

LEAKING POND?

harrogate aquatic
AQUARIUM & POND SPECIALISTS

There are several reasons why the water level in a pond can drop, and a hole in the pond liner is actually the least likely! Check down the following list before you resign yourself to emptying the pond to try and track down a hole or replace the liner.

EVAPORATION Over time water will naturally evaporate, and this will happen more quickly on hot or windy days. Shallow ponds that are in full sun during the day are more prone to evaporation. The way to measure your ballpark evaporation rate is to fill a bucket with water next to the pond and measure how much water evaporates off in a set time-span. Obviously the volume of water in your pond and the bucket are very different, but if you are losing half an inch of water from the bucket over the course of 24 hours and 6 inches from the pond, chances are your problem isn't just evaporation!

PLANTS Just like garden plants, marginal pond plants need to take up water to stay lush and green. In most ponds the amount of water used by the plants won't be noticeable, but in a little ornamental pond with lots of plants, it's amazing how much they use, especially on a hot day.

FOUNTAINS If you have a fountain, check that it is all sprinkling back into the pond. It only takes the pump to shift slightly to completely realign the nozzle. It is also very easy for gusts of wind to blow water off-course and it's impressive how much water is lost this way over time. Regularly check that the holes on the rose or nozzle aren't blocked—a bit of debris can be all it takes to make one jet spray in a different direction! This is very common if you have your fountain pump on a timer so it's on and off at intervals: when it's off, bits of sludge or algae settle and block the pipes and when it's turned on again the debris is forced up against the fine holes in the nozzle. It sometimes washes loose and corrects itself after a few minutes but if this is happening every day the water level will creep down. Check your fountain is working properly every time you turn it on. Obviously this is a common problem with solar-powered pumps that are constantly stopping and starting throughout the day.

WATERFALLS Water loss from waterfalls is very common, especially DIY waterfalls where separate rocks have been cemented together. Check for cracks or crumbled mortar if it's an old waterfall. Small cracks can be sealed with aquatic-safe silicone or polyurethane sealant which paints on like a varnish. Have a close look round every rock down the edges to check for water overflowing or splashing and look for damp soil patches near/under the edges.

PIPEWORK Most types of flexible corrugated PVC pipe will perish and become brittle after a few years of being out in the elements. This means it will split/crack easily if it's moved or trodden on. Pipes can also be chewed/damaged by rodents. If the hosing runs underground it can be split by plant and tree roots (especially bamboo!), accidentally pierced by a spade or fork or simply crushed by someone walking over it. Turning the pump off in winter can be a problem if water freezes and expands in the pipes (ideally leave your pump running all year). Joins and connectors can also leak—check the area around any joins to see if there is any moisture (this is easiest to check in dry weather) and make sure screw threads and collars are tight and not cross-threaded, o-rings and gaskets are properly seated, and the correct type and size of hose-clips are used (e.g. jubilee clips for smooth hose and double-wire clips for corrugated hose).

The easy way to test whether it's your pipework that's causing the water loss is to turn your pump off for 24 hours (so no water is being sent outside the pond area). If you don't lose any water while the pump is off, you know you have a leak somewhere along the pipelines and you will need to check or replace the hosing.

OVERGROWN PLANTS It's worth checking that flowing water isn't diverted by plants, roots, moss or blanketweed growing across a waterfall, statue or filter outlet. Moss can act like a sponge, soaking water up above the water level. If you have two ponds running into each other, check that the overflow between them isn't choked with plants.

FILTERS If you have a box-style flow-through filter, make sure it is on a level surface and

check and clean the sponges regularly. If the sponges are clogged with too much waste, the filter will just overflow! If this is happening regularly, it's possible that you need to upgrade to a more efficient filter, reduce the amount of fish you have and/or cut down how much you feed them.

PUNCTURES While it's unusual for a pond liner to leak, it is possible that the liner can be punctured or torn. Unless you use a good quality underlay and liner, roots from trees, shrubs and larger ornamental grasses like pampas and bamboo can push through over time. Sharp stones can also be a problem, especially if someone has been walking around in the pond during maintenance. Accidental damage when cleaning/weeding is very common, e.g. using a rake or fork to hook plants out! Dogs often cause problems, either from knocking objects in (e.g. heavy garden ornaments) or ripping the liner when scrambling in the pond after a runaway tennis ball! Wild animals and birds can also cause punctures—herons can pierce a liner if they are fishing in the shallows, and we've even seen damage caused when a deer accidentally took a mouthful of rubber liner whilst grazing on pondweed!

CONSTRUCTION This is a tricky one to diagnose, especially if the pond was built before you moved to the property, but the structure and stability of a pond can deteriorate over time if shortcuts were taken with the construction and materials. Cheaper liner and underlay just won't last as long as better quality materials (PVC liner is guaranteed for 15-20 years and rubber-based liner up to 30 years). Sometimes supporting soil is washed away or subsides, leaving the liner unsupported and under greater pressure. Sunlight can also degrade exposed liner (e.g. liner visible above the water level), particularly the plastic-based liners, making it brittle and vulnerable to splitting.

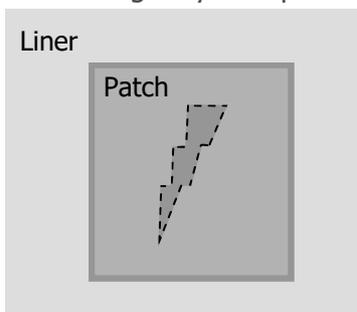
Repairing a punctured liner

FIND THE HOLE! The hardest part is tracking down where the puncture is! The hole/rip can be tiny and nearly invisible when the liner is dry and the weight of the water isn't forcing the hole open. It is usually on the waterline, so let the water drop as low as it can and mark that level. Then drain/pump out more of the water to about 2 inches below your marker. You now need to check round the circumference of the pond 2 inches above the water line. Use a nylon scourer to clean off any algae and dirt and press each section with your fingers. The soil behind the part that is leaking is likely to be very wet/soft so you may be able to feel a difference as you go round. It can also help to shine a very bright torch on each bit as you go round to help show up any difference in liner texture.

Once you've found the hole, you need to clean around the area (just use warm water and the scourer, no soap or chemicals!) and let it dry. There are different ways to patch it, depending on the size of the damaged area:

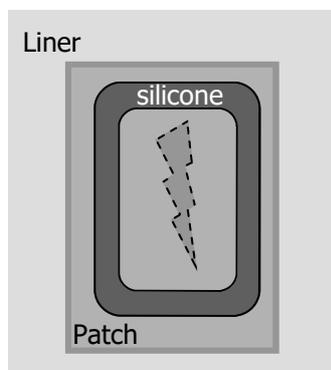
MASTIC TAPE

Ideal for smaller punctures, up to 1cm. Simply cut off a strip of the tape and position it centrally over the hole. Press gently into place. Peel off the paper backing and stick a patch of liner onto the sticky surface. Press it firmly into place, all around the edges of the patch. Pond can be refilled instantly.



SILICONE SEALANT

Ideal for larger punctures- run a bead of aquatic safe silicone about 1cm thick round the hole. Press a patch gently over the silicone. Don't press the silicone flat, it should still be about 5mm deep! Some silicone needs 24-48 hours to cure before refilling the pond.



Got questions? Talk to us!

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