



## Spring Maintenance Checklist

### Early Spring (March/April)...

- If pump was removed for the winter, replace and ensure proper operation. If pump was left running all winter, ensure the pump intake screen (or pre-filter screen if applicable) is clean of all debris.
  - Perform spring maintenance on the filter(s).
    - Mechanical/ Biological Filters: Ensure filter has been thoroughly cleaned and replace any media that needs replacing. If filter utilizes an Ultra- Violet Clarifier (UVC), ensure that the bulb is operational.
    - Upland Wetland Filters (filter falls): Remove media bag and rinse out. Replace any foam filter materials if necessary. If filter utilizes plants, remove and cutback 'wetland' aquatic plants to 1" above the pot, removing any root growth outside of the pot. Fertilize with aquatic plant tablets and return to filter.
    - Skimmer: Clean and replace any filter pad material as necessary. Ensure that float door is operational and that leaf collection basket is in place.
    - Pre-filter Units: Ensure that the unit is thoroughly cleaned. Replace foam media as required.
  - If using an Ultra-Violet Clarifier (UVC), reconnect and ensure proper operation.
  - Ensure any underwater lighting is operational and replace bulbs as needed.
  - Raise aquatic plants from deeper points to shallower sections. Fertilize using aquatic plant tablets, following all directions. Cut back any plants that were not cut back in the fall to top of pot, or 1-2" above soil level.
  - Remove as much organic matter that has collected over the late fall/winter season, from the bottom as possible. This can be done using any number of products available from skimmer nets to pond vacuums. DO NOT DRAIN.
  - Begin Benekoi™ (beneficial bacteria) treatments following all directions.
  - Begin barley straw treatments, following all directions.
  - Check water quality. Check the water for PH, Ammonia levels and Nitrites. The PH should be between 6.5 and 7.5. Ideal Ammonia levels should be .00, however in the spring that level may fall between .00 and .01. Nitrite levels should be at zero. Any corrections should be made now, performing water changes as necessary, taking care not to change any more than 30% of total volume at any one point. Treat newly added water with Ultimate™ pond water conditioner.
- Please Note:** This step is particularly important for ponds containing fish.
- For ponds containing fish, check salt level. This level should be between .01 and .03. Add salt as necessary.
  - Begin adding water hyacinths and additional oxygenators (Hornwort, Cabomba, etc.) following proper stocking guidelines. (Wait to add water lettuce until the danger of frost has passed.)
  - Begin feeding fish once water temperature has risen above 55 degrees F, using an easily digestible food (such as Nobuyuki™ low protein fish food)





### Mid/ Late Spring (May/ June)...

- As water temperatures begin to rise and plants become active again, place the aquatic plants that were placed earlier into the shallower areas to their required depths and locations.
- Start Fertilizing the “out-of-pond” plants, preferably using an organic fertilizer and taking care not to allow any fertilizer to enter the water.
- Continue with Benekoi™ (beneficial bacteria) and barley straw treatments as required following all directions.
- Continue to monitor water quality, making corrections as necessary.
- Continue fertilizing aquatic plants, using aquatic plant tablets, following the directions.
- Once the frost danger has passed, bring any indoor over wintered tropical plants outdoors and add water lettuce if desired.
- Begin restocking the pond with fish once the water temperature has risen above 65 degrees F and ensuring that the filter has been running for a few weeks. If bringing fish outdoors from inside, float fish in a plastic bag containing water from their indoor environment in the pond for 15-20 minutes to allow the fish to acclimate to the new water temperature.
- Begin feeding fish with a high protein food, for optimal growth (such as Nobuyuki™ Color Enhancing or All Season fish foods) once the water temperature has risen above 65 degrees F.

