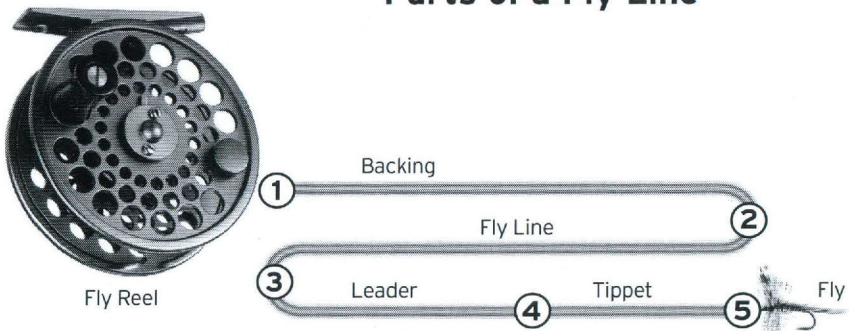
**Fly lines** come in different colors, are coated, differently tapered (double, level or weight forward) and available in floating (F) or sinking (S) line. *The rod and line weights should match.* The best fly line for beginners is a "Double Tapered" (DT) floating line. For example: DT5F (Double Tapered 5 Weight, Floating line.)

**Leader and tippet** line are transparent monofilament line measured in diameter using a number followed by an "X" (ex: 4X). A thick heavy tippet is an 0X; a fine light tippet is an 8X. Choose the tippet size to match the size of the fly and fish you want to target.

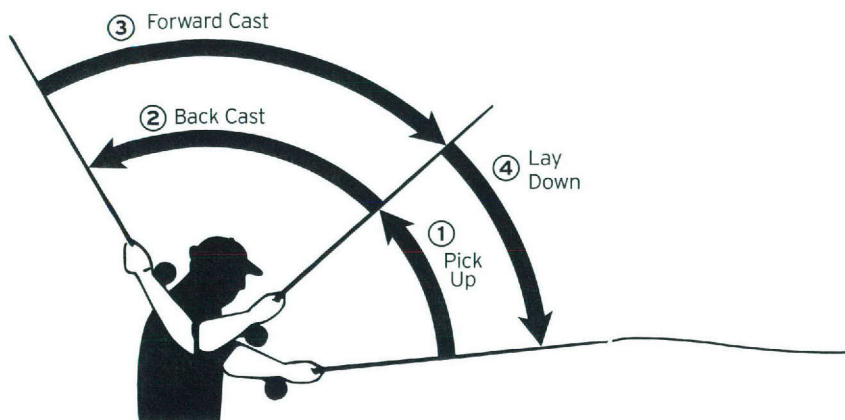
**Flies** are designed to imitate aquatic insects at different life stages; this is known as "match the hatch."

- Dry flies imitate adult insects found on the water's surface.
- Wet flies imitate nymphs found underwater.
- Streamers imitate minnows.
- Poppers imitate large insects or frogs on the water's surface that bass prefer.

## Parts of a Fly Line



## Casting Basics



A standard fly fishing cast is the four-part Overhead Cast. Try to blend the individual movements into one smooth casting motion. Practice by making one cast at a time, letting the line land in front of you each time.

### Casting Sequence

#### 1. PICK UP

Rod starts low, pointing down. Gently and slowly lift the rod to about 45-degree angle up.

#### 2. BACK CAST

- Swing rod back sharply from the end of the pickup position.
- Snap the rod with some force to just past vertical and stop quickly.
- Turn your head to watch the line straighten out and up.  
The line **must** straighten before moving to the forward cast.

#### 3. FORWARD CAST

- After line straightens, bring the rod forward smoothly.
- Stop rod tip abruptly at about the same 45 degree angle where you started the back cast. NOTE: a quick stop is very important.
- Watch as line straightens out in front of you.

#### 4. LAY DOWN

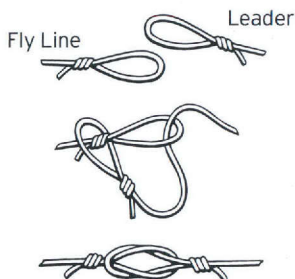
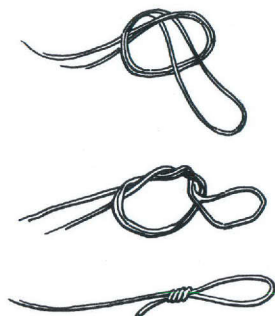
As line straightens out and begins to fall to the water, lower the rod tip **with** the line, at the same time.

## Knots

To connect the leader to the fly line, use a combination of the Double Surgeon's and the Loop to Loop knots. First, tie a Double Surgeon's knot at the end of each line, the fly line and the leader. Then, connect the two lines with the Loop to Loop knot.

### Double Surgeon's Loop

1. Double about 6 inches of line to form a loop.
2. Tie an overhand knot in the doubled line, tucking the loop through, but do not tighten yet.
3. Tuck the loop through one more time - a "double over hand" knot.
4. Wet line, pull tight and trim tag end.



### Loop to Loop

1. Pass the leader loop over the fly line loop.
2. Tuck the leader through the fly line loop.
3. Wet line, gently tighten the loops and make sure they form a figure eight shape.

### Surgeon's Knot

Use to add tippet to the leader, or to "mend" the leader if it breaks.

1. Use a length of tippet or monofilament and lay it along the broken leader end.
2. Overlap the two lines by about 6 inches.
3. Tie an overhand knot with the doubled lines.
4. Tuck the ends through once more - for a "double over hand" knot.
5. Wet line, pull tight and trim tag ends.

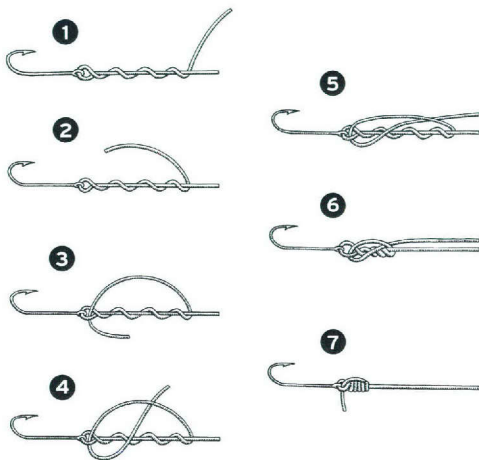


To connect the fly to the tippet, use one of these:

### Improved Clinch Knot

An "old standby" known as the fisherman's knot.

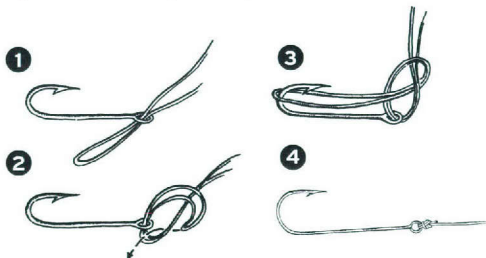
1. Pass the line through the hook eye and, with the tag end, make 5 turns around the standing line.
2. Insert the loose end of the line between the eye and the first loop formed.
3. Bring the end through the large second loop formed.
4. Wet the line and tighten the knot slowly while holding the loose end of the line end between thumb and index finger so the knot is partly closed before it's secured against the eye. Clip the loose end of the line.



### Palomar Knot

The easiest to tie and the strongest knot known to hold terminal tackle.

1. Double 4 inches of line to form a loop and pass the loop through the eye of the fishing hook. Let the hook hang loose.
2. Tie an overhand knot in the doubled line. Don't twist or tighten line.
3. Pull the loop far enough to pass it completely over the hook.
4. Wet the line.
5. Hold the hook carefully, and pull the loose end with the standing line slowly to tighten the loose end.

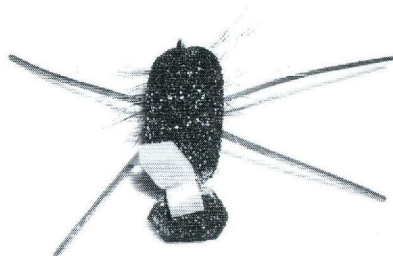




## Tie a Fly and Catch a Fish

### The Gotcha Beetle

Terrestrials that fall or are blown onto or into the water are beetles, ants, grasshoppers, crickets and other animals. The Gotcha Beetle is tied using foam sheeting for the body, adding hackle, rubber legs and, if desired, mono eyes adds to the attractiveness of the fly. It is simple to tie and a real fish getter on our local hill country streams.



### Materials

**Hook:** 9480 dry fly or 3906 wet fly size 12-8

**Thread:** 6/0 of desired color

**For the body:** Strip of foam sheeting of desired color, cut to the width of the gap of the hook

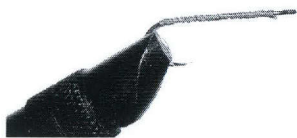
**For the ribs:** hackle feather of desired color

**For the legs:** thin rubber pieces of desired color

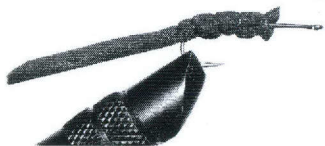
**Indicator:** yellow yarn, combed out or a thin strip of yellow foam

**Mono eyes:** extra small or small eye pieces if desired

- 1 Secure thread on hook shank one quarter the length of the hook shaft behind the eye of the hook. Wrap the thread back to slightly below the bend of the hook. Wrap the thread forward to the tie-in point then back and forward twice more. This creates a thick thread base to cement the foam underbody to the hook. Apply head cement liberally over the thread base.



- 2 Bind a strip of foam starting at the tie-in point back to slightly below the bend of the hook by creating 5 to 6 segments about 1/10 inch apart. Use 2 to 3 snug wraps at each segment to secure the foam to the shaft of the hook.





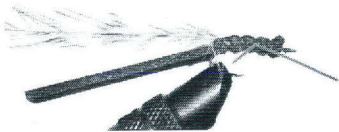
3

Wrap thread one segment forward (at the bend of the hook). Strip the fuzzy fibers from the thick part of the hackle stem. Hold the feather by the tip (using left thumb and fore finger) stroke down the shaft of the feather with the right thumb and forefinger so the hackle fibers spring out at right angles to the stem. Bind the bare stem of the feather to the shaft of the hook with 3 to 4 snug wraps. The tip of the feather should be pointing well behind the bend of the hook and the shiny side of the feather is facing the fly tier.



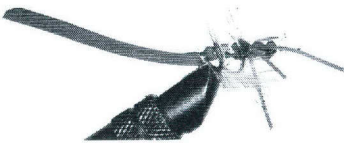
4

Wrap the thread forward covering the previous wraps to the mid shank. Cut two pieces of rubber leg material about 2-1/2 inches in length. Bind one on each side of the hook shank with 2 loose wraps. Even the legs and position them as desired. Then make a third snug wrap around the hook shank and the legs, securing them in the desired position.



5

Wrap the thread forward to a position in front of the foam body. Grasp the feather by its tip with hackle pliers and palmer the hackle forward to just in front of the foam body. Tie off and clip excess feather. If mono eyes are to be added to the fly, tie them on just behind the eye of the hook.

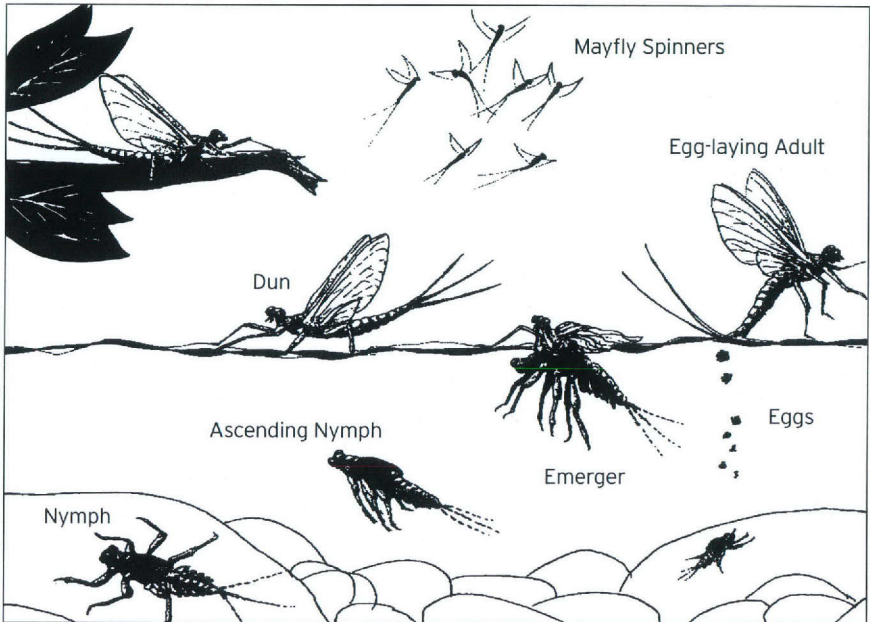


6

Pull the foam strip up and forward and bind the strip to the hook shank just in front of the under body. After making several snug wraps around the hook shank, add a tuft of combed-out yarn or a thin strip of foam and secure it with several more snug wraps. Make a whip finish and apply head cement. Trim the foam sheeting forward of where it is bound to the hook shank and immediately behind the eye.



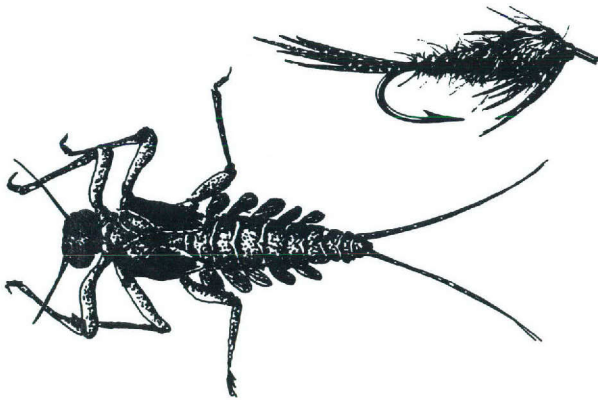
## What Fish Eat



At different stages in their life cycles, many aquatic insects are food for fish. A good fly is one that tricks the fish into thinking it is food. Knowing more about aquatic insects and the fish that eat them can increase fishing success.

## The Mayfly Life Cycle

The mayfly life cycle is: egg, nymph, dun (subimago) and spinner (imago). The nymphs hatch from the eggs and live on the bottom, where they become vulnerable to the fish if the current knocks them free or if they swim from one place to another. During emergence – the mayfly's most vulnerable stage – the nymphs swim to the surface, split their nymphal shucks, and emerge as duns. The duns drift on the surface for a short while before flying off to the streamside vegetation where they molt into spinners. The spinners return to the stream to mate above the water, deposit their eggs, and fall spent to the stream. Fish also eat the spinners.



### Nymph Natural and Pattern

Natural mayfly nymphs are not smooth; they have gills and legs that move about in the water. There are many types of fur nymphs that imitate the naturals.



## Bug Picking – Is Your Creek Polluted?

Have you ever noticed the many small animals such as insects, snails, and worms that live on the rocks and roots at the bottom of creeks, rivers, ponds, and lakes? Some of these small aquatic animals are very sensitive to changes in the water and will die if the water becomes polluted. By looking for and recognizing the different types of aquatic animals in aquatic environments, you can begin investigating the water quality of those environments.

**Equipment:** safe footwear for wading, forceps, magnifiers, small aquatic nets, pipettes, Bug Picking Data Sheet, pencils and shallow pans for holding specimens

### Directions:

1. Wade into shallow water, turning over rocks, looking for aquatic animals ("bugs"). Replace rocks where you found them after you inspect them.
2. Place each "bug" you find in a specimen pan and begin to divide them into different types and groups according to the Bug Picking Data Sheet. (Water in the pans will keep them alive while you take data.)
3. On the Bug Picking Data Sheet, put a tally mark next to the picture that matches each aquatic animal you find. Gently return the animals to the water.
4. Look at the 3 different groups of aquatic animals you found in the water. To determine if your water might be polluted, answer these questions or circle the correct response.
  - Did you find animals that are pollution sensitive?  
None    1-3 species    More than 3 species
  - Did you find animals that are somewhat sensitive?  
None    1-3 species    More than 3 species
  - Did you find animals that are tolerant of pollution?  
None    1-3 species    More than 3 species

**This water appears to be (circle one):**

Not Polluted      OK      Polluted

What could be happening upstream or on land around the water to affect the water quality where you are sampling?

I am basing this hypothesis (guess) on:

**Bug Picking Data Sheet**

**Group 1  
Pollution Sensitive**

Stonefly Larva  
1 in.

Whirligig Beetle  
0.5 in.

Mayfly Nymph  
1 in.

Caddisfly Larva  
0.5 in.

Grass Shrimp  
1-2 in.

Dobsonfly Larva  
up to 3.0 in.

Number of Species Found  
 3 or More  
 1 to 3 Species  
 No Species Found

**Group 2  
Somewhat Sensitive**

Diving Beetle  
1-1.5 in.

Dragonfly Larva  
1 in.

Damselfly Nymph  
1 in.

Scud  
0.3 in.

Water Boatman  
1 in.

Coiled Snail  
0.4 in.

Number of Species Found  
 3 or More  
 1 to 3 Species  
 No Species Found

**Group 3  
Pollution Tolerant**

mosquito larva  
0.3 in.

Gilled Snail  
0.5 in.

Freshwater Clam  
0.5 - 1.0 in.

Leeches  
to 3 in.

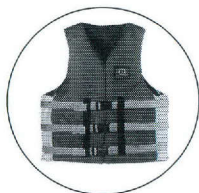
Aquatic Worm  
1 in.

Midge Larva  
0.2 in.

Number of Species Found  
 3 or More  
 1 to 3 Species  
 No Species Found

## Safety Equipment

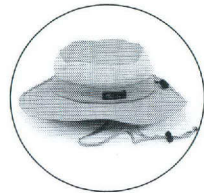
A checklist of things to take with you on your fishing trip.



Life Jacket/PFD



Water



Hat



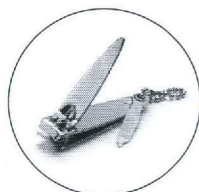
Sunglasses



Sunscreen



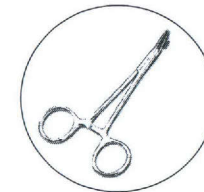
Pliers



Nail Clippers



Small First Aid Kit



Hemostats

### Note

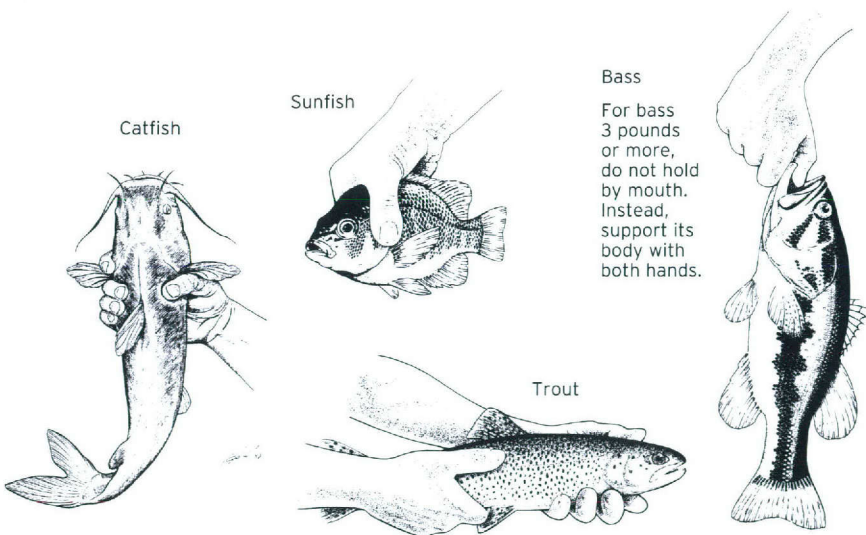
Wading sticks help judge water depth when wade fishing and help maintain balance on slippery rocks or muddy bottoms. Swift water is dangerous, especially if above your knees. Fishing with a buddy is an essential safety measure.



## Fish Handling

Handling fish properly protects both you and the fish. Some fish have sharp fins or teeth that can cut you if you don't hold them correctly. Thus, different fish species need to be handled in different ways. Learn by watching an experienced angler, but keep the following rules in mind:

1. Always wet your hands first before handling fish. Wet hands are less likely to damage the protective coating of mucous on the outside of the fish. This slimy layer helps protect the fish's skin from disease and makes it glide easily in the water.
2. Don't allow fish to flop around on the bank, the dock, or the floor of the boat. If keeping fish, put them on ice or in a bucket of cool water.
3. If you are not keeping the fish, take the fish off the hook as soon as possible. Gently lower it into the water until it begins to swim away. If it isn't ready to swim, you may need to slowly swish it in the water first. Remember, no fish is a "junk" or "trash" fish. All fish play important roles in the aquatic ecosystem.
4. If you are not keeping the fish, using barbless hooks can make it easier to take the fish off the hook.



## Fish Cleaning

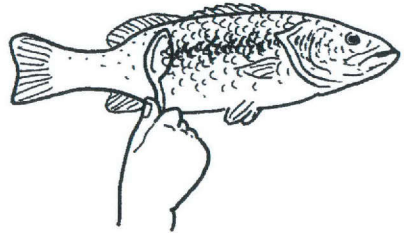
It's fun to learn to clean and cook your fish. Ask an adult for help and be careful with the knife. Keep cleaned fish ice-cold.

### Scaling

For most fish, you'll want to remove the scales if they are not skinned.

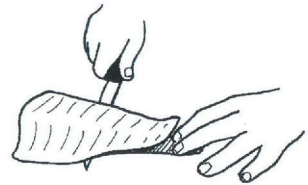
Hold the fish by its tail and scrape from tail to head with a fish scaler, butter knife or tablespoon. Cut around the head with a sharp knife.

Remove the head and insides.

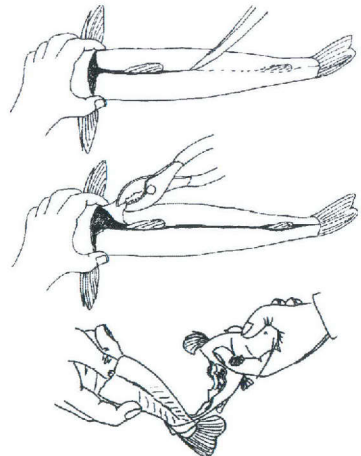


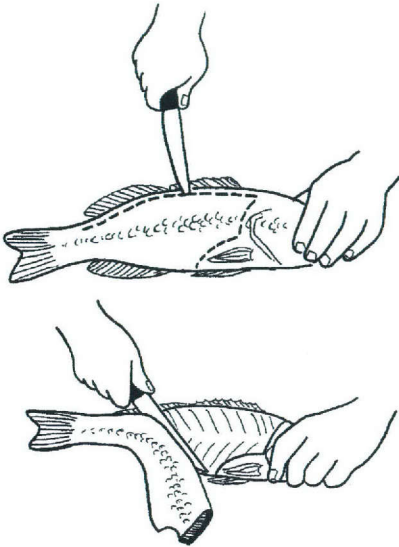
### Skinning

Skin a fillet by placing it skin-side down on the cutting board. Start at the tail and keep a tight grip on the skin. With the knife at an angle, saw the flesh off the skin.



Catfish have tough skins and you need pliers to pull them off. First, cut around the head with a sharp knife, then pull the skin back with the pliers. Finally, remove the head and insides.





## Filleting

Always cut away from yourself.

### To make boneless fillets:

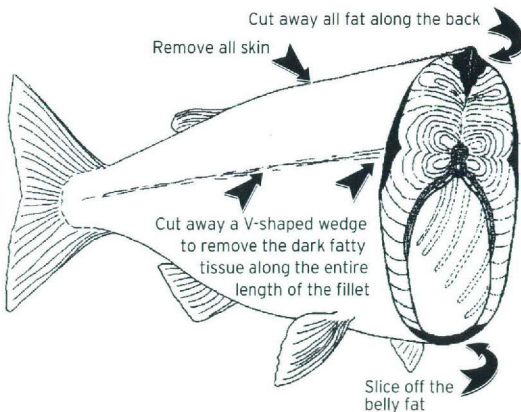
Cut down to the backbone behind the head and along the side of the fish.

Slice the meat off the bones. Turn the fish over and repeat.

The cheek meat just behind the eye is a delicacy in some households.

## Proper Cleaning

Trimming fat reduces your intake of PCBs, which accumulate in fatty tissue. Mercury accumulates in muscle tissue, the part you eat, so limit your consumption. For consumption bans and advisories, visit the Texas Department of State Health Services website: [www.dshs.state.tx.us/seafood/](http://www.dshs.state.tx.us/seafood/)



Fish cleaning instructions courtesy of Wisconsin Department of Natural Resources. Illustrations by Linda Pohlod; text by Theresa Stabo.



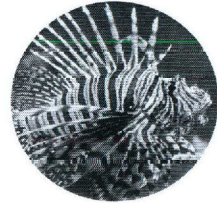
## Invasive Species

Stop the invasion! Harmful aquatic invasive species can attach to your equipment and gear, hitchhiking to other lakes and streams.

Exotic plants and animals can become invasive when they are released into ecosystems where they are not native. Invasive species have many negative impacts. They are costly to control and can take over waterways to make fishing, boating and swimming less enjoyable. Some common invasive species are hydrilla, water hyacinth, asian carp, tilapia, and apple snails.

But, our biggest problems are

**freshwater zebra mussels, giant salvinia and marine lion fish**



### How you can help:

- Don't dump your live bait or aquarium plants and animals into a bay, pond, lake or stream. You may think you are freeing them, but these plants and animals may harm the habitat if they carry diseases or are not native. Instead find someone to adopt your aquarium. Share unused bait with other anglers or put it in a trashcan.
- Clean, drain and dry your boat and fishing gear every time you leave a body of water. This includes boots and buckets too.
- Report problems. New sightings of invasive species can be reported to [www.texasinvasives.org](http://www.texasinvasives.org). If you see a fish or wildlife kill or suspect a pollution event, contact the TPWD Kills and Spills Team hotline at (512) 389-4848.

For more information visit

[www.tpwd.texas.gov/huntwild/wild/species/exotic/](http://www.tpwd.texas.gov/huntwild/wild/species/exotic/)





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