

**A GUIDE FOR RECREATIONAL
ANGLERS TO IMPROVE THE SURVIVAL
OF LINE CAUGHT FISH WHEN
RELEASED BACK INTO THE WATER.**

All anglers have a responsibility to look after our fishery resources for the benefit of future generations of anglers.

Recent studies indicate that just under 50% of all recreational caught fish are released back into the water.

This guide provides simple advice on how to handle fish that are to be released to improve the chances of survival.

Anglers are encouraged to adopt appropriate equipment and practice the simple methods described, to minimise unintended trauma and body damage to all fish being released.

We Fish for the Future



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**HANDLING FISH
FOR SURVIVAL**

GUIDE FOR THE SURVIVAL OF RELEASED LINE CAUGHT FISH

CAUSES OF FISH MORTALITY

To improve the way fish are handled, it is important to understand the causes of mortality when fish are released.

Individual fish and various species react differently when caught. Varying sizes of the same species also have different effects. Not all effects are lethal, but these can vary from immediate and obvious to those that are delayed and not obvious after release.

Immediate mortality can result from hook damage, poor handling, barotrauma (changing water pressure), damage inflicted whilst flapping around and predation (easy prey in the food chain) after release.

Long playing or landing time after hooking exhausts fish and increases stress levels, especially in fast swimming larger fish.

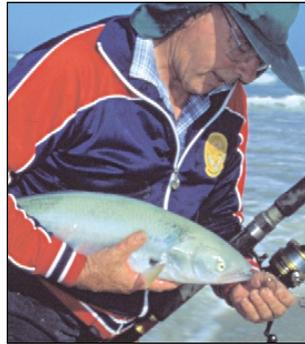
Delayed mortality may be a result of overstress, unseen damage to internal organs and backbone caused by handling out of the water, poisoning or infection from hooks left in the fish and other infections resulting from loss of scales, protective cover slime and eye damage.

Not all effects are lethal however, but changes in behaviour, reduced reproductive ability, infection and reduced resistance to disease and growth rate can occur.

Barotrauma is the fish equivalent of the "Bends" suffered by divers. In fish, the swim bladder which is an organ much like a submarine that allows fish to move up and down in a range of depths. This may become expanded when a fish is pulled up to the surface (due to a decrease in water pressure), causing the swim bladder to expand and push the stomach out of the mouth. Fish suffering this condition may not be able to return to the bottom and are vulnerable to attack by sharks and other species.

Handling of fish during capture and dehooking may also cause irreversible eye damage resulting in blindness and eye infection. This condition will render the fish unable to feed and fend for itself, making it easy prey for other fish.

Keeping fish to be released out the water longer than necessary decreases the chances of survival.



GENTLY DOES IT

GENERAL HANDLING OF FISH

- Always use a wet hand or wet cloth and avoid hot dry surfaces.
- Fish require full body support at all times to avoid damage to internal organs. Very large fish should be de-hooked while still in the water.

MEASURING & PHOTOGRAPHING

- To keep a record of the size of fish that are to be released it is preferable that the length be measured rather than weighed.
- Weighing of larger fish is best carried out in a knotless landing net or sling and should be done in a careful and speedy manner.
- Where a fish is to be photographed, the fish should be held horizontally with full body support and with less time out of the water as possible.

CORRECT TACKLE

- Tackle should be selected to suit the targeted species so that the fish can be landed quickly to minimise exhaustion. Equipment and line strength should be adopted that ensures fish can be landed quickly.

HOOK REMOVAL

- Hooks lodged near the gills require extra care during removal.
- Use of long nosed pliers or a dehooking device is preferable where the hook is in sight.
- Where a hook has been swallowed and out of sight it is best to cut the line rather than remove the hook,

HOOK SELECTION

- For many species hook selection and where it is lodged in a fish, is the most important factor in fish survival.
- Fish caught on artificial lures are less likely to be gut hooked than fish caught on bait.
- Barbless hooks are easier and quicker to remove and lessen damage to the fish.
- Contrary to popular belief, research suggests that there is little change in catch rates from the use of barbless hooks
- Larger than normal hooks reduce chances of a hook being swallowed by smaller fish.
- Hooks of the "circle" type maximise the chances of the hook being lodged in the jaw of a fish rather than being swallowed, improving survival .

LANDING NETS

- Where practical, use of knotless landing nets minimises damage to scales and a fish's protective slime covering.

CARE FOR THE EYES OF FISH

- Avoid direct sunlight going into the eyes of a fish.
- Objects and hands should not be placed near or on fish eyes.

MEASURING DEVICE

- Wise selection of an essential measuring device (ruler) will decrease fish damage.