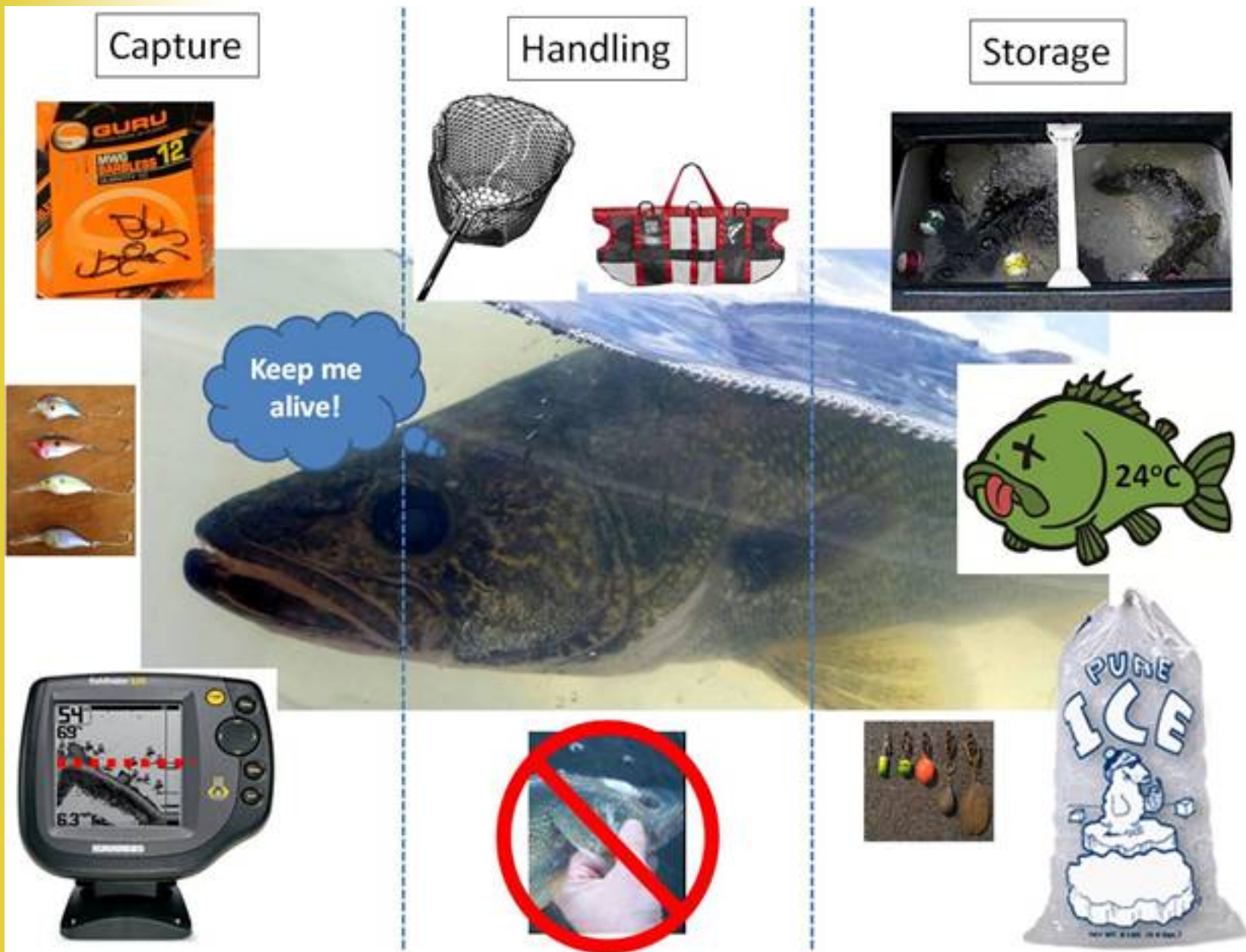


SASKATCHEWAN WALLEYE TRAIL

Methods to help keep your fish healthy

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As tournament anglers we are all keen on reducing the impact on the fishery while participating in our competitions but we also don't want those dead fish penalties at the weigh scale. These are both motivations to keep our fish healthy.

The personal at Saskatchewan Environment also keep tabs on fish mortality at the tournaments and any events that have high mortality are scrutinized and run the chance of not being licensed.

The following is a list of what you can do to reduce the chances of your catch dying in the livewell or being stressed to the point that they are deemed dead or have a high chance of delayed mortality.

Fish need oxygenated water to survive, this means that once you have more than 2 or 3 fish in the well or in warm water tournaments you need to continually run your livewell pump. Also be aware that the solubility of oxygen decreases as the water temperature increases. Warm water also increases the stress level of the fish. This is apparent when you see the color of your fish change and when you see red appear around their mouths and lower jaw. Your livewell should be equipped with a fresh water pump, a recirculation pump and have the ability to fill with water when the boat is on plane (a high speed pick-up). You may need to have a larger battery or install a second battery to continually run your pumps. I have found it effective to continually run the recirculation pump which entrains oxygen (via air bubbles) and run my fill pump on a timer.

In warm water tournaments keeping ice in the boat that you can add to your livewell will help maintain a higher level of oxygen and reduce stress on the fish, keeping the water a few degrees cooler makes a big difference in the health of your fish but don't get it too cold. Block ice works best for this, I have also used water filled and frozen plastic 2 liter milk jugs. They last quite a while and easily fit into the cooler in my boat. When using ice, I run the recirc pump and keep the fill pump on a timer or manually operate it enough to keep the livewell full but not raise the temp of the water.

Keeping the livewell full is also very important. I have placed a foam insert into my livewell overflow tube to restrict the overflow of water. This keeps my livewell close to full when fishing and also allows my high speed pick up to maintain a full livewell when traveling down the lake. This is particularly important when travelling in rough water to keep the fish from sloshing around and being hurt bumping into the sides of the livewell. If you don't have a high speed pick up, before travelling in rough water, plug your livewell overflow and completely fill the livewell before travelling and then keep the recirc pump on while travelling.

Your fish should also be handled as little as possible. Since we need to know the length of our fish and most teams weigh their fish, it is my opinion that it is best to do this as soon as they are in the boat. They are tired from the fight of being caught and are therefore more docile when being weighed and measured. This is why I don't like using balance beams to check fish, pulling them out of the livewell to check their weight against new fish that are caught just increases the chance of stress and/or hurting them especially once they have rested and are much more likely to thrash

around while being reweighed. Purchase a good scale that gives repeatable results and carefully record the weight of each fish.

After the fish have been placed in the livewell check them often to see if they are swimming in a normal fashion. If they are unable to stay upright this is usually due to fatigue, stress or overinflated air bladder. Usually weighting the fish to help them stay upright will keep them healthy. I apply clip weights to their fins, 1 weight to each pelvic fin and 1 weight on the anal fin. If we are lucky enough to have a large walleye in the well I will often also attach weights to the pectoral fins. The size of weight depends on the size of the fish. For larger fish I like to use weights that are not solidly attached to the clip, they seem to stay on better. DON'T FORGET to remove the weights before you get to the weigh scale.



Various types and sizes of clip weights

If you don't have weights or the fish aren't rolling too badly, I have found that propping the livewell lid open just enough that a bit of daylight can enter this seems to help. It is my belief that this helps the fish orient themselves and stay upright, the light lets them know which way is up.

If all has gone well, at the end of the day you will have 5 healthy fish to weigh in. You should wear cloth gloves when you retrieve your fish from the livewell, this will make it easier to hold on to them and reduce the damage to their slime coat. Going through the weigh procedure should be done as quickly as possible. If the attendant at the docks says to load your fish but you see there is a delay at the weigh scale, request that you wait a few seconds until they are ready to immediately weigh your fish.

Also keep in mind that catching fish from deep water greatly reduces their

chance of survival.

Summary / Key Points:

We all want healthy, live fish; it is essential for the fishery, and helps you at the weigh scales.

Minimizing stress to fish during capture, handling, storage, and weighing will improve survival.

Handle fish appropriately using coated nets and a weigh bag or cradle; avoid touching the gills.

Livewell conditions are critical to fish survival, especially in summer tournaments. Water **volume**, **aeration**, and **temperature** are the key factors.

Run your livewell continuously (you may need a second battery); ensure that it is full of water.

Walleye delayed **mortality increases sharply when livewell temperature is above 20°C**, and few survive prolonged exposure to temperatures higher than 24°C.

Lower your livewell temperature with ice blocks; even a few degrees can make a huge difference, especially when lake surface temperature (source for livewells) is greater than 20°C.

Monitor your fish in the livewell for signs of stress; color changes (red flushing on jaw and fins, fading of dark colors on body) and improper orientation are signs of problems with stress.

Fin weights help keep walleye upright and likely aid with proper movement of water over the gills. Don't forget to remove weights before weigh-in!

Fish experience significant trauma in livewells when your boat is moving at high speed in rough water. Make sure it is full of water, and plan a longer transport time at slower speed.

Be patient at the weigh station; keep your fish in the livewell until the last possible moment - do not line up behind other teams with your fish in a dry tub.

Make a special trip in the weigh station for large fish; they are a valuable part of the fishery and difficult to maintain in livewells for any length of time.