

How to make a release weight

Release weights may be purchased from good tackle shops or you can easily make your own using a large snapper sinker and a barbless hook.

You will need:

- 1 large snapper sinker or lead weight – minimum of 16oz (450g) up to 36oz (~1000g) for larger fish
- 1 long shank 7/0 stainless hook
- 1 small stainless screw (must fit through the eye of the hook)
- 2 cable ties



Steps:

1. Remove the barb from the stainless hook using a metal file.
2. Lay the hook on the sinker, with the hook shank finishing at the top of the sinker.
3. Use a small screw and secure the hook to the sinker (You may have to drill a small pilot hole).
4. Use two cable ties to secure and strengthen the hook position to the top of the sinker.

Attach heavy monofilament line (~ 80lb), Venetian cord or similar to the eye of the snapper sinker. Approximately 25-30 metres of line should suffice. A handline will help keep the line tidy and tangle free.

How to use a release weight

A release weight is an essential tool to help release fish showing signs of barotrauma. Anglers should always carry a release weight onboard their boat to ensure that they are prepared and quickly able to use one when required.

Release weights typically consist of a heavy weight with a barbless hook attached to about 30 metres of heavy line or cord – stored on a hand spool. Or they can be attached to a spare rod if preferred. They can be commercially sourced, or you can easily build your own. For small freshwater species, release weights of 250 – 300 grams may suffice whilst for larger fish it is suggested that large release weights are used – e.g., 750 – 1000g +.



- Using the barbless hook, attach the release weight through the top jaw of the fish (or into the soft tissue at the side of the mouth).
- Ideally, one person holds the fish whilst a second person holds the handline or rod ready in free-spool.
- Carefully place the fish into the water head first and let the attached line run free from the spool as the fish is released.

It is important to get the fish as deep as possible before it is released from the weight. Try not to cause any sudden jerking whilst the fish is descending as this may dislodge the weight from the fish before it safely reaches release depth. The fish will often swim free of the weight as it re-compresses, otherwise a sharp lift should dislodge the barbless hook so that the release weight can be retrieved.

Remember: Release weights can be used in both salt and freshwater. Freshwater fish such as Golden Perch, Murray Cod and Australian Bass caught from deep impoundments also benefit from the use of release weights when necessary.

Department of Primary Industries
Department of Regional NSW

Reducing the impacts of barotrauma



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Barotrauma and release weights

Many popular recreational fish species, such as Mulloway, Pearl Perch and Snapper, are often caught from water deeper than 10 metres. Fish hooked at such depths can display a range of injuries due to changes in water pressure as they are brought to the surface. These injuries are known as barotrauma and can affect the survival of released fish.

Physical effects can include an inflated abdomen, bulging eyes, the stomach pushed outside the mouth and distended intestines protruding from the anus.

Resilience to the effects of barotrauma varies considerably between species. DPI research has shown that some species of fish, whilst being susceptible to barotrauma, can be very resilient to its effects, and combined with correct handling can have very high survival rates after release. These include species such as Snapper, Pearl Perch, Golden Perch and Australian Bass – with the vast majority of these likely to survive if they are successfully able to return to capture depth. Species such as Mulloway are less resilient to the effects of barotrauma and usually require assistance to return to capture depth.



They also have a lower survival rate after release. Other species such as Kingfish, have physiological adaptations which largely prevent them from being impacted by barotrauma.

For fish caught from deep water, in order to minimise the effects of barotrauma, it is recommended to return the fish to capture depth as quickly as possible after capture. If the fish is displaying significant barotrauma symptoms and is unable to submerge by itself due to excessive buoyancy, a release weight should be used to return the fish to depth. Due to the increased risk of further injury or infection, venting – i.e., piercing the fish to release trapped gas – is a practice not recommended to assist a fish to return to capture depth.

Did you know?

The rate at which a hooked fish is brought to the surface has been shown not to have any influence on severity of barotrauma – it is best to get the fish to the boat and released as quickly as possible.

Top tips:

Follow these top tips to help ensure fish intended for release are returned to the water as quickly as possible.

1. Use fish-friendly landing nets to speed up the landing process.
2. Ideally unhook fish whilst they are still in the water.
3. Use needle-nosed pliers or unhooking devices to help reduce time spent unhooking.

Whether you like fishing offshore reefs for sought after sportfish like Snapper and Pearl Perch or deep freshwater impoundments and dams for iconic natives such as Australian Bass and Golden Perch, it is likely some fish you catch will experience the effects of barotrauma so it is important that you are prepared.

Pro tip: Always store your release weight in an easily accessible location, close to hand, and return it to the exact same place every time. Being organised and ready to use your release weight when required is an important part of being prepared for dealing with the effects of barotrauma.

Did you know?

Keeping fish in live wells after they have been caught from deep water can increase the negative effects of barotrauma. For this reason, to minimise barotrauma symptoms, fish intended for release should always be returned to the water as quickly as possible after being caught.



For information on how to make your own release weight, other catch and release techniques, including gear selection and fish handling, please download the free FishSmart app or visit: www.dpi.nsw.gov.au



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