



DO'S, DON'TS AND TIPS FOR PONDS

POND POSITIONING

- Avoid areas with overhanging trees that drop leaves, nuts and pollen into the pond. Also be aware of trees that have invasive roots as these can damage the pond's construction material.
- Areas that are subject to flooding and runoff should be avoided due to contamination.
- Ensure the pond receives at least half a day of sunlight as this encourages plant growth.
- Make sure an electricity supply with enough power points to cover all pond equipment, which includes pump, lighting and biofilters, is located close by and has an RCD (Residual Current Device) fitted or are fitted to the mains power supply.
- If children are likely to be around the pond it is a good idea to position the pond where it can be seen from the house. Have a wide, shallow planted area around the pond and have the pond above ground or have a fence around it. Check local council and shire regulations regarding ponds.

POND SHAPE

- Complex or overly irregular shapes should be avoided as these will result in excess folds and creases when using pond liner and also create 'dead spots' where water cannot circulate, causing the area to become stagnant.
- Use a rope or garden hose laid out on the desired area or spray paint to line the pond perimeter, to visually construct the size of the pond.
- The type of fish to be kept should be taken into consideration before building a pond as large fish such as koi require large, deep ponds, whereas goldfish are happy in smaller ponds. White cloud fish like to eat mosquitoes.
- Different plants require different depths - providing shallow and deep areas will enable you to have a pond containing species and varieties of plants.

POND EQUIPMENT

- Always follow the instructions that come with the pumps, lights and filters to ensure they are compatible with the pond being constructed, and with each other.
- It is better to purchase a larger pump/filter than what is required for the pond volume - as fish grow and breed, larger filtration and pumping equipment will cope with excess nutrients and save subsequent upgrading.
- Pumps and filters must be run 24 hours a day, 7 days a week as this will support the beneficial bacteria colony living in the filter and aid in the breakdown of waste and excess nutrients. This helps to prevent the water going green.
- The entire volume of the pond should pass through the filter every 1-2 hours and more often if there are heavy stocks of fish and large fish in the pond.

- A filter may take up to 8 weeks to develop the beneficial bacteria colony. If a UVC (Ultra Violet Clarifier) is used it should not be turned on for the first 3-4 weeks to allow the bacteria to develop.
- When starting a new pond or adding fish, bacteria kick starters or boosters such as Biostarter and other good bacteria powder can be added to the pond and directly to into the filter to start the bacteria colonisation process and to boost the levels of existing bacteria.
- Do not run a UVC without water running through it as the heat produced from the lamp can damage its plastic surrounds and perish O-rings.
- It is best to use the largest diameter hose available and a general rule of thumb is to use the same size hose that matches the outlet on the pump. Friction loss calculators should be used when water is to be pumped over long distances (5 metres plus) or to large heights.
- Ball valves should not be used on pond pumps. When a pump is to be mounted externally it should be placed below the water level so the intake line is always flooded, so if the power ever fails, it can restart easily.
- If the pump produces more flow than needed, it is better to install a T-piece and valve in-line to return the excess water to the pond rather than using just a valve to restrict the pumps flow.
- Do not concrete in hoses or electrical cables as access may be required in the future.
- Use an underlay when installing a flexible pond liner to protect it, and remove all sharp sticks and stones etc. from the hole before installing the liner and underlay, as well as using sand to form the base.

POND MAINTENANCE

- Filter materials should be cleaned in buckets or pond water (buckets need to be free of pesticides and herbicides) and the dirty water can be discarded onto the garden.
- Chlorinated tap water should never be used to clean filters as the chlorine in the tap water kills the beneficial bacteria in the filter.
- When replacing the filter materials, do not replace all the foams at once as this will set back the beneficial bacteria. It is better to stagger the change over a few weeks.
- Pond equipment should be regularly checked and cleaned, as per the manufacturer's instructions, to ensure the longevity of the ponds equipment.
- UVC filters generally need to have their globes replaced every 12 months as they lose their effectiveness after this time. O-rings should also be replaced at the same time.
- When changing the water or topping up the pond or waterfeature, use a de-chlorinator such as Pondstart to remove chlorine from the tap water.
- Statuary waterfeatures are able to have their water topped up every so often but every month a $\frac{1}{4}$ to $\frac{1}{3}$ water change should be done to remove any build-up of materials such as calcium. As the water evaporates these minerals concentrate, affecting the performance of the pump and attaching themselves to the waterfeature and pump causing pump failure and unsightly stains. Pumps that are affected by minerals are hard to clean so regular partial water changes are necessary to prevent the build-up of minerals. Pond equipment seized up by calcium and other materials may not be covered under warranty.