



How to be Fish-Friendly: Tips and Tricks for Responsible Recreational Fishing

By Angela Vander Eyken



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For many of us, casting a line out on a calm lake sounds like the perfect way to spend a late summer's evening. Avid anglers are no strangers to waking up at the crack of dawn to hop in a boat with a rod and tacklebox in hand (and maybe a morning coffee too!). Even if you do not fish often, there is no doubt that recreational fishing can be an extremely relaxing, enjoyable and oftentimes addicting hobby – it is so easy to get lost in time and not think about much else aside from that next bite! However, to

enjoy recreational fishing to its fullest and ensure that it is enjoyed by those after us, it is important to take the time to think about how you can fish responsibly. This is particularly important during [Family Fishing Week](#) here in Ontario (occurring July 4th to the 19th this year) since many newcomers to the hobby will be participating without having to own a fishing license.

The Land Between bioregion is home to more than 2400 lakes. Many of these lakes are extremely fragile. Pollution, climate change and boating are changing the structure and sustainability of fish populations.

Indeed, now is a good time to learn about how to become a more fish-friendly (and environmentally friendly) angler! Here are just a few tips and tricks to help:

1. **Read up on the regulations**

As with most fun activities in life, the first step is to make sure we familiarize ourselves with the rules. Keep in mind that you may not need a fishing license during Family Fishing Week, but you still need to follow the Conservation fishing license limits. You can find information regarding the use of live bait, catch limits, size restrictions, and open seasons for different species of fish within your area or zone (there are 20 in total) on the [Ontario Fishing Regulations website](#).

Pay close attention to which specific water body you will be fishing on because there may be exceptions for that lake. It is also a good idea to think about what you will be fishing for prior to heading out onto the lake, keeping in mind the target species, catch limit for that species, size limits, time of year, and any exceptions.

If playing for keeps, aim to keep smaller or damaged fish while leaving the larger, healthier ones to spawn and allow the population to grow. Even if you are just planning to catch and release, becoming familiar with the rules beforehand will ensure you are making the correct decisions in a quick manner to not only be compliant with the regulations, but also the most considerate of the fish's life.

2. **Be gentle**

Fish may be strong and powerful when you feel them fighting back on your line, but they are actually relatively fragile creatures outside of the water and thus need to be handled with considerable care.

Some general tips to help you be more gentle when handling fish include:

- Lower the fish gently into the water instead of tossing it - this may shock or hurt it
- Use rubber coated or knot-less nets and damp hands to handle fish - they are gentler on fish scales and their protective slime (which helps to keep them healthy)
- Avoid placing fish on dry or rough surfaces – a fish flopping around on a surface like this can damage their skin and scales
- Avoid holding fish by their gill plates – the gills are delicate and prone to hemorrhaging and infection; they should be treated as vital internal organs since fish would not be able to live without them!



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- Use barbless hooks if catching and releasing - these hooks can be released easier and do less damage to the fish
- Minimize the fight time for the fish (which can produce fatal amounts of lactic acid within the fish's body) – ensure your drag is not set too loose so you do not let out excess line
- Pay close attention to avoid feeding the line to a fish once it is biting (i.e. set the hook early) – this will often avoid gut-hooking a fish which can be very difficult and damaging to remove
- Use circle hooks – they avoid gut-hooking and also tend to prevent snags (bonus!)
- Use a dehooking tool to remove embedded hooks – they are often fairly effective and do much less damage to the fish
- Minimize the time out of water – even just one minute spent out of water can decrease the fish's chance of survival by 6 times, so it is best to have all your equipment and action plan ready
- Properly prepare for photos by making make sure you are situated, ready and comfortable - try to avoid taking photos if you are uncomfortable handling a fish (some fish have very sharp fins that may prick and cut you!)

It is also extremely important to remember that just because a fish is released (and swims away fine) does not mean that it will survive. In fact, only 11.5% of deeply hooked fish will survive upon release once the hook has been removed, and two-thirds of deeply hooked fish will survive if the hook has not been removed (Casselman, 2005). This is because removing a deeply embedded hook often results in lethal hemorrhaging or invites infection. Therefore, cutting the line (the further down the better) and leaving the hook in if you cannot get it out gently with pliers or a dehooking tool is typically less damaging to the fish than doing all you can to pull it out. This may seem counterintuitive, but most fish can shed the embedded hooks by themselves within a matter of days. Nonetheless, getting a hook stuck should still be avoided by not feeding a fish line after it bites, as well as using circle hooks. This will ensure that no hooks end up in the lake for you to cut yourself on while swimming or for other animals to harm themselves on.

3. **Set your snags free**

Ah, the dreaded snag. Loosing a lure is not only disappointing for you but also poses a serious threat to other wildlife who may ingest the lures or get tangled in fishing line. In fact, many studies have found fish with soft bait plastics and lures in their stomachs, including one study that reported soft plastic lures in 17.9% of lake trout in Charleston Lake, Ontario (Raison et al., 2014). This is not surprising news since around 80% of anglers have reported



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losing their tackle and copious amounts of toxic lead-based items in a lake (Radomski et al., 2006). Unfortunately, many birds ingest toxic lead-based sinkers and jigs thinking they are food and die as a result. That is a lot of plastic, lead and hooks polluting our lakes from snags, not to mention the amount of discarded soft baits that many people toss in the water once they are done with them. Other litter can also include packages from bait and tackle items, as well as food and drink packages which pollute the water, and can harm many birds, fish, turtles and other wildlife who can choke or get caught in them. As such, try your best not to litter or leave lost lures and soft baits in the water once they get snagged. It is best if you can boat out or wade out to unsnag the line and lure. Even better, aim to use weed-less lures in heavily vegetated areas to save both yourself and the environment the struggle!

4. **Go green**

You might feel a lot better about leaving an impossible-to-remove snag from the lake if you use eco-friendly, biodegradable tackle instead. There are many options for non-toxic sinkers and jigs made from tin, bismuth, antimony, steel, brass, tungsten, terpene resin putty, clay or polypropylene, as well as [biodegradable monofilament fishing line](#), lures and [soft baits made from fish food](#) or other non-PVC, non- plastisol and non-phthalates material. If you like DIY projects, you can even try to [make your own from home](#)!

5. **Avert the aliens**

Avert the alien species, that is! Washing your boat, gear and clothes before leaving the site, as well as draining excess water from your boat (especially if you plan to head into another lake or water body) is always a great idea to avoid the spread of invasive species. Invasive

fish, plants and aquatic organisms tend to outcompete native species for food and habitat and disrupt natural food webs. Therefore, becoming familiar with the [prohibited invasive fish, aquatic invertebrates and plant species](#) in Ontario is a great idea to avoid accidentally putting them back into the water while fishing and thus allowing them to spread more. In addition, look for regulations on which live bait you can use in certain areas - never release bait fish since they can outcompete native fish for food and habitat in the lake ecosystem.

6. **Better your boating**

Everybody knows that fishing from a boat is usually better for catching fish. You get to access deeper waters and can use fish finders to scope out prime fishing areas. However, boating can be destructive to aquatic life, including those prized fish that you are hoping to catch! Fortunately, there are certain practices that everyone can follow to better their boating behaviour. Firstly, lift your prop or trim your motor up as best you can in shallow areas and reduce your speed to under 10 km/h within 30 m of a shoreline. Boat propellers tend to rip up aquatic vegetation which would provide shelter and food for many fish and aquatic organisms. Props can also stir up sediment and create wakes which contribute to shoreline erosion and decreased water quality due to turbidity (cloudiness), making it difficult for sunlight to penetrate plants and allow them to grow. In addition, try not to drag anchors along the bottom of the lake as this disturbs sediment and vegetation, thereby damaging habitat for fish and aquatic life.

Keeping all of these things in mind the next time you are itching to go fishing will help keep your favourite fishing hole healthy and ensure there are enough fish for future generations to enjoy!

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