KOHAN POND & PUMP OPERATION AND MAINTENANCE

Spring

Three-Tier Pond

- Siphon or bucket out any water and remove as much sludge and debris as possible from all 3 tiers. This will avoid debris clogging the pump operation. Do not transfer any materials from the ponds into the lake. Occasionally people empty their aquarium materials into the ponds. These are usually non-native invasive organisms.
- Place any toad or salamander eggs/larvae in a bucket with water while cleaning the pond. Gently return after pump installation is complete.
- Install pump VERTICALLY with bottom intake vent suspended about 10cm above the lowest part of the pond. Use the log spanning the pond as the suspension point. Use a dark coloured cord and black netting for the pump so that it hangs at the correct height and is vertical. Attach the black hose securely to the pump outlet using the ring clamp making sure the hose is easily pointing to the top pond.
- Use hose bib at northeast of garden to fill all ponds. The system is full when the large/bottom pond water level is about 20cm from the top. Cover the black hose with woody materials and stones in a naturalistic manner. The outlet at the top pool should be under the surface of the water. The sound of the running water is meant to come from the small cascading waterfalls, not the water rushing from the hose and hitting the pool surface.
- Throughout the summer season, monitor the pond levels regularly and periodically clean the pump intake ports. Sometimes the water circulation pipe becomes dislodged and is not flowing directly into the top pond.

Lily Pond

- Siphon out remaining water and remove as much sludge and debris as possible.
- Install small pump in bottom of each pond so that the outlet is pointed to the centre of the pond
- Fill ponds to within 10cm of the top edge and check water plants
- Turn on pumps and check that there is adequate water circulation, adjust pump outlets as necessary

THE PONDS MUST BE CHECKED AT LEAST WEEKLY TO ENSURE PUMP OPERATION AND WATER LEVELS ARE CORRECT. ADD WATER TO PONDS IF NECESSARY (SUMMER).

Winter Shut Down

Three-Tier Pond

- Remove pump (waders probably necessary) by loosening clamp at pump outlet then releasing the suspension system at the log.
- Remove the bottom plate (pry it off, it does release) and hose off any debris from the pump (inside and outside) and reattach plate. Run it BRIEFLY (2 seconds) to remove any internal water left and shake it to hear if all water is removed. If there is still some water, hold the pump at different angles while shaking and remaining should dribble out.
- <u>Dry indoors until entirely dry</u>. Store for the winter in shed with other pumps.
- Install any anti freezing devices before below zero weather, using heavy duty extension cords. Monitor these devices periodically and according to product directions.

Lily Pond

- Remove pumps, hose clean and run BRIEFLY to remove internal water. Shake the pumps to remove any internal water still left. Dry indoors until entirely dry.
- Store for the winter in tool shed.

INVERTEBRATES, REPTILES OR POND WATER SHOULD <u>NEVER</u> BE PLACED IN THE LAKE.