
CHAPTER 5

AFTER FISHING

A.	TAKING CARE OF THE CATCH	72
B.	HANDLING FISH FOR EXPORT	73
C.	CARE OF THE BOAT	74
D.	CARE OF THE FISHING GEAR	76
E.	KEEPING RECORDS	77

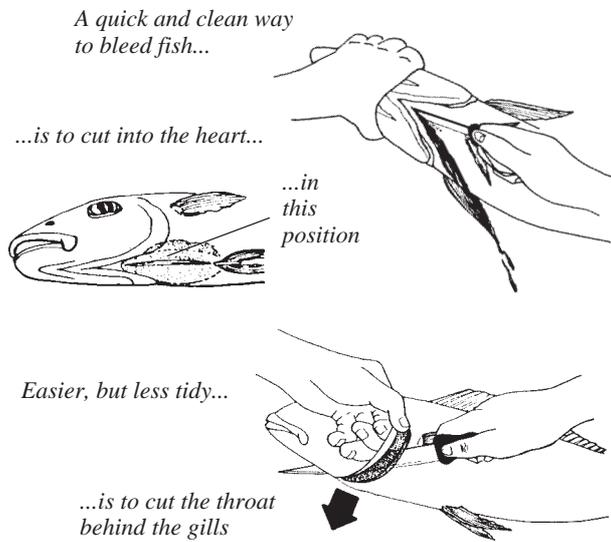
SECTION 5A: TAKING CARE OF THE CATCH

Commercial fishermen can usually expect to get more money for their fish if it is well handled and presented. Taking care of the catch starts from the minute the fish is boated, and may involve only a little effort on the fisherman's part.

Bleeding

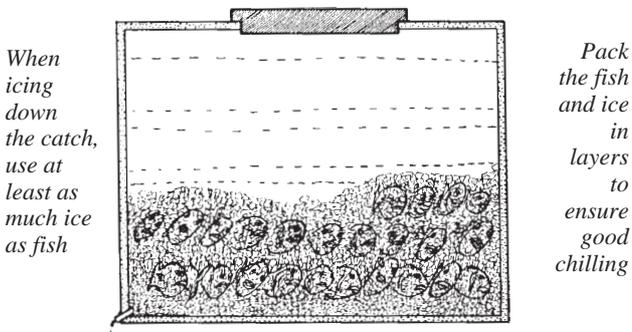
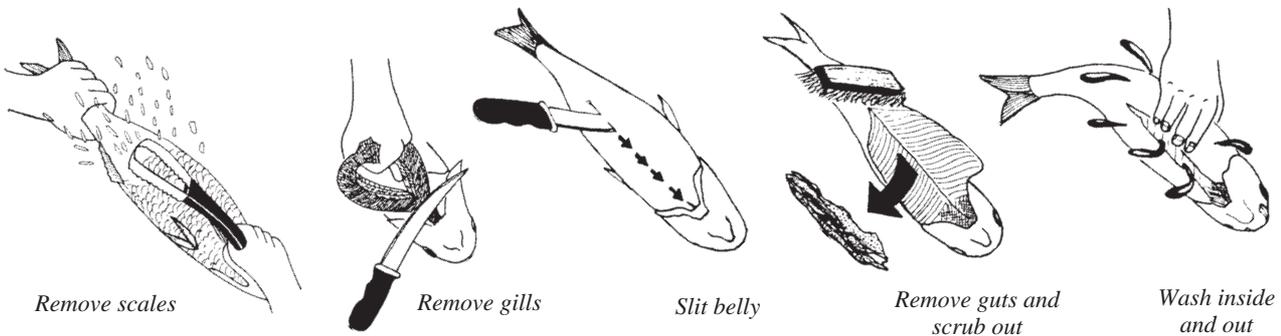
If the fish will ultimately be sold as fillets, it is usually worth bleeding them while still alive. This ensures that the flesh of white fish will be truly white—not pink or grey—when filleted. Bleeding also helps remove the lactic acid which builds up in the fish's body when it is struggling on the line, and which can cause the flesh to become soft and jelly-like.

Bleeding is done by slitting the 'throat' of the fish while it is still on the hook or gaff. The most inconspicuous way is to make the incision into the heart region of the fish, between the ventral fins. When the appearance of the whole fish is less important, a knife can simply be pushed behind the gills, cutting through the throat from the inside.



Cleaning fish

In some locations, the market requires fish to be landed whole; in others consumers prefer their fish to be cleaned—that is either gutted, gilled, scaled, or some combination of these. If the fish do have to be cleaned, this should be done reasonably soon after the fish has died in the killing box, perhaps during a lull in the fishing. If time does not permit this, the fish can be iced down whole and cleaned later, after the fishing is finished.



If the fishing trip is longer than a few hours, then ice should be carried and the fish iced down as soon as possible after capture. The best way is to allow fish to accumulate until a reasonable quantity has been caught (but in any case for no more than an hour), and then transfer them to the ice box. Working to this type of pattern avoids too much interruption to the fishing, and unnecessary opening of the ice box. When put into the ice box, the fish should be properly layered or mixed with their own weight of ice to ensure rapid and complete cooling.

When the fish have been in the ice box for some hours or days, check to make sure that the ice and fish are still well-mixed together. Repack the ice box if necessary. When the fishing trip is over, dispose of the catch as soon as possible. When unloading the fish from the boat, handle them carefully to avoid bruising and damage. Carry fish in bags or boxes, preferably mixed with some ice. Do not leave the fish in storage in the boat's ice box any longer than is needed. If it is necessary to do this, check the fish daily to ensure there is still enough ice. Re-pack or add more ice when required.

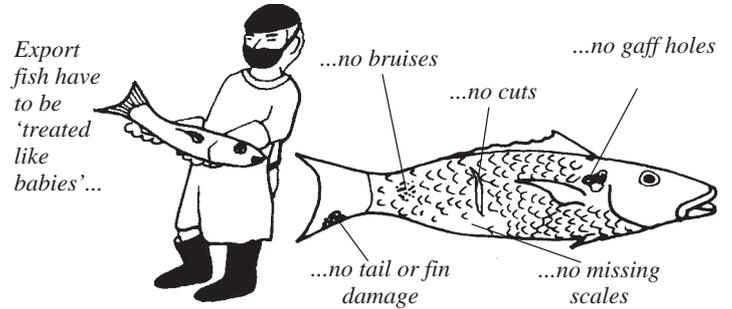
SECTION 5B: HANDLING FISH FOR EXPORT

In some countries, good airline connections make it possible for fishermen to export fresh deep bottom fish to the high-priced fresh fish markets in Japan, Hawaii, the United States West Coast, and Guam. To be acceptable on these markets, the fish must be handled in a special way, as shown below.

Careful handling

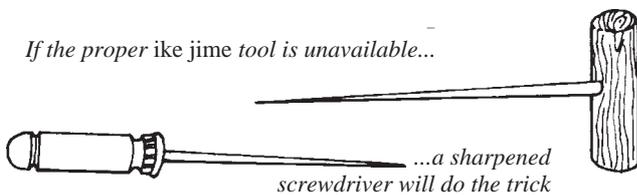
Fish destined for export must be handled carefully at all stages, from the time they are caught to the moment they are put on the plane. In particular, they must never be dropped, thrown about or otherwise mistreated. Bruises, cuts, missing scales, gaff holes or other marks on the fish will render them unsaleable. The golden rule is to 'treat them like babies'.

Treat export fish like babies



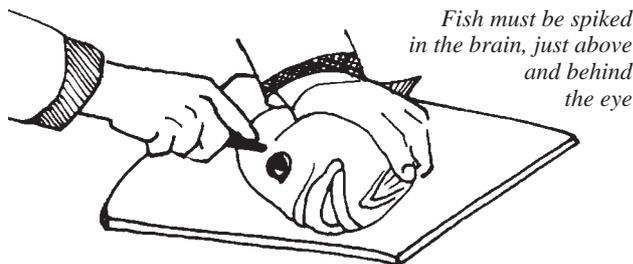
Spiking the fish

If the proper ike jime tool is unavailable...

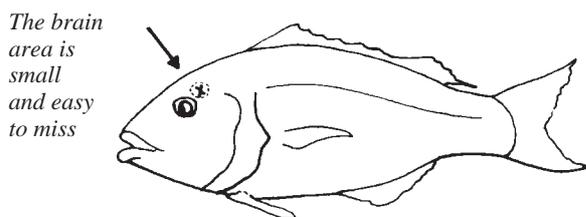


Spiking

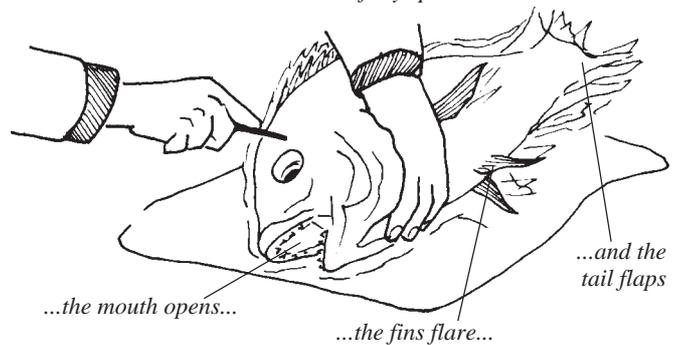
Fish being exported to Japan and certain other markets should not be allowed to die naturally, but should be killed immediately after being brought on board by inserting a steel spike into the brain. This is known as the 'ike jime' method of preparing the fish. If the proper *ike jime* tool is not available, a screwdriver sharpened to a point makes a good spike.



To kill the fish, the spike is placed just above and behind the eye and pushed into the brain. The fish will flap very briefly and then die immediately. If it does not do this, you have missed the brain.



When the brain has been successfully spiked...



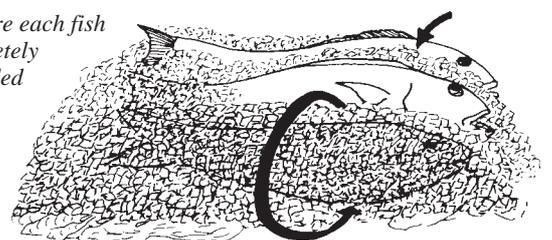
Chilling

Once dead, export fish must be rapidly chilled to zero degrees centigrade, and kept that way until they reach the market. The best way to chill them is to put them straight away into a container of saltwater ice slurry, as explained in section 3C.

When the fish have been chilled in slurry, they should then be transferred to ice storage, as shown in section 3C. Extra care should be taken to make sure each fish is surrounded by plenty of ice, so that they retain their low temperature. Fish should not be allowed to touch each other as this can cause discolouration of the skin, lowering the fishes' value or making them unacceptable. The fish should be left on ice until shortly before they are to be packed for export.

Chilling export fish

Make sure each fish is completely surrounded by ice...



...and that no fish touches another one

SECTION 5C: CARE OF THE BOAT

Commercial fishing places heavy demands on a small boat and its equipment. Thrashing fish can damage paintwork, fittings, and deck equipment. Fish slime and blood will stick to surfaces, making them slippery and dangerous. Scales and scraps of fish waste will collect in bilges and corners, blocking pipes and drains and making the boat smell. Salt spray will accumulate everywhere, causing electrolysis or corrosion of metal fittings and making moving parts such as hinges and joints seize up. A general deterioration of the boat will occur unless it is properly cleaned at the end of every day's fishing, and receives some basic maintenance each time it returns to port at the end of a fishing trip.

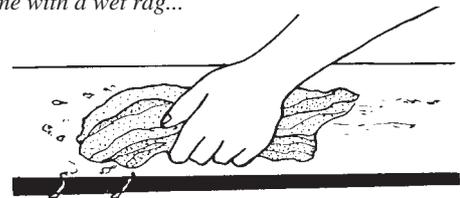
General cleaning

At the end of the day, or during a lull in the fishing, throw a bucket of sea water over the decks and interior surfaces of the boat, and clean off any patches of blood or slime with a stiff brush or a rag. Bail or pump out the bilges and pick out any pieces of waste fish which may be in there.

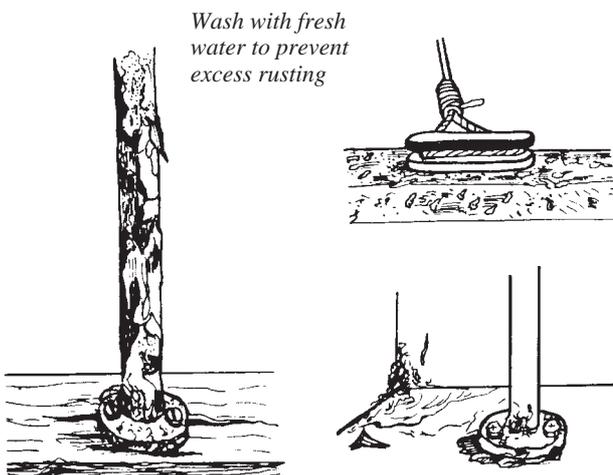
General cleaning



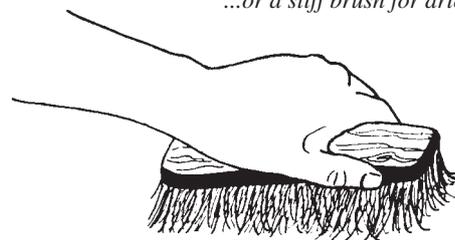
Wipe off fish slime with a wet rag...



Metal fittings



...or a stiff brush for dried-on blood

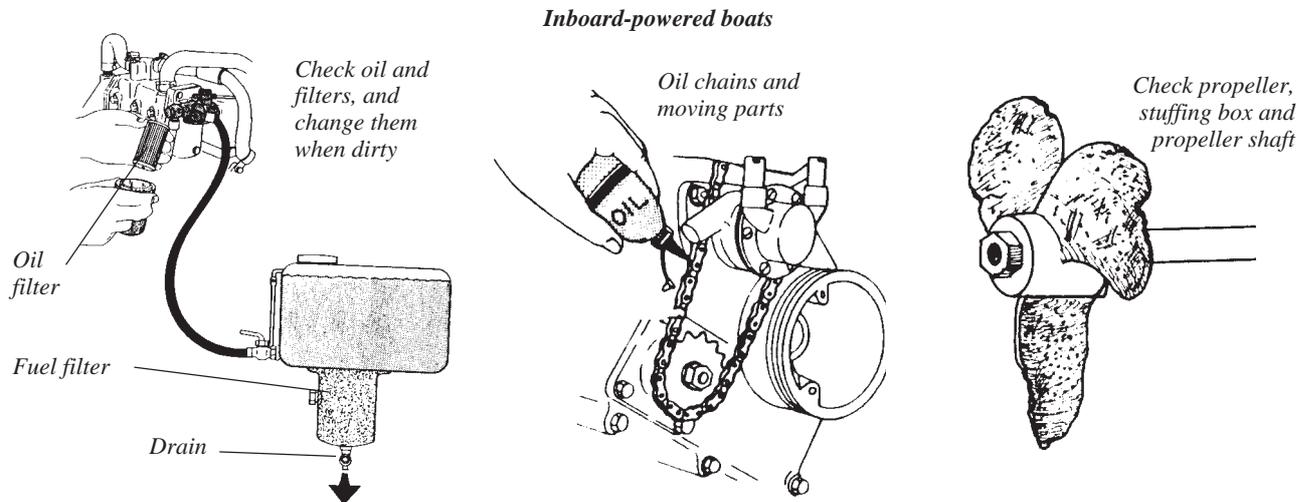


Cleaning metal fittings

When the fishing trip is over, wash or wipe down any metal fittings or moving parts using fresh water. This will remove salt and fish scales and help prevent the fittings from rusting up, jamming, or developing dangerous rough or jagged edges.

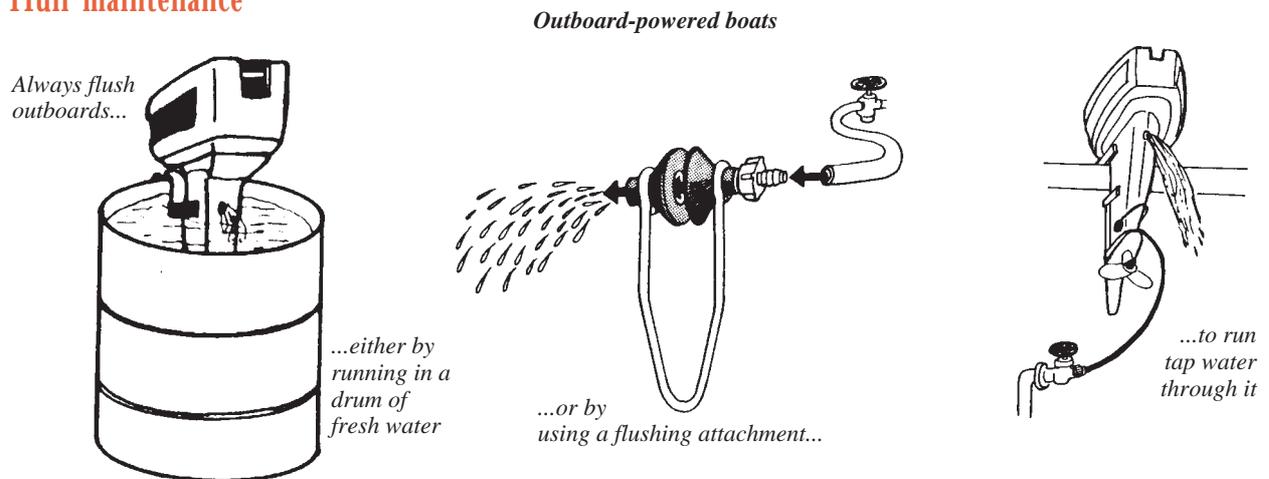
Engine maintenance

When the fishing trip is over and the engine has cooled off, wipe or wash the exterior surfaces of the engine with a rag dipped in fresh water. When it dries, wipe it with an oily rag or spray with light lubricant oil for protection. Treat any moving or corrosion-prone metal fittings in the same way. Use a grease gun to grease up the grease nipples or cups on the motor after every trip. Check the engine and gearbox oil, and change when necessary.



If the engine is an outboard, flush the engine cooling system with fresh water if possible. This can be done by removing the engine from the boat and running it in a drum of fresh water. If the outboard is permanently mounted on the boat, use a commercially available (or improvised) flushing device, fitted on to a water hose, to supply fresh water to the engine cooling intake.

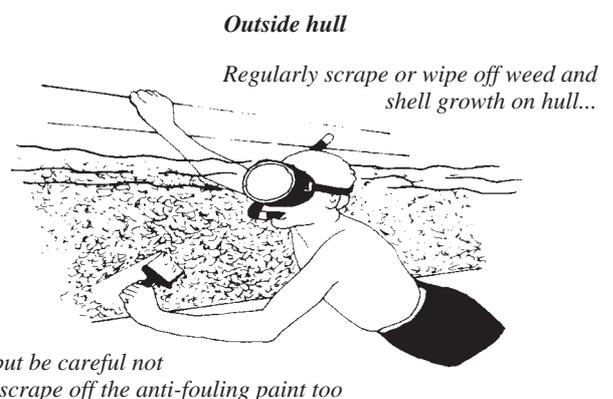
Hull maintenance



The build up of weeds, barnacles and worms on the hull below the waterline will increase your fuel consumption greatly and in wooden boats may lead to serious damage by borers or rot. Repaint the hull with anti-fouling paint every 9–12 months or as often as necessary. In between times, keep the hull clean by brushing or wiping with a cloth, being careful not to damage the paint surface.

Repairs

When the fishing trip is over, make a note of any damage which may have occurred - broken booms, lost deck equipment, etc. Carry out repairs or replacement as soon as possible, before the damage is forgotten about, or becomes serious or dangerous.



SECTION 5D: CARE OF THE FISHING GEAR

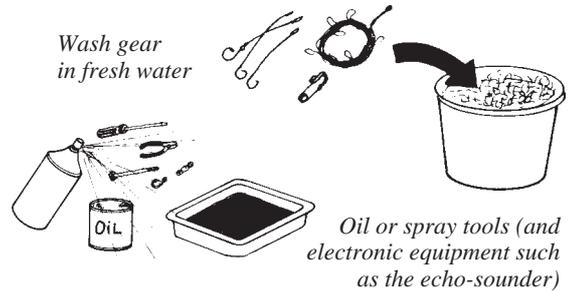
Like the boat, the fishing gear suffers damage and deterioration during use, and after the fishing trip needs to be cleaned, maintained, and where necessary repaired.

Cleaning and rust prevention

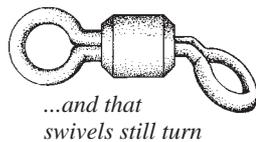
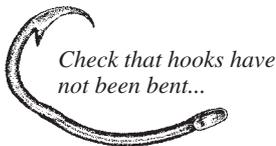
Wash all fishing gear in fresh water to remove encrusted salt. Scrape off any adhering blood and slime, and ensure the gear is properly dried before storage.

Use a light oil (such as CRC or WD-40) to spray tools, the echo-sounder, and any electronic gear that may have been touched with wet hands.

Cleaning and rust prevention



Hooks and swivels

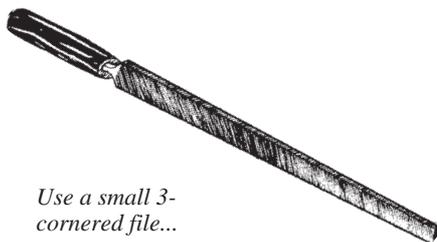


Hooks and swivels

Check all hooks to make sure they are sharp and have not been bent. Likewise, check swivels to see that they have not corroded or bent and that they are still turning properly.

Hooks can be sharpened with a small three-cornered file and abrasive paper, but this then removes the galvanised coating from the hook and increases the rate of rusting. A properly sharpened hook should leave a clear, fine scratch when drawn across the thumbnail.

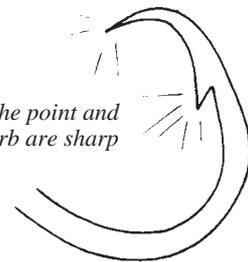
Sharpening hooks



...to file the sides and outer edge of the tip...



...until the point and barb are sharp



Although used hooks can be sharpened when necessary, they should be replaced when they become too rusty. Continued use of rusty hooks to save money is a false economy as they will result in fewer hook-ups and a lower catch. The same goes for hooks which have been bent by a large fish. These should be discarded, not bent back into shape, as this will weaken them and they may break or straighten when taken by the next big fish.

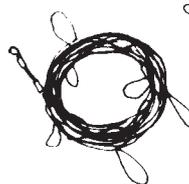
Terminal rigs

Check for cables that are fraying or untwisting, worn monofilament, trace attachment loops that have pulled tight, etc. Repair or replace anything that looks suspect, before it has a chance to break with a large fish on the end. Make up new rigs and traces to replace those that have been lost or damaged.

Store terminal gear in a dry place, neatly coiled or wrapped on handcasters, old plastic bottles, or other circular objects 15–30 cm in diameter.

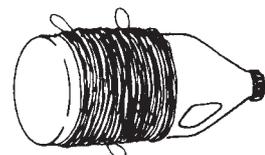
Terminal rigs

After cleaning terminal rigs...



...store them on handcasters...

...or large-diameter plastic bottles

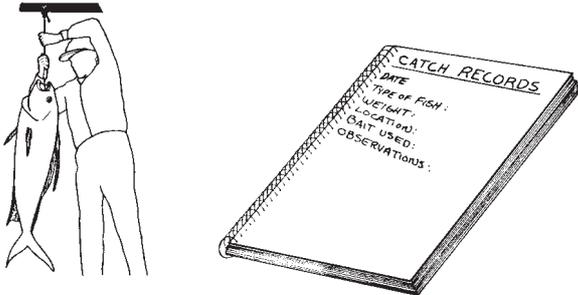
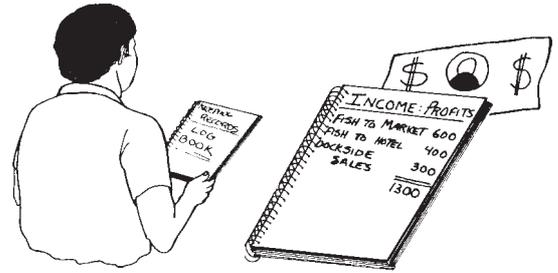


Anchor

Check the anchor to make sure that the prongs have not become weakened by too much bending (see section 4I).

SECTION 5E: KEEPING RECORDS

By keeping records of his fishing and business activities, a commercial or semi-commercial fisherman will be aware of his own performance, and can continue to try to improve on it. Notes should be kept during each fishing trip, and then written up properly once the trip is over. Many Fisheries Departments or fishery research agencies will provide log-books and technical assistance to help fishermen keep good records.

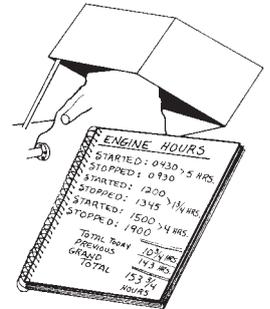


Fishing records

By recording the number, weight and type of fish caught and the area where they were taken, the fisherman can build up a valuable log of his successes and failures over a period of years. This can be a useful reference for the future, reminding the fisherman of where his best catches came from during a given season, or the best depth, time of day, tide or moon to fish in a particular area.

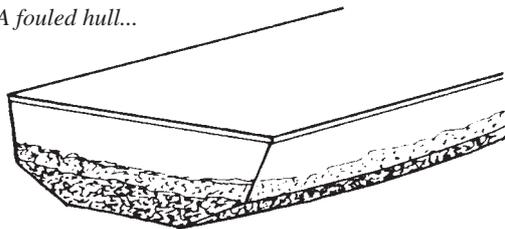
Operating records

As well as information on fish catches, records concerning the operation of the boat should also be kept. In particular, details of the number of hours the engine has been run should be written down. This enables the fisherman to know when he should carry out basic maintenance procedures, such as oil changes, in accordance with the manufacturer's recommended procedures. Doing this will avoid dangerous and costly breakdowns and engine down-time.

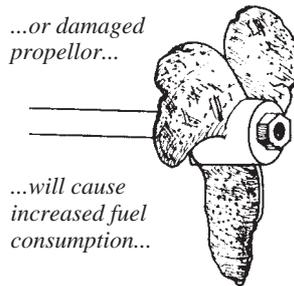


By recording how much fuel was used on each trip, and knowing the number of hours the engine has run, the fisherman can calculate the average fuel consumption per engine running hour. This allows proper estimation of fuel consumption for long trips. It also allows him to keep a check on whether his boat is continuing to perform efficiently. If fuel consumption per engine hour starts to rise over a period of several trips, it could be an indication of engine malfunction. Alternatively, the boat may be getting badly fouled by growth on the hull, or may have suffered damage to the propeller.

A fouled hull...

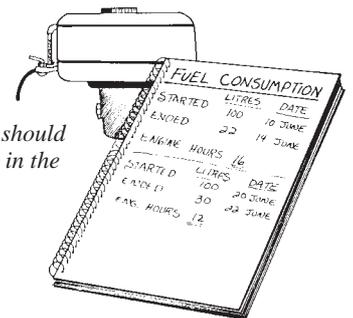


...or damaged propellor...



...will cause increased fuel consumption...

...which should show up in the records



Financial records

Any commercial or semi-commercial fisherman should keep a running record of the money he spends on his fishing, and on his earnings. This should include the cost of fuel, bait, crew wages, ice, rations, vessel and engine maintenance and repairs, gear, bank loan and interest repayments, etc. By balancing this against the income he receives for the sale of fish, and from any other activities (occasional charters, transport jobs, etc.), the fisherman can see the true profitability of his business, and areas where he could economise on costs.

