What Should I Do With My Aquarium in Hot Weather?

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The Pragmatic Aquarist

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We all get a little concerned when the temperature starts to climb, and with good reason. A fish tank is an enclosed environment, which makes it more susceptible to swings in conditions like temperature than people often realise, and an aquarium will always sit a few degrees above the temperature of the room around it. So when the weather turns hot, your tank turns hot with it. The good news is that keeping your fish safe really comes down to two things, getting the water a little cooler and keeping the oxygen up. There are a few easy wins that do exactly that, and one common mistake to avoid, and we will go through all of them in this article.



In a hurry? Jump to:

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Prefer to watch? Here is the video version.

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Why hot weather is harder on an aquarium than a pond

People assume a pond is the vulnerable one in summer, sitting out there in full sun. In practice temperature is far more critical in an aquarium. A pond has a huge volume of water, a big surface area and the insulating mass of the ground around it, so it heats up slowly and holds a large reserve of oxygen. An aquarium has none of those advantages. It is a small body of water sitting inside a house that is already warming up, and it tends to track within two to five degrees of the room around it.

Add to that the lid or hood most tanks have, plus the heat thrown off by pumps and lighting, and your tank essentially becomes a small greenhouse. Your fish did not sign up for a sauna. When the weather climbs towards 30 degrees, or pushes past it, holding a stable temperature in the tank becomes genuinely difficult, and that is when problems start in both freshwater and marine setups.

The oxygen problem that catches people out

Here is the part most people miss. Warm water holds far less dissolved oxygen than cool water. At the same time, warmth speeds up your fish's metabolism, so they actually need more oxygen, not less. Your filter bacteria are demanding more too. So just as supply drops, demand goes up. That is the squeeze that does the damage.

Most aquarists already run plenty of circulation and an air pump, which is exactly the right instinct and gives you a real head start over a pond keeper in the same heat. But circulation alone will not save you if the water temperature keeps climbing, because there comes a point where the water simply cannot carry enough oxygen no matter how hard you agitate it. That is why cooling the water and oxygenating it have to go hand in hand.

The golden rule: do not let it climb in the first place

Prevention is the whole game here. Once the temperature in a tank has climbed significantly, it is slow and difficult to bring back down, and a stressed fish does not have the luxury of waiting. So the moment you know hot weather is coming, get ahead of it. Watch the temperature, keep the room as cool as you reasonably can, and start your cooling measures early rather than scrambling when the tank is already at 30 degrees.

Buy this one thing first
A good digital aquarium thermometer tells you exactly how your temperature is behaving at a glance, hour to hour, so you spot a climb early and act on it rather than discovering the problem when the fish are already at the surface. It is the cheapest insurance in the hobby.


FLUVAL
ROOM TEMP
31.0°C
AQUARIUM TEMP
28.9°C
FLUVAL
DIGITAL THERMOMETER

Think about how you stay cool

Before the kit, it helps to think about what you do when the weather turns. You stand next to a fan, and you pour yourself a nice cold drink with ice in it. That is honestly the whole strategy for your tank in miniature. A fan moving air across the surface, and something cold floated in the water. The two easy wins below are exactly that, and neither costs you a penny if you already own a fan and a freezer.

Easy win one: the frozen bottle trick

This is the one you can do right now without a trip to the shops. Fill a clean plastic bottle with water, pop the lid on, and put it in the freezer. Once it is frozen solid, float it in the aquarium and let it gently pull the temperature down.

A few practical notes. Match the bottle to the tank. A large aquarium may need two or three bottles to make a difference, while a small tank only needs a small bottle, or you will overcool it. Keep the cap on so you are not diluting the tank or, in a marine system, throwing the salinity off. And keep an eye on that thermometer while it works, because the aim is a gentle, gradual drop, not a sudden plunge. Swap a fresh bottle in as each one thaws.



Easy win two: the fan across the surface

The second cheap win is one of the most effective tools you have, and it might already be sitting in a cupboard. Take a desk fan or a standing fan, position it next to the tank, and have it blow gently across the surface of the water. You will probably need to open or slide back the covers so the air can actually reach the surface.

It works for exactly the same reason a cool breeze cools us down on a hot day. The moving air drives evaporation off the water's surface, and evaporation carries heat away with it. It is well established that a fan run across the surface can shave two to three degrees off the water temperature, which is often the entire difference between a stressed tank and a stable one. As a bonus, opening the covers and moving the surface also improves gas exchange, so you get a little oxygen lift at the same time.

There are some neat clip-on aquarium cooling fan units made specifically for the job, and they are worth a look if you would rather not have a desk fan parked on the sideboard for half the summer. But you do not need to wait for one to arrive. In a pinch, go and borrow the standing fan out of your

kid's room and point it at the tank. The principle is identical, and the fish will not tell on you.



A few more things that genuinely help

On top of the two big wins, a handful of small adjustments stack up:

1. Boost the surface movement. Aim a filter outlet at the surface and add an airstone on your air pump. Surface agitation is the single best way to drive oxygen into the water, and it matters more in heat than at any other time.
2. Turn the lights down or off through the hottest spell. Lighting, and the gear behind it, throws real heat into a closed tank. Leaving them off for two or three days will not harm anything, your fish will not miss them and your plants will cope quite happily, and you cut out a chunk of the energy that is heating the water in the first place.
3. Ease off the feeding. Uneaten food rots and consumes oxygen, which is the last thing you want when oxygen is already tight. Feed a little lighter through the worst of it.
4. Keep the tank out of direct sun and draw the curtains or blinds on the sunny side of the room. Sunlight straight onto the glass turns a warm tank into a hot one quickly.

The common mistake to avoid: turning your heater down

Do not turn your heater down in hot weather. It will not cool the tank, and it quietly sets up a cold shock for your fish when the weather breaks.

Here is the one that catches people out every summer. When the weather gets hot, the instinct is to reach for the heater and turn it down. Please do not. It does nothing to help today, and it quietly sets up a much bigger problem for later.

Your heater is thermostatically controlled. If you have it set to 26 degrees, it will not throw out any heat at all once the water is at or above 26 degrees. So if your tank has crept up to 28 degrees in a heatwave, your heater is already switched off and sitting there doing nothing. Turning the dial down changes nothing about the heat you are dealing with right now. And if your heater genuinely is still pushing out warmth above its set point, it has failed, and it is time for a new one.

The damage comes later. Say you wind the dial down to 20 or 22 degrees during the hot spell. The weather breaks, the room cools, and now your heater believes you want the tank held at 20 degrees. Your fish go from a very warm 28 or 29 degrees straight down towards 20, a sudden swing in the wrong direction, and that kind of rapid drop shocks them far more than the warmth ever did. You have turned one problem into two. Leave the heater set where it always lives, let it stay off while the water is warm, and let it quietly take over again when things cool down on their own.

Marine and reef tanks need a closer eye

If you keep marine, this all applies and then some. Corals and invertebrates have a narrower tolerance than most fish, and the oxygen squeeze hits a busy reef hard. There is also a catch unique to saltwater. As water evaporates, whether naturally or because you have a fan running, the salt is left behind and your salinity creeps up. So while you are cooling the tank you also need to keep topping up with fresh RO water, not saltwater, to hold the salinity steady. Check it more often than usual through a hot spell.

For a reef of any real value, the cheap measures buy you time but they are not always enough, which brings us to the one bit of kit worth spending on.

When a chiller is worth it, and the catches nobody mentions

I will be honest about chillers, because this is exactly the sort of thing other retailers gloss over. An aquarium chiller is the serious option, and it comes with serious downsides as well as a serious price tag. You are looking at a minimum of around £400, and the price climbs from there with capacity.

First, availability. Everybody wants one the moment a heatwave hits, which is precisely when they are hardest to get hold of. If you think you need one, the time to sort it is before the hot weather, not during it.

Second, they are expensive to run, and here is the part people do not think about. A chiller does not make heat disappear, it just moves it. All the heat it pulls out of the water, it throws straight out into the room. So the very room your aquarium sits in gets warmer and less comfortable, and worse, that rising room temperature is the ambient the chiller is fighting against. You can end up in a loop where the chiller heats the room, which makes the chiller work harder, which heats the room more. It can be quietly counterproductive if the room is small or poorly ventilated.

If you do go for one, do not cut it fine on the volume. The figures are a ceiling, not a target. If a unit is rated for up to 200 litres, that is the absolute most it will handle, and a chiller can only pull the temperature down by so many degrees below ambient. So if you have a 200 litre tank, I would always size up to the next model. The bit of extra capacity is what gets you through the genuinely hot days, which are the only days you bought it for.

For most freshwater tropical keepers in the UK, you still do not need one. We get a handful of properly hot weeks a year, and between a fan, good surface agitation and a frozen bottle or two, the vast majority of tanks come through fine. Where a chiller earns its place is marine and reef systems, coldwater setups in a conservatory or a hot room, or any tank holding livestock you could not bear to lose. If that is you, it stops being a luxury and becomes insurance.



Coldwater fish suffer more than tropicals

It is worth knowing who is most at risk. Tropical fish are at least used to warmth, so they have a bit more room before they are in trouble, though every species still has an upper limit. Coldwater fish, goldfish and the like, are the ones that struggle most. They are adapted to cooler water, and high temperatures stress them far sooner. If you keep coldwater indoors, watch them especially closely when the weather turns.

How to spot a fish in trouble

Learn the warning signs, because they tend to show before things become an emergency:

- Gasping at the surface or crowding around the filter outflow and airstone, the classic sign of low oxygen
- Rapid gill movement
- Lethargy, hanging in one spot, or sitting oddly
- Loss of appetite

Surface gasping is your cue to act immediately. Get more air in, get the temperature moving down, and do not wait to see if it settles on its own.



What not to do

A couple of well-meant mistakes can do more harm than the heat itself.

Do not lob a tray of ice cubes straight into the tank. Your fish are not making cocktails. Tap-water ice brings chlorine with it, and the sudden temperature swing is a shock in its own right. That is why the sealed frozen bottle is the right approach.

Do not crash the temperature with a big, cold water change either. A rapid drop is a shock, and shock can kill a fish that the warmth alone would not have. If you do change some water, keep it modest and only a little cooler than the tank, and use a dechlorinator as always.

The pragmatic summary

When the weather turns hot, here is the short version:

- Act early. Once a tank has heated up it is slow to cool, so get ahead of it
- Watch a thermometer, ideally a digital one, so you can actually see what is happening
- Float a frozen, capped water bottle in the tank, scaled to the size of the tank
- Run a fan across the open water surface, worth two to three degrees on its own

- Maximise surface agitation and air to keep oxygen up as the water warms
- Do not turn your heater down. It is already off in the heat, and turning it down only shocks the fish when the weather cools
- Dim the lights, feed lighter, and keep the tank out of direct sun
- For marine tanks, top up evaporation with fresh RO water to hold salinity steady
- Consider a chiller for reef, coldwater or high-value setups, but most tropical tanks will not need one
- Never use tap-water ice cubes or a big cold water change to cool things down

Get the basics right and a heatwave becomes a few days of paying closer attention, rather than a disaster. If you are not sure what your particular setup needs, that is exactly the sort of thing we are happy to talk through in the shop, no pressure to buy anything.

About the author

Richard Cook is the Managing Director of Shirley Aquatics, a family-run aquatics business that has been serving fishkeepers since 1939. A third-generation aquatic retailer with over 35 years of hands-on experience, Richard is the voice behind The Pragmatic Aquarist, known for his honest, no-nonsense approach to fishkeeping advice that helps customers make confident decisions that work in the real world, not just on paper.