

Tagging Manual

for the

Oceanographic Research Institute's
Cooperative Fish Tagging Project

ORI-CFTP



INCORPORATING



Helping people to care for our ocean



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You've just joined a community of anglers helping to better understand and protect South Africa's linefish. Every fish you tag feeds real science, helping us understand how our fish move, grow and survive, so they can be managed sustainably for the future.

The best part: when one of your tagged fish is caught again, we send you a detailed report on where it went and how much it grew. Your name stays with that fish for life.

One important thing before you start: we tag only a set list of priority species. You'll find that list at the back of this guide — please check it and tag only those species. Note that the tagging of any stingrays or eagle rays is not allowed.

This guide covers the essentials. Your tagging kit also includes a flash drive with instructional videos for every technique described. When in doubt, watch it, or reach out.



YOUR REFERENCE NUMBER

You've been given a six-digit tagging reference number (e.g. BA0031). Use it whenever you contact us. It links every tag and recapture to you, tracks how many tags you've been issued and used, and is your login for the website (your reference number and password is in your welcome letter).



YOUR ONLINE PROFILE

Everything happens through your online profile at www.oritag.org.za. It's where you capture all your tag data, and where you can view your tagging history, check your records are captured correctly, and update your own contact details.

All tag data is captured online. Enter your tags through your profile - we no longer accept tag information by email, WhatsApp, SMS or spreadsheet.

To capture your tag data:

- Go to www.oritag.org.za and log in with the details we gave you at registration — the Log in button is top right. Don't apply for a new account.
- Open the 'Tag Release' tab at the top of the page.
- Complete the form that pops up — it's already filled in with your personal details. Enter each tag individually and carefully (typos cause major problems at recapture) and keep your white cards as a backup.

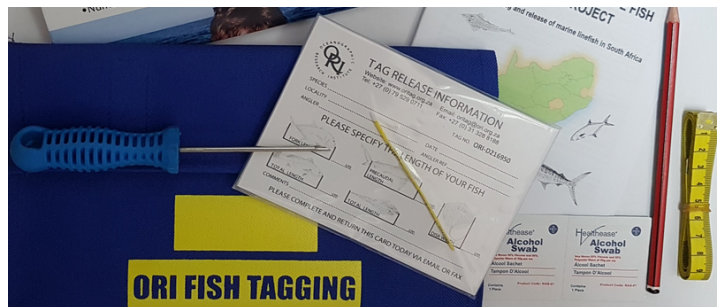
TAG TYPES, ORDERING TAGS AND PRICING

Order more tags by emailing the Tagging Officer at oritag@ori.org.za. Tags currently cost R20 each, but this may increase - always email to check the latest price.

Item	Price
Tag	R20
Replacement applicator	R200
Shark skin piercer	R50
D-tag or M-tag kit	R600
A-tag kit	R650
Two tag type kit	R900

YOUR TAGGING KIT

Your kit contains: tags · applicator · cleaning swabs & brush · tape measure · pencil · sticker · flash stick (videos + guides). Rinse and sterilise everything in fresh water and methylated spirits or alcohol after each use — a clean applicator stops the next fish picking up an infection. Store tags dry in a clean, airtight container.



M-tags

For billfish and large gamefish that can't be landed. Applied with a stainless steel needle attached to a tagging pole.



A-tags

For bigger fish and sharks > 60 cm. Applied with a stainless steel handheld applicator.



D-tags

For smaller fish and sharks between 30 - 60 cm. Applied with a stainless steel handheld applicator.

02 TAGGING PROCEDURE

Golden rule: Don't keep your fish out of the water for more than 30 seconds.

BEFORE YOU FISH

Decide beforehand that your next catch will be tagged, and have everything you need laid out and ready (a loaded applicator, pliers, measuring tape and tag card) so the fish spends as little time as possible out of the water. Use heavier tackle and single hooks with flattened barbs (circle hooks are excellent) — they're better for the fish than ultra-light line, barbed hooks and trebles.



LANDING AND HANDLING

Land the fish as quickly as is safe, a fish that fights less has a much better chance of survival. How you handle it next depends on its size and whether you're fishing from the shore or a boat. In every case: keep time out of the water to a minimum, keep it wet and protect the fish's mucus and scales. Assess its condition first, don't waste a tag on an injured or exhausted fish that's unlikely to survive.

Small fish or sharks

For fish and sharks small enough to lift and handle safely:

- Keep a bucket of fresh seawater close by and place the fish head-first into it straight after capture so it keeps breathing.
- When you're ready to tag, lift it onto a wet flat surface (thick PVC plastic or similar) and cover its eyes with a wet cloth. For sharks, turning it belly-up helps calm it.

Larger fish or sharks from shore

Big fish and sharks can't go in a bucket, and must not be dragged up on to the dry sand - this strips their protective slime and injures them. Plan ahead and keep them wet:

- Choose a safe spot before you fish. Make sure there's somewhere you can land a shark safely if you hook one - ideally a gentle gradient sandy beach.
- For sharks, use the waves to help land it, not force. Grab the end of the tail to guide it up the beach, but never haul the shark's full weight by the tail - use the momentum of the waves to bring it in.
- Keep it in the shallows or swash zone, in as much water as possible, and tag it where it lies rather than dragging it up the beach.

Larger fish or sharks from boat

Fish and sharks too big to boat should be tagged alongside the boat, in the water - don't lift them aboard:

- Bring the fish in quickly and let it calm alongside the boat before tagging. A crew member with gloves can steady it; for billfish, hold the bill down.
- Tag it in the water with a hand applicator or tagging pole (M-tag) (see more details below).

02 TAGGING PROCEDURE

Never tag a fish under 30 cm: Survival drops sharply below this size.

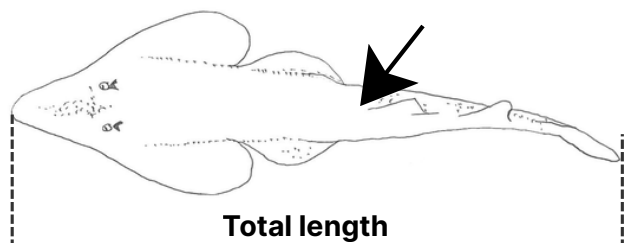
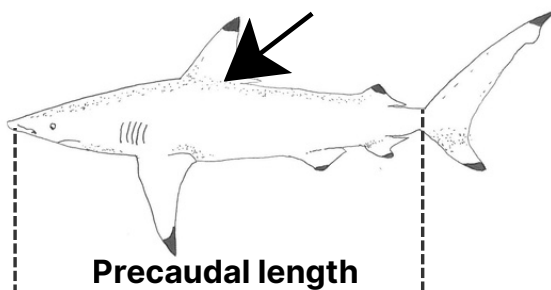
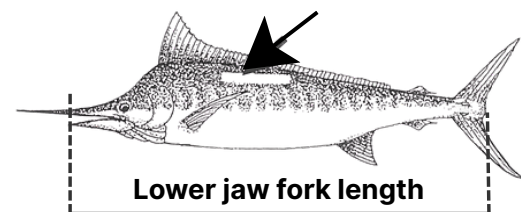
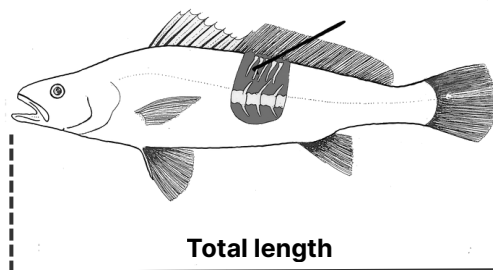
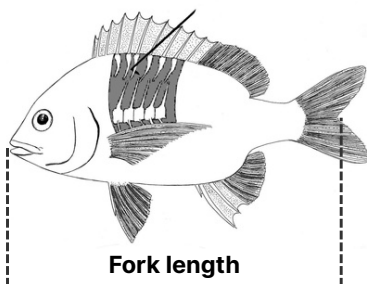
TAGGING AND MEASURING YOUR FISH

Watch our instructional videos for visual details on how to tag and measure:

- When you are ready to tag, you need to prepare the tagging site. For bony fish, remove one scale at the insertion point, for sharks, use the shark skin piercer to make a hole through the skin at the insertion point.
- Let the tag sit loosely in the applicator before you insert. Insert the tag at a 45° angle into the muscle just below the dorsal fin, streamer pointing towards the tail, barb facing inwards/downwards. Push in with a quick thrust, retrieve slowly, then give a gentle tug so the barb locks between the pterygiophores.
- Measure the length of your fish - forked length for fish with a forked tail, total length for fish that don't have a forked tail, precaudal length for sharks that have a precaudal notch (groove just before the tail fin), total length for sharks that don't have a precaudal notch (e.g. catsharks, hound sharks, etc.), and lower jaw fork length for billfish.

HOOK REMOVAL AND FISH RELEASE

- Remove the hook from the fish's mouth quickly and carefully by hand or using long-nose pliers. If the hook is swallowed, do not try and remove it, simply cut the line near the eye of the hook. If the fish is bleeding badly rather don't tag it and simply release it. Remember to crimp the barbs on your hooks.
- If tagging from the shore, make sure you release your fish in deep enough water with its head pointing out to sea. Wait for an incoming wave before you release it as the fish will always swim into the current.
- If tagging from a boat, release your fish gently from the side of the boat. If your fish is tired and weak, spend time holding it gently facing into the current to help revive it.



02 TAGGING PROCEDURE

RECORDING ON YOUR TAG CARD

Record your data on the white tag release card immediately after tagging, while it's fresh in your mind.

- Species — use the full accepted common name (e.g. "black musselcracker", not just "musselcracker").
- Length — the measurement in mm plus which type it is (e.g. fork or total length, etc.).
- Shark sex — Male, Female or Unknown (see the next section to know how to determine sex).
- Your location - either GPS coordinates or well known names of the beach / fishing spot.
- Date — format yyyy/mm/dd.
- Your angler reference number — even if you didn't catch the fish yourself.
- Comments — anything useful: hook left in, missing fins, poor condition, etc.
- Tick the boxes if you notice any pollution or beach driving, erosion or development.

Once home, capture this information online through your profile as soon as possible!



IDENTIFYING SHARK SEX

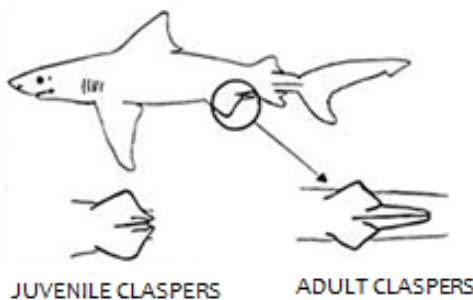
Sharks and rays are easy to sex: males have two "claspers" — cartilaginous extensions on the inner edge of the pelvic fins, on the underside.

Adult males: claspers are large and extend well past the pelvic fins.

Juvenile males: claspers are shorter and only just protrude, look closely.

Females: no claspers at all.

MALES



FEMALES



M-TAG POLE

M-tags are used to tag marlin, sailfish and large gamefish that can't be boated. Use a wooden pole 20 – 25 mm thick and 1.5–2.5 m long (to suit your freeboard, a broomstick works well), with a metal applicator tip on one end and a "V" notch on the other for de-hooking. If you can easily reach the fish by hand over the side of the boat, a tagging pole is unnecessary and a handheld applicator will suffice. To fit the applicator, drill a centred 4 mm hole 20 mm deep into the pole, add strong epoxy to the hole and the applicator base, then - gripping the applicator's tapered shoulder with pliers - drive it 20 mm in by hammering the pliers, not the applicator. A rubber stopper on the pole stops the tag going in too deep.

To tag: load the tag firmly on the tip and secure it with the rubber band provided.



03 RECAPTURES

CAUGHT A TAGGED FISH?

Recaptures are gold, but only if reported quickly and accurately. Report them online at www.oritag.org.za - you don't need a membership profile to submit a recapture on the website. We send an exciting, detailed report to the angler who reports it, the more accurate your info, the better the report.

What to send us:

- Tag type and number, look for a letter followed by six digits (e.g. D132526). Read it carefully and try take a photo of it if possible to refer back to later.
- Don't remove the tag if you're releasing the fish. Only remove the tag if the number can't be read, it looks as though it might fall out, or it has caused harm to the fish because of poor tagging. In these cases, you may then re-tag on the other side using a new tag and report both numbers.
- Species, length & locality - same rules as tagging. Note the measurement type.
- Shark/ray sex and date (yyyy/mm/dd).
- Kept or released? If released, was the original tag left in or removed? Never re-tag a fish that still has its original tag.
- Your name & contact details so we can send your report.
- Any useful observations about the condition of the fish or tag

Pass it on: See or hear of anyone catching a tagged fish? Offer to help them record the details and send it in. You'll be spreading the word and making sure the data reaches us correctly

What you'll learn from reporting a recapture:



MOVEMENT

Where the fish was tagged and recaptured and the distance between those two areas



TIME AT LIBERTY

How long ago the fish was tagged



GROWTH

How much the fish has grown in that time



04 FISH BAROTRAUMA

Deep-water species (e.g. red steenbras, black musselcracker) can suffer barotrauma - "being blown" - when gases expand in their swim bladder as they're pulled up. Signs: inflated abdomen, bulging eyes, stomach inverted and pushed into the mouth, protruding intestines from the anus. These fish often can't swim back down and float at the surface.

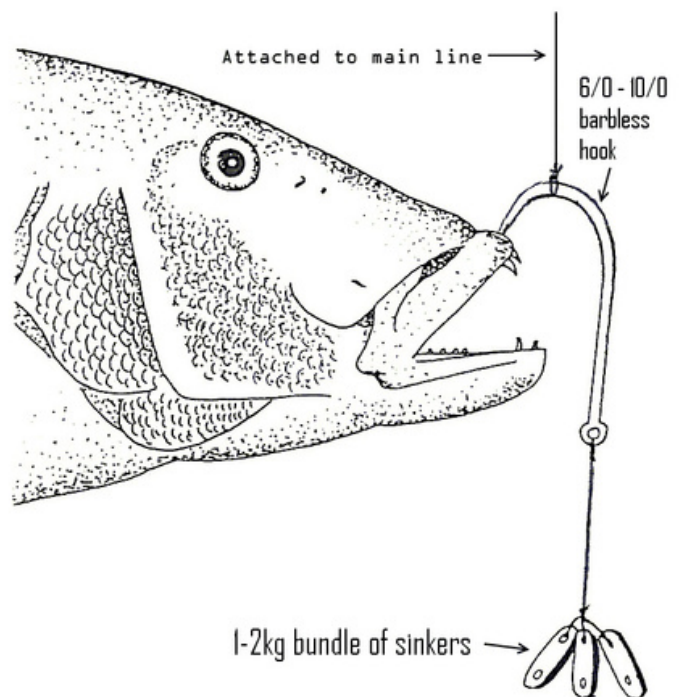
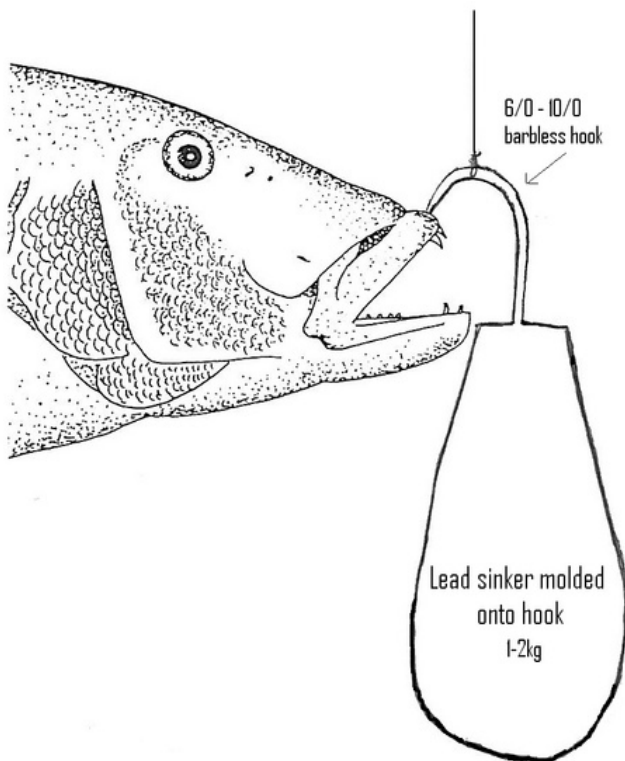
The down-rigger release weight

A simple fix that recompresses the swim bladder. You need an 0-10/0 barbless J-hook (file the barb off) tied upside-down to a dedicated line, with a bunch of heavy sinkers or a moulded lead weight.

- Hook the fish through the upper lip from outside in; don't drop it.
- Lower it gently to the bottom and avoid sudden jerks on the way down which can release the fish too soon.
- Once deep enough to recompress the swim bladder, a firm tug frees the hook. The fish swims off; recover your rig.

The commercially available SeaQualizer® works the same way and releases automatically at a set depth.

Don't vent fish. Pricking the swim bladder or organs with a needle takes real skill and often causes fatal infections. Use the down-rigger method instead.

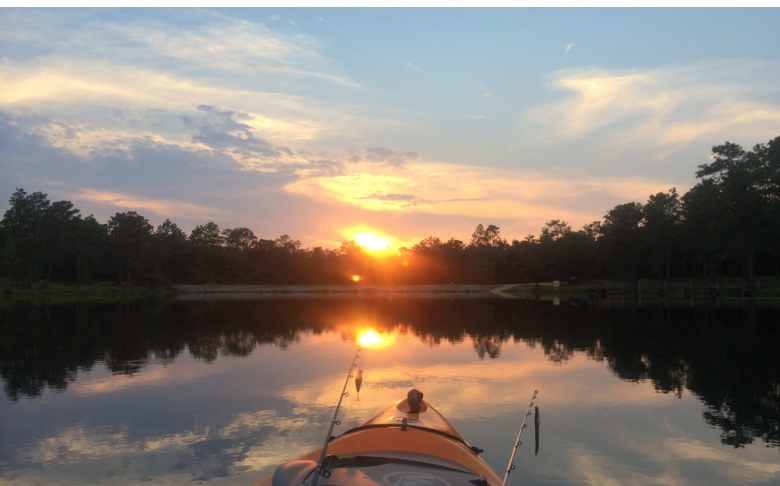


05 RESPONSIBLE ANGLER

Developed by WWF-SA's Fish4Life with the SA Shark Conservancy, SAIAB, Rhodes University and ORI. As an ORI-CFTP member, we hope you'll adopt these and lead by example.

A responsible recreational angler:

1. Holds a valid recreational angling permit and knows and complies with the regulations.
2. Stays informed about marine resources and angling's impacts.
3. Adapts to change and embraces researchers' and managers' recommendations.
4. Acts responsibly around activities that will negatively impact marine conservation.
5. Collects bait with minimum disturbance.
6. Keeps only what they need for immediate use, and never sells fish.
7. Kills retained fish quickly and humanely.
8. Handles all released fish, of any species, for the best chance of survival.
9. Uses tackle that minimises stress and injury, especially for catch-and-release.
10. Values a healthy environment; disposes of line and plastic properly, leaving a spot as good or better.
11. Reports poaching, habitat destruction and pollution to the authorities.
12. Uses established legal roads and tracks to reach a fishing spot.
13. Respects other legitimate marine users.
14. Educates others, especially children, in sustainable fishing.
15. Is a role model and leads by example.



06 PRIORITY SPECIES

These are the species we request our anglers to tag.

1. SANDY BEACH / SOFT BOTTOM

Baardman/bellman/tassel fish	Largespot pompano/wave garrrick	Southern/African pompano
Cock grunter	Natal stumpnose/yellowfin bream	Spotted grunter
Dusky kob/daga salmon	Perch/river bream	Squartetail kob (confirm ID)
Geelbek/Cape salmon	Silver kob (confirm ID)	Tripletail
Javelin/mof grunter	Snapper kob	White steenbras/pignose grunter

2. GAMEFISH

Albacore/longfin tuna	Couta/king mackerel	Pickhandle barracuda
Bigeye kingfish	Elf/shad	Prodigal son/cobia
Black marlin	Garrick/leervis	Sailfish
Blacktip/yellowtail kingfish	Giant kingfish	Shortbilled spearfish
Bludger	Great barracuda	Springer/ladyfish/tenpounder
Blue marlin	Greater amberjack/yellowtail	Striped marlin
Blue/Ferdy kingfish	Largemouth/talang queenfish	Swordfish/broadbill
Bluefin kingfish	Longfin amberjack/tropical yellowtail	Wahoo
Brassy/greenspot kingfish	Longfin kingfish	Yellowfin tuna
Cape/giant yellowtail	Natal snoek/queen mackerel	Yellowspotted kingfish

3. ROCKY SHORE & REEF

Banded galjoen	Galjoen/damba	Stone bream/stinker
Blue emperor	Lemonfish	White musselcracker/brusher
Bronze/copper bream	Minstrel rubberlip	Yellowbelly rockcod
Catface/brownspotted rockcod	River snapper/rock salmon	Zebra/wildeperd
Cave bass	Speckled snapper	

4. OFFSHORE REEF

Blue seabream	Lyretail/swallowtail rockcod	Sailfin rubberlip
Cape seabream	Malabar rockcod	Scotsman
Dageraad	Moustache rockcod	Seventy-four
Dusky rubberlip	Poenskop/black musselcracker	Soldier/santer
Englishman	Potato bass	Tomato rockcod
German	Red stumpnose/Miss Lucy	White-barred rubberlip
Halfmoon rockcod	Red/copper steenbras	Wreckfish
Kaakap/green jobfish	Roman	Yellowfin emperor

06 PRIORITY SPECIES

5. SHARKS

Blackspot shark
Blackspot/common smoothhound
Blacktip/blackfin shark
Broadnose sevengill cow shark
Brown shyshark
Copper shark/bronze whaler
Dark shyshark
Dusky/grey shark
Flapnose houndshark
Giant hammerhead

Giant sandshark
Grey reef shark
Hardnose smoothhound
Java shark
Leopard catshark
Longnose blackfin/spinner shark
Puffadder shyshark
Sandbar shark
Scalloped hammerhead
Shortfin mako

Sliteye shark
Smooth hammerhead
Soupfin shark/vaalhaai
Spotted gully shark
Spotted ragged-tooth shark
Striped catshark/pyjama shark
Thintail thresher
Tiger shark
Zambezi/bull shark

6. MOZAMBIQUE

Amberjack
Black marlin
Blue marlin
Couta/king mackerel
Giant kingfish/trevally

Largemouth/talang queenfish
Natal snoek/queen mackerel
Sailfish
Southern/African pompano
Springer/ladyfish/tenpounder

Striped marlin
Swordfish/broadbill
Yellowfin tuna
Wahoo

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