

A WaterZoo guide to...

# Preventing overheating of aquariums

Warm weather can cause water temperature to increase to dangerous levels, our guide will help minimise distress to your fish and corals.

In our experience temperatures of below 30°C do not normally cause a serious problem with most livestock in aquariums. In our experience many species, including cold-water fish can tolerate temperatures up to 29.5°C (85°F), with out any short-term problems. Many hardier species can endure even warmer temperatures temporarily. Corals and other sensitive marine fish are most at risk from elevated temperatures, especially hard corals where would suggest a maximum temperature of 28C (82.5°F). Fluctuating temperatures can be more stressful to livestock than temperatures that are slightly outside their normal range.

Good oxygenation is vital in hot weather, as the water temperature increases the amount of dissolved oxygen decreases. In hot weather fish gasping at the surface is often a sign that oxygen levels have dropped dangerously low. Strong oxygenation is especially important if your aquarium is stocked to capacity, or with larger specimens.

Opening or removing your hood will help prevent overheating, as this will allow warm air to escape. Leaving the lights off can also make a considerable difference in reducing heat build up, most fish, plants & even corals should survive a few days with a reduced amount of light. Use a fan to circulate air across the surface of the aquarium; this will dissipate heat quicker as well as having a cooling effect due to evaporation. We stock some unobtrusive fans designed specifically for this purpose. We have found these to be very effective, and can reduce the water temperature by several degrees.

When upgrading or replacing lighting it definitely worth considering LED's, these produce a fraction of the heat when compared with fluorescents or metal halides, as well as having lower running costs.

Virtually all aquarium pumps are water cooled. When choosing pumps, don't be tempted to buy one that is considerably larger than you need as may contribute to elevated temperatures. Also look to buy the most energy efficient pump or filter you can, Tunze and Eheim are good examples, these will consume less power as well producing less heat.

Ultraviolet sterilisers used are often used on aquariums to control disease, these generate little heat, but switching them off may lower the water temperature by a degree or so.

Aquarium coolers are the best option for preventing over heating, these start from around £300. However, these are a 'one off' investment and can easily save you hundreds of ££'s in a well stocked aquarium by preventing mortalities. They also provide a stable temperature which is important to long term success, especially with marine species.

Alternately, you could purchase an air conditioner and cool the entire room, so you will benefit too. However, these are very expensive to run, most consuming more than a 1000 watts per hour

Adding ice to the water is unlikely to be an effective way to reduce water temperature and will have little effect. A litre of ice added to a 100-litre aquarium is only likely to reduce the water temperature by about ¼ of a degree °C. If added to a small aquarium it may cause a rapid drop in temperature, or even cool the water too much.

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