

MOORE WATER GARDENS

WATER LILIES & AQUATIC PLANTS

2017 Catalogue



2017 CALENDAR OF EVENTS

LOTUS WORKSHOP

Saturday, April 15, 11:00am

This popular event is back again! Our own lotus expert, Farley See, will be hosting a hands-on learning workshop where you will discover how to plant and also care for your lotus year round. Register by April 12 for only \$49.99 (plus tax) and receive a bare root lotus of your choice. Pot and planting materials are included. You may leave your lotus in our care until it is ready for your pond in mid-May.

AQUASCAPE PONDLESS WATERFALL INSTALL

Saturday, April 22, 9am - 12pm

Come and learn how to install a beautiful pondless water feature! A representative from Aquascape will install a Waterfall Landscape Fountain Kit here at Moore Water Gardens and also answer any questions you may have about the installation process.

Kits will be discounted **THIS DAY ONLY at 25% off!**

Kits contain all of the hardware you need, rocks and plants are not included.

LILY & WATER PLANT DIVIDING DAYS

Saturday, April 22 & Saturday, April 29, 9am - 3pm

Bring your lilies, lotus, and shallow water plants to be divided! Our experienced staff will divide your root-bound water plants free of charge! Replanting can also be done at 40% off our regular prices (contact us for more details). Watch, ask questions and learn while our staff works. You may also drop off your plants for us to divide and pick them up later. No appointment necessary.

SPRING POND OPENING SEMINAR/Q&A

Saturday, April 22, Thursday, April 27 & Saturday, April 29, 11am

Three dates this year for your convenience. Learn the ins and outs of getting your pond going for the season! Each seminar will include the same Information. Seminars may include outdoor demonstrations, weather permitting.

KIDS POND ECOLOGY WORKSHOP

Saturday, May 27, 11am - 12pm

Back by popular demand! Kids aged 5-10 get to create and take home their own mini pond and learn about pond ecology. There will also be a wetland tour! Registration fee is \$25.00 per pond to cover the cost of supplies. A limited number of spaces are available. Please register before May 23.

THE SNAKE LADY

Saturday, May 27, 11am - 3pm

Valerie Williams – “The Snake Lady”, will bring an exciting collection of reptiles and amphibians for everyone to enjoy! Ask questions and have fun with friends at this educational and informative experience!

SUMMER SALES DAYS

Saturday, July 1 - Saturday, July 15

We are having our summer sales for two weeks this year to celebrate Canada's 150th Birthday! Come and take advantage of the biggest and best discounts of the season! Huge savings throughout the store and nursery. While quantities last.

2017 PHOTO CONTEST

Deadline: July 15

You could win a \$50 Moore Water Gardens gift certificate!

Submit your photos via email, mail or drop them off in store to enter. Include your name, phone number, email and photo contest category.

Categories include: Best Pond / Best Bloom / Best Wildlife & Pond / Best Waterfall / Best Pet or Child & Pond / Best Fish

Front Cover: Pink Sensation, Hardy Water Lily

Back Cover: Wanvisa, Hardy Water Lily

BUY WITH CONFIDENCE FROM THE OLDEST
AND LARGEST WATER GARDENS IN CANADA.

SINCE 1932

FOUNDED BY MONT B. MOORE [1901-1973] IN 1932

Highest Quality and Most Complete Selection

For over 85 years Moore Water Gardens has specialized in aquatic plants and is one of the most respected and trusted names in the water plant industry. Always family owned and operated, we care about what we do.

NO GARDEN IS COMPLETE WITHOUT A LILY POND

Water plants succeed under the most trying conditions, as severe heat or drought does not affect them. Once established, a mature lily pond requires little maintenance, special gardening experience is not required.

HOW TO FIND US

Phone: 519-782-4052 Fax: 519-782-3139 Email: moorewg@execulink.com

Visit our website: www.moorewatergardens.com

4683 Sunset Road, Port Stanley, ON N5L 1J4

GUARANTEE

We guarantee to provide you with strong, vigorous plant material – true to name and in good growing condition. If any plant fails to grow and we are notified during the growing season, we will replace the plant free of charge, one time only – customer to pay shipping charges only. This guarantee applies to tropical plants only when we are allowed to ship at a date considered safe for planting.

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HARDY WATER LILIES

"Canadian Grown"

Hardy water lilies are ideal for any water garden because of their perennial beauty, ease of culture, wealth of bloom, and range of colour and form. They grow readily when provided with sunlight, rich soil, warm water, and are exceptionally hardy. Their purchase may be considered a permanent investment. With reasonable care hardy water lilies can be retained for many years.

All hardy water lilies are available bare root. Many are container grown in 8" pots. These plants must be transplanted to an 18L (1 cu. ft.) container or larger, however, root disturbance is minimal in potted plants and there is no set back in growth. This is especially important for late season planting. Potted lilies are highly recommended after July 1st.

Odorata type lilies have a fast growing horizontal rhizome and require extra large planting containers (27 L or All-Purpose Tub, see page 30). They are also suitable for naturalizing.

For Planting/Transplanting Information on Hardy Water Lilies see pages 35-36.

For Overwintering Information see page 40-42.

LEGEND

-  Full Sun
-  3/4 Sun
-  Partial Shade

- S** – Small Spread is 4-5 sq. ft. of surface area
- M** – Medium Spread is 6-10 sq. ft.
- L** – Large Spread is 10-12 sq. ft.
- BR** – Bareroot

D: planting depth measured from the surface of the water to the crown of the plant

RED



'Almost Black' (Slocum)
Extremely dark red blooms. Almost black at the centre. Dark green leaves.

 M-L **D: 10-20"**
BR \$35.00 **8" Pot \$43.00**



'Attraction' (Marliac)
Large garnet red blooms, outer petals are off white. Glossy green leaves, strong growing.

 L **D: 10-24"**
BR \$30.00 **8" Pot \$38.00**



'Black Princess' (Slocum)
Deep reddish black cup shaped flowers. Dark green foliage with burgundy overtones.

 L **D: 10-20"**
BR \$35.00 **8" Pot \$43.00**



***'Burgundy Princess'** (Strawn)
Dark, cherry red flowers deepen with age. Bronze-green leaves. Available in Bareroot only.

 M **D: 10-20"**
BR \$25.00



'Charles de Meurville' (Marliac)
Plum blooms streaked with white. Green foliage.

 L **D: 10-20"**
BR \$30.00 **8" Pot \$38.00**



'Escarboucle' (Marliac)
Magnificent deep crimson flowers. Strong, green foliage.

 L **D: 10-20"**
BR \$30.00 **8" Pot \$38.00**



'Gloriosa' (Marliac)
Profuse, bright crimson flowers. Free blooming. Bronze green leaves.

 M **D: 10-20"**
BR \$30.00 **8" Pot \$38.00**



'James Brydon' (Dreer)
Goblet shaped rose red flowers. Leaves are bronze green.

 M **D: 10-20"**
BR \$30.00 **8" Pot \$38.00**

*NOTE: This type of lily has a fast growing horizontal rhizome and requires extra large planting container (27L). They are also suitable for naturalizing.

HARDY WATER LILIES cont'd



'Laydekeri Fulgens' (Marliac)
Very prolific, deep red blooms often outnumber the dark green leaves.

● M D: 6-18"
BR \$30.00 8" Pot \$38.00



'Perry's Baby Red' (Slocum)
Profuse small dark red cup shaped flowers. Shiny green leaves.

● S D: 6-18"
BR \$30.00 8" Pot \$38.00



'Rembrandt' (Marliac)
Full cup shaped garnet blooms with pink sepals. Coppery green leaves. Tolerates some shade.

● L D: 10-24"
BR \$30.00 8" Pot \$38.00



'Steven Strawn' (Strawn)
Bright apple red flowers are cup shaped. Glossy mottled foliage.

● L D: 10-20"
BR \$30.00 8" Pot \$38.00

CHANGEABLE/AUTUMN



'Sultan' (Marliac)
Large cherry red cup shaped blooms. Strong, large green leaves. Does well in deep water.

● L D: 10-24"
BR \$30.00 8" Pot \$38.00



'Comanche' (Marliac)
Changes from apricot yellow to copper red. Flecked leaves, strong grower and bloomer.

● L D: 10-24"
BR \$30.00 8" Pot \$38.00



'Indiana' (Marliac)
Small flowers change from peach to deep orange-red. Free bloomer. Mottled leaf pattern.

● S D: 6-18"
BR \$30.00 8" Pot \$38.00



'Little Sue' (Strawn)
Pointed petals change from light to reddish-orange. Speckled bronze leaves.

● S D: 6-18"
BR \$30.00 8" Pot \$38.00

PINK



'Robinsoniana' (Marliac)
Very bright, deep orange-red blooms. Dark green leaves have purple mottling and red undersides.

● M D: 10-20"
BR \$30.00 8" Pot \$38.00



'Sioux' (Marliac)
Pointed petals change from orange-yellow to deep orange-red. Leaf flecked with chocolate.

● M-L D: 10-20"
BR \$30.00 8" Pot \$38.00



***'Arc en Ciel'** (Marliac)
Pinkish white flowers. Leaves are variegated pink, white, and bronze.

● M D: 10-20"
BR \$30.00 8" Pot \$38.00



***'Firecrest'**
Bright pink with fiery orange stamens. Greenish purple leaves. Good for naturalizing.

● L D: 10-24"
BR \$30.00 8" Pot \$38.00



***'Fire Opal'** (Slocum)
Bright pink double blooms. Greenish purple leaves. Good for naturalizing.

● L D: 10-24"
BR \$35.00 8" Pot \$43.00



'Hollandia' (Marliac)
Outstanding large double pink blooms, 6-8" across. Large green leaves.

● L D: 10-20"
BR \$30.00 8" Pot \$38.00



'Joanne Pring' (Pring)
Deep pink blooms, 2-3" across are held above the water. Lightly mottled leaves.

● S D: 6-12"
BR \$30.00 8" Pot \$38.00



'Marliac Carneia' (Marliac)
Vanilla scent. Light shell pink. Good bloomer, vigorous grower. Strong green leaves.

● L D: 10-20"
BR \$30.00 8" Pot \$38.00

HARDY WATER LILIES *cont'd*

PINK



'Mary' (Strawn)
Unique reddish pink blooms with white outer petals. Open early in the morning. Dark green leaves with purple touches.

● M-L D: 10-20"
BR \$30.00 8" Pot \$38.00



'Masaniello' (Marliac)
Cup shaped rose pink blooms held well above the water. Large and fragrant. Green foliage.

● M-L D: 10-20"
BR \$30.00 8" Pot \$38.00



***'Mayla'** (Strawn)
Magnificent double petalled hot pink. Contrasting leaves are greenish purple.

● L D: 10-20"
BR \$35.00 8" Pot \$43.00



'Mme Wilfron Gonnere' (Marliac)
Soft double pink blooms. An old favourite. Lush green leaves.

● M D: 10-18"
BR \$30.00 8" Pot \$38.00



'Norma Gedye' (Gedye)
Semi double flowers are a pleasing rose pink. A good bloomer. Abundant green foliage.

● M-L D: 10-20"
BR \$30.00 8" Pot \$38.00



***'Pearl of the Pool'** (Slocum)
Bright pink blossoms. Round green leaves. Naturalizes readily.

● M-L D: 10-20"
BR \$30.00 8" Pot \$38.00



***'Peter Slocum'** (Slocum)
Large silvery soft pink fragrant flowers. Foliage is green.

● L D: 10-20"
BR \$30.00 8" Pot \$38.00



'Pink Grapefruit' (Strawn)
Peachy pink blooms stand glowing above the water. Leaves are uniquely mottled. Fragrant and prolific.

● L D: 10-20"
BR \$35.00 8" Pot \$43.00



'Pink Sensation' (Slocum)
Glowing rich pink, good bloomer. Green leaves have reddish undersides. Outstanding, one of the very best pinks.

● L D: 10-20"
BR \$30.00 8" Pot \$38.00



NEW 'Purple Fantasy' (Florida Aquatic Nurseries)
A hardy purple water lily! These bright purple/fuchsia flowers and the deep green pads makes for a real eye catcher and will be the talking point of any pond. In the past, only Tropical lilies exhibited this purple colour. Not so with the hardy Purple Fantasy! PATENT# PP26530

● M
BR \$85.00

NEW



'Yuh Ling' (Strawn)
Deep pink flowers with dark yellow centres. Large reddish green leaves.

● M-L D: 10-20"
BR \$30.00 8" Pot \$38.00

*NOTE: This type of lily has a fast growing horizontal rhizome and requires extra large planting container (27L). They are also suitable for naturalizing.

HARDY WATER LILIES cont'd

PEACH



'Barbara Dobbins' (Strawn)
Peach flowers held above water. Large mottled leaves. Give extra winter care.

● L D: 10-20"
BR \$30.00 8" Pot \$38.00



'Wanvisa' Best New Waterlily 2010 – International Water Gardening Society This very unique hardy waterlily was discovered by Dr. Nopchai Chansilpa in Thailand. Flowers are dark salmon peach with yellow streaks on the petals. This trait has never been seen before in a hardy lily. Another unique feature is that occasionally flowers are produced with some bright yellow petals, or completely yellow. The leaves are rich chocolate-bronze with green mottling. A compact vigorous grower. Give extra winter care.

● L D: 10-24"
BR \$35.00 8" Pot \$43.00



'Colorado' (Strawn)
Salmon pink flower held above the water. Leaves are mottled. Give extra winter care.

● L D: 10-20"
BR \$30.00 8" Pot \$38.00



'Peach Glow' (Strawn)
Large fragrant peach-yellow blooms with abundant petals, held well above the water. Free flowering.

● L D: 10-24"
BR \$35.00 8" Pot \$43.00



'Peaches and Cream' (Slocum)
Peony shaped peach pink outer petals, and creamy yellow inner petals. Fragrant.

● L D: 10-24"
BR \$35.00 8" Pot \$43.00



'Starbright' (Strawn)
Slender peach white petals with pink sepals. Green leaves with burgundy mottling.

● M D: 10-20"
BR \$35.00 8" Pot \$43.00

WHITE



'Gladstone' (Richardson)
Large pure white blooms, 6-8" across. Robust green leaves.

● L D: 10-24"
BR \$30.00 8" Pot \$38.00



'Gonnere' (Marliac)
Huge fully double white flowers resemble a snowball. Dark green leaves.

● M D: 6-18"
BR \$35.00 8" Pot \$43.00



'Hal Miller' (Miller)
Large creamy white. Olive green leaves are reddish underneath. Give extra winter care.

● M-L D: 10-20"
BR \$30.00 8" Pot \$38.00



'Marliac White' (Marliac)
Fragrant, sparkling white, excellent bloomer. Shiny, dark green leaves.

● M-L D: 10-20"
BR \$30.00 8" Pot \$38.00



'Virginialis' (Marliac)
Largest, semi double snow white flower. Glossy green foliage. Long blooming season.

● L D: 10-20"
BR \$30.00 8" Pot \$38.00



'White Laydekeri' (Marliac)
Small white cup shaped flowers with deep yellow centres. Leaves are dark green.

● S D: 6-12"
BR \$35.00 8" Pot \$43.00

HARDY WATER LILIES *cont'd*

YELLOW



'Carolina Sunset' (Slocum)
Huge yellow with a peachy glow. Large mottled leaves. Give extra winter care.

● XL D: 10-20"
BR \$35.00 8" Pot \$43.00



'Charlene Strawn' (Strawn)
Prolific, fragrant yellow held above the water. Shiny mottled leaf. Give extra winter care.

● L D: 10-20"
BR \$30.00 8" Pot \$38.00



'Chromatella' (Marliac)
Reliable bloomer, canary yellow flowers. Splotches of reddish brown on foliage.

● M-L D: 10-20"
BR \$30.00 8" Pot \$38.00



'Denver' (Strawn)
Full white flowers with a hint of peach. Foliage has red tinted edges. Give extra winter care.

● S-M D: 6-18"
BR \$30.00 8" Pot \$38.00



'Lemon Chiffon' (Strawn)
Double ball shaped lemon yellow blooms. Lush, flecked leaves.

● M-L D: 10-20"
BR \$30.00 8" Pot \$38.00



'Moorei' (Adelaide Botanic Gardens)
Yellow cup shaped blooms, strong grower. Leaf flecked with brown.

● L D: 10-24"
BR \$30.00 8" Pot \$38.00



'Pygmy Helvola' (Marliac)
Free flowering mini 1½" yellow blooms. Leaf mottled with purple.

● XS D: 4-8"
BR \$30.00 8" Pot \$38.00



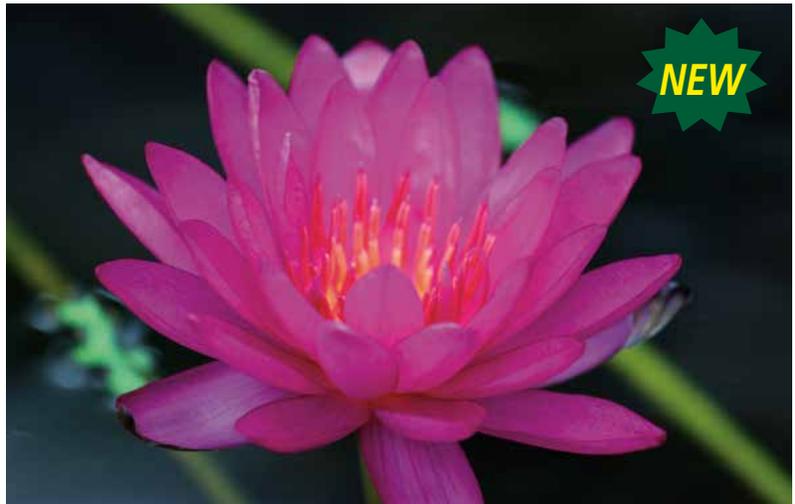
'Sunrise' (Marliac)
Sulphur yellow blooms held above water. Leaf speckled with brown. Give extra winter care.

● L D: 10-20"
BR \$30.00 8" Pot \$38.00



'Texas Dawn' (Landon)
Pinkish yellow fragrant flowers, an excellent bloomer. Richly mottled foliage. Give extra winter care.

● L D: 10-20"
BR \$30.00 8" Pot \$38.00



NEW Hardy Water Lily Purple Fantasy

TROPICAL WATER LILIES

Purchase Day Blooming and Night Blooming tropical lilies to enjoy around the clock blooms.

Tropical water lilies should be treated as **annuals**. Tropical water lilies have huge flowers (up to 12" across); their perfume permeates throughout the entire garden. They also have more blooms and a longer blooming season than hardy varieties. Day blooming tropical lilies open from midmorning until late afternoon and Night blooming lilies open at dusk and close mid morning when the sun is bright. However, night bloomers may remain open on cloudy days. **Plants are shipped in 5" pots, ready to transplant into 18L (1 cu. ft.) container or larger**, so there is little, if any, setback.

Tropical water lilies are **not shipped until June** when the water has warmed to about 20°C (70°F). Cold water is likely to cause the young plants to become dormant.

Tropical water lilies should be grown at a depth of 6-8". Both day and night bloomers require full sun.

For Planting/Transplanting Information on Tropical Water Lilies see page 35.

For Overwintering Information see page 41.

When ordering, please specify:

1. Day Blooming or Night Blooming Lily
2. Colour (see below for colours)
3. Size

Note: All night bloomers have a large spread (16-25 sq. ft.). Most day bloomers have a medium to large spread (12-25 sq. ft.) Dwarf varieties (5-10 sq. ft.) are only available in light blue.

Day Bloomers – 6" Pot \$67.00



Autumn

Dark Blue

Yellow

Blue



Purple

Pink

White

Red

Night Bloomers – 6" Pot \$67.00



LOTUS

Lotus, sacred flower of the Hindus, produces round aerial leaves that stand 18" to 4' above the water. The exotic fragrant blossoms produce the unusual seed pod seen in many flower arrangements.

Lotus require many weeks of sunny, warm weather, large containers and rich soil in order to bloom well, although they are **HARDY to Zone 5**. Sometimes they produce only aerial leaves in their first year. They will spread rapidly in natural ponds if planted deep enough to protect the rhizome from freezing.

We ship bare root rhizomes (which resemble bananas) from mid April to late May. Lotus in 27L (3/4 bu.) containers are available throughout the season (**pick up only**).

A water depth of 1-2" over the soil line is ideal in spring. As growth becomes established, water depth may be increased to 3-10".

NOTE: Supply is always limited and orders are filled in the order in which they are received. Please allow for substitutions. Lotus rhizomes are sometimes difficult to get established. Please handle carefully and follow directions closely.

*****Lotus Guarantee:** Due to the sensitivity of the lotus plant, **Moore Water Gardens must be notified if the plant does not grow within the growing season, NO EXCEPTIONS.**

***** We will replace the plant free of charge, one time only – customer to pay shipping charges.**

For Planting/Transplanting Information on Lotus see page 36.

For Overwintering Information see page 41.



Full Sun

H – height

D: depth from the top of the pot to the surface of the water

Bare root – \$36.00 Container Grown – \$79.99



Asiatic
Nelumbo alba grandiflora
Large, purest white, cup shaped, fragrant.



Chawan Basu
Nelumbo 'Chawan Basu'
White blooms, pink tips. Semi-dwarf.



Green Maiden
Nelumbo 'Green Maiden'
2-3" Flowers change soft pink to pale yellow. Good for tub gardens. Dwarf.



Momo Botan
Nelumbo 'Momo Botan'
Fully double rose pink blooms. Leaf 10-12" across. Dwarf.

● H: 30-36"

D: 3-10"

● H: 24-30"

D: 3-10"

● H: 18-24"

D: 3-10"

● H: 18-24"

D: 3-10"



Mrs. Perry D. Slocum
Nelumbo 'Mrs. Perry D. Slocum'
Double blooms change pink to yellow. Strongest grower.

● H: 36-48"

D: 3-10"



Roseum Plenum
Nelumbo 'Roseum Plenum'
Large double deep rosy pink blooms.

● H: 36-48"

D: 3-10"



Sacred Pink
Nelumbo nucifera speciosum
Large fragrant pink flowers. Leaves up to 24" across.

● H: 36-48"

D: 3-10"

OXYGENATING PLANTS

- CONTROL ALGAE NATURALLY
- IMPROVE WATER QUALITY
- KEEP THE WATER PURE AND CLEAR
- PROVIDE SPAWNING SPACE FOR FISH
- SHELTER AND PROTECT BABY FISH

Every pool needs oxygenating plants. These plants grow under water similar to plants you see growing naturally in ponds and lakes. They absorb excess nutrients from the water and liberate oxygen during the day, which helps to clear the water and helps to prevent the growth of algae that cause green water. Oxygenating plants are indispensable when fish are present, as they set up a balanced or natural condition of the water. They also will assist materially in raising a hatch of baby fish, as the young fish find much needed shelter and protection among the foliage.

For Planting Information on Oxygenating Plants see page 36.

☀️ 🌑 Full Sun to Partial Shade

Cuttings in a Bag – Remove from bag before placing in pond

Use 1 bag per 5-6 sq. ft. of open surface area (less for large ponds)

Aquatic Mint – (*Micromeria brownii*)

Roundish, light green leaves, aromatic.

Tropical, Zone 9. ☀️ 🌑

\$5.99 per bag, \$26.99 for 6 bags

Bacopa – (*Bacopa monnieri*)

Oval green leaves.

Tropical, Zone 9. ☀️ 🌑

\$5.99 per bag, \$26.99 for 6 bags

Cabomba – (*Cabomba carolineana*)

Glossy green, fan-like leaves.

Semi-hardy, Zone 6-7. ☀️ 🌑

\$7.99 per bag, \$35.99 for 6 bags

Elodea – (*Elodea canadensis*)

A native "anacharis". Very hardy, vigorous.

Hardy, Zone 3. ☀️ 🌑

Available after mid-May. Supply Limited.

\$6.50 per bag, \$31.99 for 6 bags

Hornwort – (*Ceratophyllum demersum*)

A fine leaved hardy oxygenator that does not require planting, merely drop in the water. Excellent for fish spawn and fry.

Hardy, Zone 5. ☀️ 🌑

\$9.50 per bag, \$42.99 for 6 bags

Ludwigia – (*Ludwigia spp.*)

Leaves are green above, reddish beneath.

Tropical, Zone 6-7. ☀️ 🌑

\$5.99 per bag, \$26.99 for 6 bags



Elodea



Cabomba



Hornwort



Vallisneria

Individual Plants

Recommended 1 plant per sq. ft. of open surface area.

Dwarf Sagittaria – (*Sagittaria subulata*)

Grass-like, vigorous.

Tropical, Zone 6-7. ☀️ 🌑

\$0.99 each, \$9.99 per dozen

Vallisneria – (*Vallisneria spp.*)

Broad green leaves. Grows up to 24" long.

Semi-hardy, Zone 6. ☀️ 🌑

\$1.70 each, \$17.00 per dozen

FLOATING PLANTS

GREAT NATURAL FILTERS – PROVIDE SHADE

These plants grow simply by floating on the water surface. They do **NOT** require planting. These plants help control algae by shading the water and utilizing dissolved nutrients that would otherwise be used by algae for growth.

 Full Sun
  3/4 Sun
  Partial Shade



Water Hyacinth
Eichhornia crassipes major
 Natural biofiltration and algae control. Spawning area for fish. Blooms occasionally.

  **Zone 9**
 \$3.99 ea, \$19.99 ½ doz, \$35.99 doz



Dwarf Water Hyacinth
Eichhornia crassipes spp.
 Ideal for small ponds. Size: approximately 4" across.

  **Zone 9**
 \$3.99 ea, \$19.99 ½ doz, \$35.99 doz



Water Lettuce
Pistia stratiotes
 Rosette of velvety blue-green leaves. Does well in partial shade.

  **Zone 9**
 \$4.50 ea, \$22.99 ½ doz, \$41.99 doz



Azolla
Azolla carolineana
 Lacey green leaves. Not usually eaten by fish. Can be invasive.

  **Zone 7**
 \$6.99 per 8 oz. portion



Botswana Wonder
Aeschynomene fluitans
 Water 'Sensitive Plant'. Bright yellow flowers. Fern-like foliage closes when touched.

  **Zone 9**
 \$5.99 each



Duckweed
Lemna minor
 Small floating leaves. Favourite food of goldfish.

  **Zone 3**
 \$5.99 per 8 oz. portion



Ivy-Leaved Duckweed
Lemna triscula
 Floats just below water surface. Good fish food and water clarifier.

  **Zone 3**
 \$5.99 per 8 oz. portion



Salvinia
Salvinia rotundifolia
 Leaves are covered with tiny hairs. Not usually eaten by fish.

  **Zone 9**
 \$6.99 per 8 oz. portion

HARDY SHALLOW WATER PLANTS

At the edge of natural ponds there is often a profusion of rushes and other marginal plants. In order to make the pool more attractive, we suggest the addition of some of these hardy varieties.

Hardy shallow water and bog plants are available bare root, 4" pots, or 8" pots. Due to the large size and weight 8" pots are available for pick up only.

Note: 4" pots must be transplanted to 8" pots or larger

LEGEND

☀ Full Sun

☀☀ 3/4 Sun

☀☀☀ Partial Shade

H – Height of Plant

D: depth measured from the surface of the water to the top of the soil

For Planting/Transplanting Information on Hardy Shallow Water Plants pages 36-37.

For Overwintering Information on Hardy Shallow Water Plants see page 40-41.



Arrowhead
Sagittaria latifolia
Three petalled white flowers on spikes. Blooms spring/summer.

H: 24-36" D: 2"
☀☀ Zone 3
4" Pot \$6.99 8" Pot \$15.99



Black Gamecock Iris
Iris louisiana 'black gamecock'
Intense purple black blooms have yellow band.

H: 36-48" D: 0-4"
☀☀ Zone 4
4" Pot \$6.99 8" Pot \$17.99



Bloody Dock
Rumex sanguineus
A rosette of lance-shaped green leaves with distinct deep red veins.

H: 12-18" D: 0"
☀ Zone 5
4" Pot \$6.99 8" Pot \$17.99



Blue Rush
Juncus glaucus
Attractive, sturdy greenish blue foliage.

H: 12-18" D: 0-2"
☀ Zone 5
4" Pot \$6.99 8" Pot \$15.99



Blue Monkey Flower
Mimulus ringens
A native perennial, 1" blue-violet flowers, Blooms July to August, prefers damp conditions

H: 12-30" D: 0-1"
☀☀ Zone 3
4" Pot \$6.99 8" Pot \$15.99



Blue Water Iris
Iris versicolor
Elegant blue blossoms. Flowers early spring. Sword shaped leaf.

H: 24-36" D: 0-6"
☀☀ Zone 3
4" Pot \$6.99 8" Pot \$15.99



Bogbean
Menyanthes trifoliata
Pinkish white flowers. Blooms early spring. Creeping spread.

H: 6-9" D: 0-6"
☀☀ Zone 4
BR \$3.99 4" Pot \$6.99,
8" Pot \$15.99



Bulrush
Scirpus lacustris
Green cylindrical leaves produce light brown seed heads.

H: 36-60" D: 6"
☀☀ Zone 3
4" Pot \$6.99 8" Pot \$15.99

HARDY SHALLOW WATER PLANTS *cont'd*



Cattail
Typha latifolia
Tall, vertical foliage. Brown catkins in late summer.

H: 60-84" D: 0-12"
Zone 3
BR \$3.99, 8" Pot \$15.99



Cardinal Flower
Lobelia cardinalis
Vibrant red blooms in late summer to fall. Attracts hummingbirds.

H: 36-48" D: 0"
Zone 5
4" Pot \$7.25 8" Pot \$17.99



Colorific Iris
Iris louisiana 'colorific'
Blooms are reddish-purple and white with graceful, narrow green foliage.

H: 30" D: 0-4"
Zone 4
4" Pot \$7.25 8" Pot \$17.99



Corkscrew Rush
Juncus effusus 'spiralis'
Unusual coiled green foliage. Used in flower arrangements.

H: 18-24" D: 0"
Zone 5
4" Pot \$6.99 8" Pot \$16.99



Dwarf Cattail
Typha laxmannii
Vertical green foliage. Plump catkins in late summer.

H: 36-48" D: 0-6"
Zone 3
4" Pot \$6.99 8" Pot \$15.99



Floating Heart
Nymphaoides peltata
Bright yellow flowers. Small lily-like leaves. Blooms spring to fall.

H: 0" D: 6-10"
Zone 5
BR \$3.99 4" Pot \$6.99
8" Pot \$15.99



Gold Strike Rush
Juncus effusus 'Gold Strike'
Dark green with vertical golden stripe.

H: 18-24" D: 0-2"
Zone 5
4" Pot \$6.99 8" Pot \$16.99



Golden Creeping Jenny
Lysimachia nummularia 'Aurea'
Groundcover, golden leaves and yellow flowers.

H: 3" D: 0"
Zone 5-6
4" Pot \$6.99 8" Pot \$15.99



Graceful Cattail
Typha angustifolia
Tall, slender leaves. Narrow brown catkins in late summer.

H: 72-96" D: 0-6"
Zone 3
4" Pot \$6.99 8" Pot \$15.99



Hardy Water Thalia
Thalia dealbata
Spikes of tiny purple flowers in late summer. Bold blue-green leaves.

H: 36-48" D: 0-6"
Zone 5-6
BR \$11.99 5" Pot \$16.99
8" Pot \$18.99



Horsetail
Equisetum hyemale
Leafless green stems. Distinctive brown joints. Brownish flower cone.

H: 24-36" D: 0-2"
Zone 4
4" Pot \$6.99 8" Pot \$15.99



Houttuynia 'Chameleon'
Houttuynia cordata variegata
Variegated red, cream and green groundcover.

H: 12" D: 0"
Zone 6
4" Pot \$6.99 8" Pot \$15.99

HARDY SHALLOW WATER PLANTS cont'd



Leatherleaf Sedge
Carex buchananii
Coppery bronze leaves grow in dense clumps.

H: 18-24" D: 0"
 Zone 6
 4" Pot \$6.99 8" Pot \$15.99



Lizard's Tail
Saururus cernuus
White fragrant flower heads in summer. Heart shaped leaves.

H: 24-36" D: 0-2"
 Zone 4
 4" Pot \$6.99 8" Pot \$15.99



Mare's Tail
Hippuris vulgaris
Native plant with unbranched stems. Unique green foliage throughout growing season.

H: 8-18" D: 8-24"
 Zone 3
 4" Pot \$6.99 8" Pot \$15.99



Marsh Marigold
Caltha palustris
First to bloom in spring. Buttercup yellow clusters. April 15 - May 15 only.

H: 8-12" D: 0"
 Zone 4
 4" Pot \$6.99 8" Pot \$15.99



Mentha Aquatica
Mentha aquatica
Lavender-pink flowers. Blooms late summer. Very aromatic foliage.

H: 8-12" D: 0-2"
 Zone 5
 3 stems \$2.99 4" Pot \$6.99
 8" Pot \$15.99



Needle Rush
Eleocharis montevidensis
Dense tufts of quill-like leaves.

H: 8-12" D: 0-2"
 Zone 5
 4" Pot 6.99 8" Pot \$15.99



Pickerel Rush
Pontederia cordata
Clusters of blue flowers held above the lance shaped green leaves.

H: 24-36" D: 2-6"
 Zone 4
 4" Pot \$7.50 8" Pot \$17.99



Ribbon Grass
Phalaris arundinacea sp.
Striped green and white foliage. Does well wet or dry.

H: 18-24" D: 0"
 Zone 4
 4" Pot \$6.99 8" Pot \$15.99



Sagittaria Lorata
Sagittaria lorata
Spikes of tiny white flowers in summer. Narrow green leaves.

H: 12-18" D: 0-2"
 Zone 5
 4" Pot \$6.99 8" Pot \$15.99



Spearwort
Ranunculus lingua grandiflora
Buttercup yellow blooms. Blooms all summer.

H: 24-36" D: 2-6"
 Zone 4
 4" Pot \$6.99 8" Pot \$15.99



Sweet Flag
Acorus calamus
Green sword shaped leaves, aromatic when crushed.

H: 24-36" D: 0-2"
 Zone 4
 4" Pot \$6.99 8" Pot \$15.99



Variegated Cattail
Typha latifolia variegata
Variegated leaves of green and cream all season. Catkins in late summer.

H: 36-48" D: 0-8"
 Zone 4
 4" Pot \$7.50 8" Pot \$17.99

HARDY SHALLOW WATER PLANTS cont'd



Variegated Sweet Flag
Acorus calamus variegatus
Sword-like foliage lined with white. Striking.

H: 24-36" D: 0-2"
  Zone 4
 4" Pot \$7.25 8" Pot \$17.99



Variegated Water Celery
Oenanthe javanica 'Flamingo'
Pink, green, white leaf. Excellent natural filter.

H: 12-18" D: 0-2"
  Zone 5
 4" Pot \$6.99, 8" Pot \$15.99



'Pond Ready' Variety Pots

Containing a tall centre "thrill" plant, shorter "fill" plants and low or "spill" plants, they provide an instant display for pond shelves and patio ponds. Selections will include all hardy plants or a combination of hardy and tropical plants.
Pick up only 8" Pot \$24.99



Water Cress
Radicula nasturtium aquaticum
Edible dark green leaves. Prefers moving water.

H: 6-9" D: 0-2"
  Zone 4-5
 4" Pot \$6.99 8" Pot \$15.99



Water Forget-Me-Not
Myosotis scorpioides
Dainty blue flowers. Blooms spring to fall. Clip for regular bloom.

H: 6-9" D: 0"
  Zone 4
 4" Pot \$6.99 8" Pot \$15.99



Water Plantain
Alisma plantago aquatica
Pinkish white flowers on tall stems in summer.

H: 24-36" D: 2-6"
  Zone 5
 4" Pot \$6.99 8" Pot \$15.99



White Rush
Scirpus albescens
Vertical green/white stripes. Maintains colour throughout the season.

H: 36-48" D: 2-6"
  Zone 5
 4" Pot \$7.25 8" Pot \$17.99



Yellow Monkey Flower
Mimulus luteus
Yellow flowers with reddish painted faces resembling a monkey.

H: 12-18" D: 0"
  Zone 6
 4" Pot \$6.99 8" Pot \$15.99



Yellow Water Iris
Iris pseudacorus
Large yellow flowers. Blooms in early spring. Sword shaped leaves.

H: 36-48" D: 2"
  Zone 4
 4" Pot \$6.99 8" Pot \$15.99



Zebra Rush
Scirpus tabernaemontani
Horizontal bands of green and white, provide strong contrast.

H: 36-48" D: 2-6"
  Zone 4-5
 4" Pot \$7.50 8" Pot \$17.99



Zebra Tails
Typha angustifolia 'Zebra tails'
New leaves start out green and develop creamy variegation as they mature.

H: 48-60" D: 0-3"
  Zone 5
 4" Pot \$6.99 8" Pot \$17.99

TROPICAL SHALLOW WATER PLANTS

The inclusion of shallow water plants will greatly enhance the appearance of the pool. Ledges or raised planters may be used to meet the depth requirements of the plants. Many of the tropical varieties listed here may be kept indoors as houseplants during the winter. Others should be treated as annuals.

Tropical shallow water and bog plants are available in 4" pots, and a few are available bare root or in 8" pots. Due to the large size and weight 8" pots are available for pick up only.

Note: 4" pots must be transplanted to 8" pots or larger

LEGEND

-  Full Sun
-  3/4 Sun
-  Partial Shade

H – Height of Plant

D: depth measured from the surface of the water to the top of the soil

For planting/transplanting information on Tropical Shallow Water Plants see page 36-37.

For overwintering information on Tropical Shallow Water Plants see page 41-42.

CANNA



African Sunset Canna
Canna spp.
Variegated burgundy, pink, green and yellow. Broad orange flower.

H: 36-48" D: 0-2"
 Zone 9
4" Pot \$12.99 8" Pot \$24.99



Australia Canna
Canna spp.
Burgundy red foliage with faint green striping & reddish orange flowers.

H: 48-60" D: 0-2"
 Zone 9
4" Pot \$12.99 8" Pot \$24.99



Bengal Tiger Canna
Canna x 'Pretoria'
Boldly striped yellow and green foliage. Broad orange flower.

H: 36-48" D: 0-2"
 Zone 9
4" Pot \$12.99, 8" Pot \$24.99



Black Knight Canna
Canna spp.
Dark green leaves with burgundy overtones. Deep velvety red bloom.

H: 36-48" D: 0-2"
 Zone 9
4" Pot \$12.99, 8" Pot \$24.99



Lemon Punch Canna
Canna sp
Vivid lemon yellow flowers on a compact plant. Very profuse bloomer with green foliage

H: 24-36" D: 0-2"
 one 9
4" Pot \$12.99 8" Pot \$24.99



Longwood 'Erebus'
Canna glauca hybrid
Narrow petals are delicate peach pink. Bluish green foliage. A true water canna.

H: 48-60" D: 0-6"
 Zone 9
4" Pot \$12.99 8" Pot \$24.99



NEW Maui Punch Canna
Canna spp
Large yellow / gold flowers spotted with bright orange / red. Long blooming season.

H: 24-36" D: 0"
 Zone 9
4" pot \$12.99 8" pot \$24.99



Orange Punch Canna
Canna spp.
Very bright orange flowers with yellow spots and green foliage. Eyecatching.

H: 24-36" D: 0-2"
 Zone 9
4" Pot \$12.99 8" Pot \$24.99

TROPICAL SHALLOW WATER PLANTS cont'd

PAPYRUS



Pink Sunburst Canna

Canna sp

Variated foliage with yellow, pink and green. Lush pink blooms.

H: 24-36" D: 0-2"

☀️ ☀️ Zone 9

4" Pot \$12.99 8" Pot \$24.99



Stuttgart Canna

Canna x 'Stuttgart'

Green leaves with white patches. Bright orange flowers. May sunburn.

H: 48-60" D: 0-2"

☀️ ☀️ Zone 9

4" Pot \$12.99 8" Pot \$24.99



Dwarf Papyrus

Cyperus haspan

Spikey, tufted flower head turns bronze.

H: 18-24" D: 0-2"

☀️ ☀️ Zone 9

4" Pot \$10.99 8" Pot \$24.99



Little Giant Papyrus

Cyperus papyrus percametus

Sturdy stems are topped with tufted "mop heads".

H: 18-24" D: 2-6"

☀️ ☀️ Zone 9

4" Pot \$10.99 8" Pot \$24.99

TARO



Papyrus

Cyperus papyrus

Tall triangular stalks with thread-like tufted heads.

H: 48-96" D: 2-6"

☀️ ☀️ Zone 9

4" Pot \$10.99 8" Pot \$24.99



Black Coral Taro

Colocasia esculenta 'Black Coral'

Very dark, glossy ruffled leaves have distinct blue veins.

H: 36-48" D: 0-3"

☀️ ☀️ Zone 9

4" Pot \$12.99 8" Pot \$24.99



Black Magic Taro

Colocasia esculenta 'Black Magic'

Deep purple-black leaf. Dark burgundy stems.

H: 36-48" D: 0-2"

☀️ ☀️ Zone 9

4" Pot \$12.99 8" Pot \$24.99



'Black Marble' Taro

Colocasia multiflora 'Black Marble'

Distinctively mottled leaf on dark burgundy stems.

H: 36-48" D: 0-2"

☀️ ☀️ Zone 9

4" Pot \$12.99 8" Pot \$24.99



Imperial Taro

Colocasia antiquorum illustris

Violet-black blotches on green leaves. The best!

H: 36-48" D: 0-2"

☀️ ☀️ Zone 9

4" Pot \$12.99 8" Pot \$24.99



Lemon Lime Taro

Xanthosoma mafaffa

Thick, rich, golden yellow leaves. Ideal for small pools & tubs.

H: 12-28" D: 0"

☀️ ☀️ Zone 9

4" Pot \$12.99 8" Pot \$24.99



Mojito Taro

Colocasia esculenta 'Mojito'

The large green leaves are strongly splattered with contrasting dark purple. Very unusual.

H: 36-48" D: 0-2"

☀️ ☀️ Zone 9

4" Pot \$12.99 8" Pot \$24.99



Red Stem Taro

Colocasia spp.

Blue-green leaves on tall purple-red stems.

H: 36-48" D: 0-2"

☀️ ☀️ Zone 9

4" Pot \$12.99 8" Pot \$24.99

TROPICAL SHALLOW WATER PLANTS cont'd



Rhubarb Taro
Colocasia esculenta 'Rhubarb'
Velvety green leaves with vibrant, red stems.

H: 36-48" D: 0-2"
 Zone 9
 4" Pot \$12.99 8" Pot \$24.99



Dwarf Parrot Feather
Myriophyllum papillosum var. *pulcherrima*
Feathery foliage on trailing red stems.

H: 4" D: 2-6"
 Zone 6
 \$3.99 per bunch
 \$8.99 for 3 bunches
 4" Pot \$10.99 8" Pot \$18.99



Parrot Feather
Myriophyllum aquaticum
Parrot Feather is no longer permitted for sale in Ontario as per the Ministry of Natural Resources regulation.

H: 4" D: 2-6"
 Zone 6



Dwarf Umbrella Palm
Cyperus alternifolius gracilis
Umbrella-like foliage on sturdy round stems.

H: 18-24" D: 0-2"
 Zone 9
 4" Pot \$10.99 8" Pot \$24.99



Umbrella Palm
Cyperus alternifolius
Umbrella-like foliage. Ideal centerpiece. Overwinter indoors.

H: 24-36" D: 0-2"
 Zone 9
 4" Pot \$10.99 8" Pot \$24.99



Azure Hyacinth
Eichhornia azurea
Purple blue flower with yellow eye, trailing variety. Must be planted.

H: 6-8" D: 6"
 Zone 9
 BR \$10.25



Dwarf Blue Bells
Ruellia brittoniana 'Katie'
Flowers all summer with bluish purple blooms.

H: 12" D: 0-2"
 Zone 8-10
 4" Pot \$11.99 8" Pot \$24.99



Four Leaf Water Clover
Marsilea mutica
Four lobed leaves. Bronze pattern on floating and aerial leaf.

H: 6" D: 2-6"
 Zone 6-7
 1" Plug \$3.99 4" Pot \$10.99
 8" Pot \$17.99



Primrose Creeper
Ludwigia sp.
Bright yellow flowers. Vine-like with shiny green leaves.

H: 6-18" D: 0-2"
 Zone 6
 \$3.25 for 3 stems



Royal Blue Pickerel Rush
Pontederia dilatata
Clusters of blue flowers held above the lance shaped green leaves.

H: 24-36" D: 2"
 Zone 8-9
 4" Pot \$10.99 8" Pot \$24.99



Red Stemmed Thalia
Thalia geniculata ruminoides
Brilliant red stems topped by dark green lance shaped leaves. Tall stalks of lavender purple flowers.

H: 6-8" D: 0-6"
 Zone 7
 5.5" Pot \$19.99



Ruby-Eyed Arrowhead
Sagittaria montevidensis
White flowers with red dot at base of petals. Blooms all summer.

H: 24-36" D: 2"
 Zone 8-9
 4" Pot \$12.99

TROPICAL SHALLOW WATER PLANTS cont'd



Water Amaranth
Alternanthera reiniekii
Narrow burgundy foliage.
Tiny pinkish white flowers.
Alone or as underplanting for tall plants.

H: 10-18" D: 0-2"
Zone 9
4" Pot \$10.99 8" Pot \$17.99



Water Pennywort
Hydrocotyle vulgaris
Round green leaves. Tufts of white blooms. Creeping plant.

H: 6-9" D: 2-6"
Zone 7
BR \$3.50 4" Pot \$10.99



Water Poppy
Hydrocleys nymphoides
Pale yellow flowers. Shiny green leaves. Blooms all summer.

H: 4-6"
BR \$5.25



White Arum Lily
Zantedeschia spp.
White spathe flower. Spring bloomer. Heart shaped leaves.

D: 6" H: 18-24"
Zone 9
4" Pot \$10.99 8" Pot \$24.99



Yellow Snowflake
Nymphoides geminata
Yellow fringed bloom.
Mottled lily-like leaves float on surface.

H: 0" D: 6-8"
Zone 6-7
BR \$6.99 4" Pot \$10.99



Zephyr Lily
Zephranthes candida
Beautiful white flower. Grass like foliage. Blooms in mid-summer.

H: 6-9" D: 0-2"
Zone 8
4" Pot \$10.99



POND READY VARIETY 8" POTS

Containing a tall centre "thrill" plant, shorter "fill" plants and low or "spill" plants, they provide an instant display for pond shelves and patio ponds.
Available for Store Pick-up only.

8" Pot \$24.99

PLANTING CHARGES

To ensure optimum growth we encourage transplanting into an appropriate-sized container. D.I.Y. or take advantage of our increasingly popular planting service making your purchase 'pond-ready'.

Planting service includes Fafard Water Garden Soil, Trico Fertilizer, a layer of Pebble Stone and our staff expertise. Containers are sold separately.

5" to 10" pot \$5.00, #5 tub, #7 tub or Roseanne Marginal Container \$12.00, All Purpose Tub \$18.00, Super Tub \$29.00.

DIVIDING CHARGES

FREE DIVIDING SERVICE IS PROVIDED ON SATURDAY, APRIL 22 & SATURDAY, APRIL 29, 2017 ONLY. At other times there is a charge for dividing plants, by appointment only. Planting, if required, is extra. Advice and information is always gladly provided at no charge!!

\$10.00 per tub/container

GIFT CERTIFICATE

Ideal Christmas or Birthday gifts.

May be applied to the purchase of any plants or products listed in our catalogue.

Be sure to specify recipient's name and value of gift certificate.

Non-taxable

SCAVENGERS

Snails will feed on algae on the sides of the pond and pots. Melanthis snails are often seen feeding across the surface of the water. Snails do **NOT** clear green water. Snails will usually overwinter in the pond.

Tadpoles are active in devouring organic matter and green algae. Will develop into frogs by summer. Available only in late spring. A fun addition to your pond. **PICK-UP ONLY!**



Melanthis Snails
Prolific egg layers. Very hardy snails.
\$0.99 each, \$9.99 per dozen

NOTE: Due to recent government regulations Trapdoor Snails are no longer available.



Green Frog Tadpoles
Rana clamitans
3 for \$12.00

FISH



2010 Photo contest entry by Tracy Zubrig

We offer a wide variety of fish. Our selection includes Comets, Fantails, Calico Fantails, Shubunkins, Black Moors, Orandas, and Koi. Priced according to variety and size. Call ahead for availability. Fish must be picked up at our facility.

For Stocking and Feeding Information see page 37.

For Overwintering Information see page 42.

FISH FOOD

If fish are fed regularly at the edge of the pool they will become tame and approach visitors, adding a touch of life and increasing the attractiveness of the water garden. Feed Spring & Fall food when water temperatures are between 10°C, 50°F and 15°C, 60°F. **DO NOT OVERFEED.**

For Feeding information see page 37.



TETRA POND FLOATING POND STICKS
An ideal maintenance diet that provides nutrition for energy, longevity, and overall health for Goldfish and Koi.

100 g	\$7.99
780 g	\$32.99
1.68 kg	\$56.99
3 kg bag	\$88.99



TETRA POND FLOATING KOI VIBRANCE
A highly nutritional diet that brings out vibrant reds and yellows on Koi and ornamental Goldfish.

140 g	\$8.99
1.1 kg	\$37.99
2.35 kg	\$68.99
7.5 kg bulk	\$179.99



CRYSTALCLEAR® STAPLE KOI & POND FISH FOOD

CrystalClear® Staple floating fish food contains a balanced nutritional formula for all pond fish. This balanced blend of vitamins, minerals and amino acids are perfect for everyday feeding during the warmer months. CrystalClear® contains a minimum of 32% protein. Softens Fast for Easy Digestion.

1 lb	\$12.99
2.2 lbs	\$19.99
8.8 lbs	\$54.99



TETRA POND SPRING AND FALL DIET
Recommended for spring and fall feeding, contains wheatgerm (Optimum metabolic efficiency).

780 g	\$37.99
1.4 kg	\$65.99



TETRA POND FLAKED FISH FOOD
The primary meal for small goldfish and Koi. Its easy digestibility helps your pond water to stay clean and clear.

180 g	\$11.99
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FLOATING PELLET FISH FOOD
Suitable for Goldfish and Koi.
Small (~3.0 mm) or
Large (~5.0 mm) pellet sizes
Mixed – a 50/50 combination of small and large pellets. For ponds with both large and small fish

500 g	\$8.25
2.0 kg	\$14.99
4.0 kg	\$23.99



CRYSTALCLEAR® WHEATGERM FISH FOOD

CrystalClear® WheatGerm floating fish food is designed for the cooler months of the year. This wheat germ formula is easily digestible and perfect for transitioning koi and goldfish into and out of the colder months. CrystalClear® WheatGerm contains a minimum of 28% protein.

2.2 lbs	\$29.99
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FISH MEDICATION

Prevention of Fish Ailments Good water quality is essential for having happy and healthy pond fish. This is achieved by doing regular partial water changes especially in spring, avoiding overfeeding, using extreme care when applying any pesticides or herbicides to the lawn and garden. Large fish populations may benefit from the addition of a biofilter system. Ideally, new fish should be quarantined before adding to the pond.

Fish Problems? See page 43 for help.



POND CARE MELAFIX®

All natural antibacterial derivative of the leaves from the melaluca tree. Treats ulcers, wounds, damaged fins, fin and tail rot. Safe for snails, invertebrates and plants. Will not affect biofilters or alter pH. Use when adding new fish to the pond. Highly recommended.

16 oz / 473 ml – treats 4,800 US gallons **\$22.99**
 64 oz / 1.89 L – treats 19,000 US gallons **\$76.99**

POND CARE PIMAFIX®

All natural formula rapidly treats fungal infections on body and fins, and internal and external bacterial infections. Pimafix works in combination with Melafix to increase effectiveness against fish diseases.

16 oz / 473 ml – treats 2,400 US gallons **\$23.99**
 64 oz / 1.89 L – treats 9,600 US gallons **\$80.99**



TETRA POND FISH TREATMENT

Destroys parasites, bacteria and fungus and helps control "ick"
 Contains formaldehyde
500ml – 16.9 oz
 treats 2,500 US gallons **\$27.99**



POND CARE MASTER LIQUID TEST KIT

Material and instructions for testing pH, ammonia, nitrite, and phosphate
\$35.99

POND WATER TREATMENTS

Many pond water treatments are available on the market today. We feel it is important to attempt to balance your pond naturally by planting and stocking according to basic guidelines. Pond requirements will change seasonally and with maturity. We have listed some products that have proved effective in helping to remedy common problems, while seeking to achieve a natural balance. Safe for all aquatic and domestic animals.

USE EXACTLY AS DIRECTED. Most effective when pond water temperature is above 15°C, 60°F.

STRING ALGAE REMOVER

INTERPET POND BALANCE

Combats string algae by gradually adjusting pond's water chemistry. Safe for fish, plants, and pond life. Three treatments are recommended.

Standard 250 g
 treats 1,800 gallons **\$19.99**
Supervalue 500 g
 treats 3,600 gallons **\$34.99**
Medium 1.5 kg
 treats 10,800 gallons **\$69.99**
Large 9.34 kg (pail)
 treats 67,000 gallons **\$309.99**



CRYSTALCLEAR® D- SOLV

D-Solv is excellent for removing string algae and scum from waterfalls, streams and rocks. The ideal 'spot cleaner'! D-Solv uses oxygen power and of course, is non-toxic to fish.

2 lbs. – treats 800 sq ft \$24.99
10 lbs. – treats 4,000 sq ft \$69.99



WATER CLARIFIERS



MICROBE-LIFT PL

Speeds the removal of all organic waste matter in ponds by adding a select group of microbes that increase the rate of organic breakdown and improve filter performance.

16 oz – Treats 80 gal. pond for 11 months or 200 gal. pond for 8 months **\$22.99**
 32 oz – Treats 500 gal. pond for 11 months or 1,000 gal. pond for 8 months **\$29.99**



CRYSTALCLEAR® BIOLOGICAL CLARIFIER™

A bacteria and enzyme formulation to naturally help to clear water, remove odours and break down suspended debris and decaying leaves. Resulting reduced ammonia levels help to improve dissolved oxygen levels. Easy-to-use water soluble packets. Use when water temperatures are above 10°C / 50°F. Apply weekly or as needed. Safe for all aquatic life.

6 packets – treats 500 gallons for up to 4 months	\$19.99
12 packets – treats 1,000 gallons for up to 4 months	\$29.99
24 packets – treats 2,000 gallons for up to 4 months	\$46.99
96 packets – treats 6,000 gallons for up to 4 months	\$159.99

CRYSTALCLEAR® CLARITYMAX™

Designed to maintain clear water, ClarityMax™ helps to break down organic materials on and around waterfalls, streams, plant pots and filtration systems. It uses a powerful combination of activated barley, natural bacteria and enzymes to help reduce excessive nutrients that contribute to organic growth. Use when water temperatures are above 10°C / 50°F. Apply weekly or as needed. Safe for all aquatic life.



1.0 lb – treats 500 gallons for up to 4 months	\$28.99
2.5 lbs – treats 1,250 gallons for up to 4 months	\$69.99
6.0 lbs – treats 3,000 gallons for up to 4 months	\$145.99

CRYSTALCLEAR® ONEFIX™

Fast-acting OneFix™ utilizes natural bacteria to digest suspended organics. This helps to keep the pond balanced and clear. Use when water temperatures are above 10°C / 50°F. Apply weekly or as needed. Safe for all aquatic life.



8 oz – treats 125 gallons for up to 4 months	\$9.99
16 oz – treats 250 gallons for up to 4 months	\$19.99
32 oz – treats 500 gallons for up to 4 months	\$19.99
64 oz – treats 1,000 gallons for up to 4 months	\$34.99

CRYSTALCLEAR® POND TINT™

Pond Tint is a non-toxic pond dye used to reduce algae photosynthesis occurring within the pond. Shaded pond water stays clearer, provides safety for fish from predators and keeps water cooler during hot summer months. Now available in two colours. Safe for plants and fish.



Blue 16 oz – treats 16,000 gallons	\$14.99
Nite (Deep Blue) 16 oz – treats 16,000 gallons	\$14.99

CRYSTALCLEAR® RAPICLEAR™

RapiClear™ is a flocculant that clears water quickly and safely by coagulating suspended organic particles. The organics form clumps which fall to the bottom where they can be vacuumed out or removed from the pond by filtration. Safe for plants and fish. Apply weekly or as needed.



16 oz – treats 16,000 gallons for up to 4 months	\$15.99
32 oz – treats 32,000 gallons for up to 4 months	\$25.99
64 oz – treats 64,000 gallons for up to 4 months	\$46.99
128 oz – treats 128,000 gallons for up to 4 months	\$89.99

CRYSTALCLEAR® SPRING & FALL PREP

Designed to replenish winter bacterial loss and accelerate decomposition of organics with a "burst" of cool water natural bacteria and barley. Easy-to-use pre-measured water soluble packets. Safe for all aquatic life. Apply weekly during spring start-up and fall closing when water temperatures are between 4°C / 40°F and 10°C / 50°F.



6 packets – treats 1,000 gallons for up to 6 weeks	\$19.99
12 packets – treats 2,000 gallons for up to 6 weeks	\$29.99

CRYSTALCLEAR® MUCK OFF

Muck & Sludge Reducer

MuckOff tablets are designed to sink to the bottom of the pond to quickly reduce muck and sludge caused from dead algae, leaves and fish waste. MuckOff easy-to-use tablets are a blend of natural bacteria and enzymes that help clear water by removing excess nutrients and reducing sediment. Use once every four weeks when water temperatures are above 10°C / 50°F.



24 tabs – treats 4,000 gallons	\$19.99
48 tabs – treats 8,000 gallons	\$29.99
96 tabs – treats 16,000 gallons	\$46.99

POND WATER TREATMENTS *cont'd*

CRYSTALCLEAR® FOAM-B-GONE™

Foam-B-Gone™ will remove foam from water within seconds of application. Useful for fountains and statuary. Safe for fish and plants. Foam is usually caused by excessive organics present in pond water. Protein foam can be harmful and should be removed quickly.

8 oz – treats 8,000 gallons **\$9.99**



TETRA POND AQUA SAFE

Makes tap water safe for fish and plants

- Removes chlorine & chloramine
- Detoxifies heavy metals
- Provides a protective colloidcoating to protect fish gills

250 ml – treats 1,250 gallons **\$11.99**

500 ml – treats 2,500 gallons **\$20.99**

3 L – treats 15,000 gallons **\$98.99**



ENVIRONMENTALLY FRIENDLY – NATURAL SOLUTIONS

BARLEY & PEAT PRODUCTS

A Green Choice for reducing the growth of string algae in the pond. Barley and Peat Products have been used successfully for years in the U.K., and more recently in North America to control string algae growth. These products will not get rid of existing algae, but discourage the growth of additional algae in your pond. As the barley breaks down, it creates unfavourable conditions for new algae growth. It is safe for fish and plants.

For best results:

- Add in the early spring before string algae growth starts
- Locate near water flow and near the surface
- Replace with fresh material every 2-3 months

BARLEY STRAW BUNDLE

Premium certified organic barley straw. Naturally safe for all pond life. 100% Barley Straw. Inhibit the growth of string algae. Best if added in the spring before algae growth starts. Tie bag near water movement for optimum efficiency. Keep straw submerged 1-3 feet. 8oz bundle treats 1,000 gallons for a period of 3-4 months. Replace before completely disintegrated. Loose pack in mesh bag.

8 oz – treats 1,000 gallons for 3-4 months **\$9.50**



2011 Photo Contest – Dale & Laurie Curran

CRYSTALCLEAR®

NATURE'S CHOICE™ BARLEY STRAW PELLETS

Inhibit the growth of string algae. Best if added in the spring before algae growth starts. Locate near the surface and by water flow for optimum efficiency. Directions included. Barley Straw pellets in net bag remain effective in pond for 2-3 months. Emits a natural chemical to help reduce string algae growth.

2 lb bag – treats 2000 gallons for 3 months **\$22.99**

5 lb pail – treats 5000 gallons for 3 months **\$34.99**



CRYSTALCLEAR® BARLEY EXTRACT LIQUID

As barley straw slowly ferments or rots, it produces a natural extract which has been proven to clear pond water. While effective, this fermentation process has always been slow and messy requiring the barley to be added in the spring. Designed to eliminate these steps CrystalClear® Barley Extract is fermented under ideal conditions capturing the powerful, all natural barley extract, allowing it to work immediately out of the bottle with no mess. Use every two weeks.

16 oz – treats 8,000 gallons **\$19.99**

32 oz – treats 16,000 gallons **\$31.99**

64 oz – treats 32,000 gallons **\$54.99**

128 oz – treats 64,000 gallons **\$69.99**



TETRA POND BARLEY & PEAT EXTRACT

Convenient liquid releases humic acids and replaces bulky barley bales. It maintains the natural beauty of ponds and waterfalls and reduces pond maintenance by reducing the growth of string algae.

500 ml – treats 2,500 gallons **\$20.99**

FLEXIBLE POND LINER

It's What You Can't See...



That Really Counts.

Firestone



EPDM Pond Liner
45 mil

Properties: Black, 20 Year Pro-Rated Warranty, UV and Air Pollution Resistant, Flexible and Elastic, Safe for Fish



Cut to length:

Up to 100' in the following widths:
5.5', 15', 20' or 25'

Up to 50' in 30' width

\$0.89 per sq. ft.

Liners available for Pick-up or Delivery.

Note: Liners exceeding 485 sq. ft. must be shipped by Truck Freight. Please call for rates.

Shipped liners may be subject to a \$23.00 handling charge.



Geotextile Felt Underlay
Protects liner from punctures.
15' width \$0.32 per sq. ft.



EPDM Patch Tape
Easy and effective way to patch.
6" wide \$4.99 per ft.



Double-Sided Tape
For bonding two liners.
3" wide \$1.99 per ft.

Calculating the Correct Size of Liner Required

Width: Maximum Width of Pond + (2 x Maximum Depth of Pond) + 2' overlap
Length: Maximum Length of Pond + (2 x Maximum Depth of Pond) + 2' overlap
Disregard shelves when measuring

Example: Pond Size 6' x 8' x 3' deep
Width: $6 + (2 \times 3) + 2 = 14'$ Length: $8 + (2 \times 3) + 2 = 16'$ The liner size required is 15' x 16'.

For instructions on installation see page 39-40.
See page 40 for finishing edges.

PUMPS

Pumps create water movement that adds an aesthetic enjoyment to the pond and contributes to the well-being of fish. This effect can be achieved with the addition of water features such as waterfalls, fountains and piped statuary. Filtration also requires an appropriately sized pump (see filters page 28-29). Oil filled pumps are continuously lubricated by non toxic dielectric oil for exceptional life expectancy and heat dissipation.

To determine the correct pump for your pond see page 38.



FOUNTAIN PUMPS 2 Year Warranty

All Oase Fountain Pumps have an adjustable flow control to fine-tune the flow rate and pumping height. Energy efficient, low consumption. Compact design. Suction cups on bottom of pump help stabilize unit. Quiet operation. Ideal for continuous operation.



MODEL	U.S. GPH				SHUT OFF	HOSE SIZES	WATTS	CORD LENGTH	PRICE
	1'	3'	5'	10'					
90	65	--	--	--	2.8'	½", ¾"	4	6'	\$34.99
150	115	50	--	--	3.6'	½", ¾"	7	6'	\$39.99
320	280	180	75	--	6.2'	½", ¾"	23	16'	\$64.99
525	475	340	220	--	7.9'	½", ¾", 1"	42	16'	\$79.99



AQUARIUS UNIVERSAL PUMPS 2 Year Warranty

Ideal for continuous operation. Can be used in shallow water. High performance with minimal space requirements. Quiet operation.



MODEL	U.S. GPH					SHUT OFF	HOSE SIZES	WATTS	CORD LENGTH	PRICE
	1'	3'	5'	7'	10'					
800	725	620	500	350	--	9.9'	½", ¾"	60	16'	\$119.99
1400	1260	1000	750	475	--	10.2'	½", 1"	80	16'	\$179.99



AQUAMAX® ECO CLASSIC – FILTRATION PUMPS 2 Year Warranty

AquaMax Eco Classic pumps use the latest motor technology resulting in a 40% reduction in energy use over similar pumps. Built-in thermal overload and frost protection ensure that your pump will keep running throughout the years. These pumps allow for fewer clogs and better water quality with solids handling up to ¾ in. Energy efficiency and dependability are strong factors when considering the purchase of an AquaMax Eco Classic pump.



MODEL	U.S. GPH				SHUT OFF	HOSE SIZES	WATTS	CORD LENGTH	PRICE
	3'	5'	8'	12'					
1900	1450	1180	450	--	9.5'	1", 1¼", 1½"	65	20'	\$299.99
2700	2200	1740	950	--	10.8'	1", 1¼", 1½"	101	20'	\$399.99
3600	3000	2500	1800	500	13'	1", 1¼", 1½"	151	20'	\$479.99

PUMPS cont'd

To determine the correct pump for your pond see page 38.

Little GIANT PondWorks • DIRECT-DRIVE POND & STATUARY PUMPS 3 Year Warranty



OIL FREE Designed to operate continuously producing greater starting torque and more flow pressure than comparable mag-drive pumps. Pre-filters and Fountainheads available. See page 30.

MODEL	U.S. GPH				SHUT OFF	OUTLET	WATTS	CORD LENGTH	PRICE
	1'	3'	5'	10'					
PE-1F-PW #566608	170	140	100	--	7'	½"	36	15'	\$84.99
PE-2F-PW #566611	300	255	205	70	12'	½"	47	15'	\$118.99
PE-2.5F-PW #566612	475	440	395	205	13'	¾"	80	15'	\$153.99

Little GIANT PondWorks • DIRECT-DRIVE WATERFALL PUMPS 3 Year Warranty



These high flow pumps by Little Giant are excellent for filtration, waterfalls and streams. They have two outlets that allow for two water features to operate simultaneously. They can operate horizontally or vertically, and have a screened inlet.

MODEL	U.S. GPH				SHUT OFF	OUTLET	WATTS	CORD LENGTH	PRICE
	5'	10'	15'	20'					
WGP 65 PW #566409	1250	785	325	--	20'	1"	230	16'	\$215.99
WGP 80 PW #566417	3200	2700	2100	1300	29'	1¼"	675	16'	\$268.99
WGP 95 PW #566407	4000	3500	2850	2200	30'	1¼"	700	16'	\$321.99



WATER GARDEN PUMPS – MAGNETIC-DRIVE POND & STATUARY PUMPS 3 Year Limited Warranty on Models 325, 500, 1000 5 Year Limited Warranty on Model 1900



Power waterfalls, filters and fountain heads. Reliable Magnetic Drive technology. Adapters included. Energy efficient. Pre-filter and fountain heads available. See page 29.

MODEL	U.S. GPH				SHUT OFF	OUTLET	WATTS	CORD LENGTH	PRICE
	1'	2'	3'	5'					
325 GPH	325	290	250	150	7'	½" or ¾"	22	12'	\$71.99
550 GPH	550	525	475	270	7'	¾" or 1"	42	12'	\$103.99
1000 GPH	1000	900	800	500	8'	1"	80	16'	\$135.99
1900 GPH	1900	1750	1550	1150	16'	1¼"	185	16'	\$226.99

AQUARIUS UNIVERSAL PUMPS ~ 2 Year Warranty

Handles solids up to ¼" in diameter.

Very energy efficient.

Asynchronous motor provides high torque, trouble-free performance at higher head heights.

Easy to maintain. Durable pre-filter cage prevents clogging and reduces pump maintenance.

Oil free design prevents pond contamination.



MODEL	U.S. GPH					SHUT OFF	HOSE SIZES	WATTS	CORD LENGTH	PRICE
	1'	3'	5'	10'	15'					
1000	1000	940	850	--	--	10'	1¼", 1½", 2"	55	25'	\$221.99
2700	2600	2550	2425	1840	--	14'	1¼", 1½", 2"	147	25'	\$323.99
5200	5250	5180	5116	4250	3186	24'	1¼", 1½", 2"	360	25'	\$480.99

FILTRATION

Biological filters allow growth of beneficial bacteria which helps to maintain good water quality in heavily stocked ponds. UV clarifiers provide permanent control of suspended algae which cause green water. They maintain beautiful water clarity while reducing pond maintenance. Mechanical filters primarily protect the pump and fountainhead from becoming clogged with debris. Natural plant filters incorporating beneficial bacteria and filter plants are efficient and an attractive addition to your pond.

For more information on types of filtration see page 38-39.



FILTOCLEAR & BIOPRESS PRESSURIZED UVC FILTERS 2 Year Warranty

Pressurized filtration is great for use with waterfalls. Easily concealed units. Bottom 2/3 can be buried in the ground.

Easy to clean! Just pull on the cleaning handle to loosen debris in the filter pads. Includes a backwash function.

Built in UV Clarifier starts clumping microscopic green algae immediately.



MODEL	MAX POND VOLUME			RECOMMENDED PUMP <i>(depends on head height)</i>	UVC WATTS	MAX RECOMMENDED FLOW RATE	PRICE
	0-6 GOLDFISH	MANY GOLDFISH	KOI				
BIOPRESS 1600	UP TO 1600 GAL	UP TO 800 GAL	UP TO 400 GAL	AquaMax Eco Classic 1900	9	2000 GPH	\$299.99
FILTOCLEAR 3000	UP TO 3000 GAL	UP TO 1500 GAL	UP TO 750 GAL	AquaMax Eco Classic 1900 or 2700	18	2000 GPH	\$499.99
FILTOCLEAR 4000	UP TO 4000 GAL	UP TO 2000 GAL	UP TO 1000 GAL	AquaMax Eco Classic 2700 or 3600	24	3000 GPH	\$699.99



ULTRAKLEAN POND FILTERS 3 Year Warranty

Provides optimal filtration for ponds up to 3500 gallons. Efficiently traps dirt and debris and eliminates green water.

Includes biomedica and high-output UV Clarifier.

Easily integrated into new or existing ponds.

Simple to use cleaning feature allows unit to be backwashed without opening the canister.



MODEL	MAX POND VOLUME			RECOMMENDED PUMP <i>(depends on head height)</i>	UVC WATTS	MAX RECOMMENDED FLOW RATE	PRICE
	0-6 GOLDFISH	MANY GOLDFISH	KOI				
ULTRAKLEAN 2000	UP TO 2000 GAL	UP TO 1000 GAL	UP TO 500 GAL	AquaForce 1000 or AquaForce 2700	14	2700 GPH	\$434.99
ULTRAKLEAN 3500	UP TO 3500 GAL	UP TO 1750 GAL	UP TO 875 GAL	AquaForce 5200	28	5200 GPH	\$527.99



VITRONIC UNIVERSAL UV CLARIFIERS 2 Year Warranty

Cleans the green out of water.

Clear tubing adapters show the clarifier is working.

Safe and easy monitoring of UVC light: visual function check of the UVC bulb with an indicator light.

Easily integrates into an existing or new pond system.

Quick release for easy bulb change and cleaning of the quartz glass.



MODEL	MAX POND VOLUME (gallons)			MAX FLOW RATE (gph)	HOSE SIZES	WATTS	CORD LENGTH	PRICE
	NO FISH	WITH GOLDFISH	WITH KOI					
18W	5000	2500	1250	925	1", 1¼", 1½"	18	16'	\$199.99

The use of high quality UVC bulbs guarantees a long service life, and a constant effective irradiation capacity.

FILTRATION *cont'd*

PF-AD-PW 566107

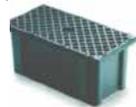
Dual Inlet filter for Pondworks pumps PE1F-PW, PE2F-PW, PE2.5F-PW. Filters water by keeping debris from entering the pump and fountain nozzle. Replacement foam 566109 \$7.99



\$34.99

FB-PW 566108

For Pondworks pumps PE1F-PW, PE2F-PW (includes fine and coarse filter pads, 8" stem with adapter for use with fountainheads). Replacement pads for FBPW 566111 \$13.99



BULK WASHABLE FILTER MATERIAL

Replace your worn out material or build your own filter. 28" wide.



Fine 1/3" (White) PF11 \$0.75 /linear inch
 Medium 1" (White) PF17 \$1.05 /linear inch
 Coarse 1 1/4" (Cream) PF2 \$1.35 /linear inch
 Coarse 2" (Cream) PF16 \$1.55 /linear inch

TETRA PRE-FILTER

For Tetra Water Garden Pumps 325, 550, 1000, 1900. Contains: Pre-filter with foam insert, pump and pre-filter tubing adapters. 4" of 1" hose \$28.99
 Replacement foam \$10.99



FOUNTAINHEADS

The most appealing aspect of a water garden is the tranquil sights and sounds of moving water. Choose from a range of fountain nozzle patterns to create a unique effect in your pond.



FHK1-PW 566266

For Pondworks Pumps PE1FPW, PE2F-PW. Choose from Daisy, Tulip or Waterbell spray patterns. Includes telescoping stem that extends 8-12" and flow control valve to adjust spray. \$33.99



FHT-1170-PW 566518

For Pondworks Pumps PE1FPW, PE2FPW, PE2.5FPW. Bubbler spray pattern. Telescoping stem extends 8-12". \$33.99



FHT-1090-PW 566267

For Pondworks Pumps PE1FPW, PE2FPW, PE2.5FPW. Three-tier spray pattern. Telescoping stem extends 8-12". \$33.99



FHT-1280-PW 566240

For Pondworks Pumps PE1FPW, PE2FPW, PE2.5FPW. Waterbell spray pattern. Telescoping stem extends 8-12". \$33.99



TETRA COMPLETE FOUNTAIN SET

Features three interchangeable fountain heads, Spray, Bell and Frothy. Adjustable height for different pond depths. Connects to 1/2", 3/4" and 1" ID tubing going to statuary, filters, or waterfalls. Adapters included to fit TetraPond® Water Garden Pumps 325, 550, 1000, 1900. \$24.99



OASE 4 PATTERN NOZZLE SET – 1/2 INCH

Beautiful water displays made simple. 2-Tier, Bell, Trumpet, Arch for use with Oase Fountain Pumps. \$29.99

HOSE

When using hose in and around your pond the best choice is either kink-free tubing or flexible PVC tubing. Flexible, black hose is easily hidden. Algae growth is prevented inside tubing. Will not crimp or collapse – improving pump performance.

UL and Metric Kink Free

3/4" \$1.39 per ft.
 1" \$1.59 per ft.
 1 1/4" \$2.09 per ft.
 1 1/2" \$2.29 per ft.
 2" \$3.29 per ft.



Black PVC Hose

3/8" \$0.50 per ft.
 1/2" \$0.70 per ft.



PLANTING SUPPLIES

PLASTIC POTS

Excellent for planting marginals and oxygenators

8" pot \$2.50 8" pan \$2.25
 10" pot \$3.25 10" pan \$2.75



POLYETHYLENE PLANTING TUBS

Excellent for planting lilies and aquatic plants.

No. 5 – 14" diameter, 8½" deep, 18 L / 1/2 bu. capacity \$7.50
 No. 7 – 15" diameter, 9½" deep, 27 L / 3/4 bu. capacity \$8.50

ROSEANNE MARGINAL POT

Ideal for planting groupings of bog plants. No holes, prevents earth from escaping.

22" x 12" x 7", 18L / ½ bu. capacity \$21.99



EXTRA LARGE TUBS

Ideal for lotus, water lilies, oxygenators and bog plants. Made of black, high density polyethylene.

All Purpose Tub	Small Plantainer	Super Tub
26" x 20" x 6"	26" diameter, 7" deep	36" x 24" x 8"
\$19.99	\$25.99	\$48.99

FLOATING ISLAND PLANTERS

Provides shade and protective cover for fish. Ideal for ponds without shelves and to keep raccoons from disturbing marginal plants. Protects plants from Koi. Self watering design constructed of heavy duty foam for long life.

12" Island \$59.99 16" Island \$73.99
 20" Island \$113.99

9" Creeper Island \$20.99
 16" Sundial Island \$42.99
 24" x 27" Mini Pond Raft \$139.99
 48" x 13" Transitional Pond Raft \$139.99



SOIL

FAFARD WATERGARDEN SOIL

A specialized potting medium offers stability and promotes rooting of plants. Tested at our nursery, the soil has proved to allow good growth and development of water lilies and other water plants. Fertilize as recommended. Pick up only. 18L Bag – fills No. 5 tub \$8.99 or 3 bags for \$21.99



PEBBLE STONE

Suitable for covering the soil in planting containers, these rounded pebbles are approximately 3/8-5/8" in diameter. Ideal for use in natural bog plant filters. Pick up only. 20 Kg bag \$6.99



FERTILIZER

Water lilies and aquatic plants require fertilizing in the spring and throughout the growing season in order to promote maximum growth and bloom. Water lilies as well as lotus are heavy feeders and will produce more and larger flowers if fertilized regularly during the summer. Safe for fish.

For fertilizing directions see page 37.

TRICO FERTILIZER TABLETS 15-30-15

Special plant food in tablet form for stimulating growth of lilies and aquatic plants during growing season.

20 tablets	\$18.99
40 tablets	\$31.99
100 tablets	\$45.99



LAGUNA ONCE-A-YEAR FERTILIZER SPIKES 16-9-12

Well balanced, low phosphorous, no copper. Provides nutrition for one full year. Activated above 10°C, when plants need it most. Easy to use, slow release 7" spikes. Use 3 spikes for 18L planting container. Adjust accordingly.

3 spike Pkg \$12.99



PRE-FORMED PONDS



ARUBA
57" x 30" x 18"
50 gallons
\$110.99

MacCOURT Polyethylene Ponds

Black, 15 year Warranty, UV Stabilized, 18" & 24" deep. Ready to install Pre-formed Ponds 200-250 mil. A variety of shapes and sizes (70 US gal. to 270 US gal.) are available at our greenhouse. Pick-up only. Visit or inquire for details.



JAMAICA
78" x 54" x 18"
100 gallons
\$182.99



CONNECTING POOL
33" x 20.5" x 7"
\$108.99



GRAND CAYMAN
72" x 45" x 24"
165 gallons
\$365.99



CASCADE
47" x 20.5" x 9"
\$108.99



FREE STANDING WATER GARDEN

No digging required. Used on decks or patios. 35 gal., 38" wide, 14" deep with 3 shelves. \$84.99



PLANTAINER

Can be used as a mini garden in the ground, on the deck or in a 1/2 whiskey barrel. An excellent planter for lilies or lotus.

Large (20 gal., 26" diameter, 15" deep) \$39.99
Large with 6" spillway \$40.99



POND ACCESSORIES



WATERFALL SPILLWAYS

Waterfalls are an eyecatcher for your garden, the terrace or your pond. Waterfalls also provide additional aeration – they add oxygen to the water to create a healthy environment for fish and plants.



Dimensions
(L x W x H): 12.5 x 10.4 x 6"
Inlet Size: 3/4" and 1"

WATERFALL SPILLWAY 8"

Seamlessly add a beautiful waterfall to your pond. Designed to be easily disguised so you can create a natural looking waterfall for your pond or disappearing water feature.

\$39.99

Flow Style	Target Flow Rate
Subtle	400 gal/h
Moderate	800 gal/h
Robust	1600 gal/h



Dimensions
(L x W x H): 20.7 x 18.5 x 1.5"
Inlet Size: 1.5"

WATERFALL SPILLWAY WITH FILTRATION 16"

Contains filtration with bio-media to help promote the growth of beneficial bacteria, and filter foam, that clears the spillway of debris.

\$199.99

Flow Style	Target Flow Rate
Subtle	800 gal/h
Moderate	1600 gal/h
Robust	3200 gal/h

POND LIGHTS



LED EGGLETT & TRANSFORMER
3 Year Warranty

Fully submersible light and cord or use out-of-pond. Two white LED's included. Transformer powers up to 12 LED Eglights.

Model LCE2-W #566443

\$67.99

Add-on White LED Eglite 2 pack

\$44.99



LOW VOLTAGE LIGHT & TRANSFORMER
1 Year Warranty
excludes bulbs



Fully submersible 12V light with 20W halogen bulb and 4 coloured lenses. Weather proof, 120V transformer with on-off timer, capable of powering three 20W bulbs.

Light has 20' cord Transformer has 2' cord.

Model LVLT-PW #566526 **\$161.99**

Additional 20W Light with lenses. Includes mounting bracket and 20' cord.

Model LVL-PW #566527 **\$79.99**



TRIPLE LIGHT SET
1 Year Warranty

Use underwater or outside of pond. Light sensor automatically turns on at dusk and shuts off at dawn. Complete set includes: 3 low voltage 10 watt lights (with MR 11 bulbs), transformer (12 volt with 120 watt power supply), 20 foot light cable and red, yellow, and blue lenses. **\$94.99**



WATERPROOF POND GLOVES

Great for pond maintenance in cold water. Heavyweight PVC 23" glove with, bicep length sleeve. One size fits all. **\$12.99**



ROCKIN' FOAM WATERFALL SEALANT

Expanding black polyurethane seals gaps and spaces between rocks in ponds and waterfalls. Patented trigger dispenses from any angle. Reusable, allows multiple uses after opening. Made with carbon, colour will not fade. Non toxic to fish and plants.

20 oz **\$29.99**



POND ACCESSORIES *cont'd*



PONDVAC 4

2 Year Limited Warranty

Pondovac is the premier pond, swimming pool and household wet vacuum on the market and it is now even better.

FEATURES

Patented two-chamber system for continuous suction and discharge. Built-in wheels make it easy to move. A new more rugged design.

- Rigid aluminum suction tubes
- Large accessory assortment included
- 16' suction hose, 8' discharge hose
- Cord length 13'
- Powerful 1800W motor
- Max. suction height 8'
- Dimensions 15" dia x 27" high

\$499.99



POND VAC™

Cleans small debris, mud, silt, and fish waste from the bottom of the pond. Uses air-water pressure suction. No pumps, batteries or water connections. Simple and efficient with minimum water removal.

Pond Vac II Regular Handle
Length 59", wt 1.5 lbs.

\$77.99*

Pond Vac II Telescoping Handle
Length 96", wt 1.75 lbs.

\$103.99*

***Available for PICK UP only**



POND NETS

'EASY CATCH' NYLON NET

6" or 10".



6" \$2.99
10" \$4.99

SKIMMER NET*

60" handle. 10" x 9" x 3".



\$28.99*

RED HANDLED NET*

42" handle. 16" x 9" x 7".



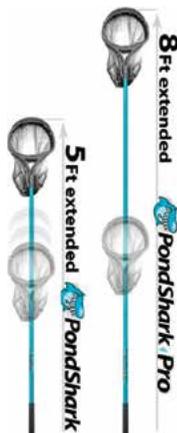
\$44.99*

TELESCOPING HANDLED NET*

30-57" handle.
14" x 13" x 11".



\$55.99*



POND SHARK

The Pond Shark is the ultimate 3-in-1 water gardening tool. It includes net, rake and scraper, and has a telescoping steel handle that adjusts to any user and any job.

The Pond Shark helps to remove unwanted pond scum, debris, and string algae. Features a sturdy hydrodynamic net with a tough and durable poly-fiber head. Perfect for safely catching pond fish.

Pond Shark 41-60" **\$44.99***

Pond Shark Pro 59-96" **\$59.99***

***Available for PICK UP only**

POND NETS



ULTRA POND NETTING

Heavy duty pond netting is UV resistant. Catches falling leaves and debris. Protects fish from predators. Black 1/2" mesh. Comes in reusable storage bag with 12 ground stakes.

Sizes:	10' x 15'	\$29.99
	15' x 20'	\$44.99
	20' x 20'	\$54.99
	20' x 30'	\$74.99

PROTECTIVE NETTING

Keeps leaves from falling into the pond. Discourages predators such as raccoons and birds. Almost invisible 5/8" black mesh.

Width 14'
\$0.75 per running ft.



WINTER PROTECTION

During winter months fish, frogs and snails need an adequate oxygen supply. Toxic gases caused by decomposition of organic matter combined with total ice cover can be stressful, if not fatal to your fish. **Never break the ice cover as the shock waves can cause damage and even death to fish.** See page 42. Aerators are often used with De-icers to increase oxygen levels during winter weather.



TetraPond FLOATING POND DE-ICER

- Energy efficient 300 Watts
- Thermostatically controlled to reduce heating time and save electricity
- Keep an area of the pond ice-free to release harmful gases
- Natural stone finish blends with pond
- Effective to -28°C

3 Year Limited Warranty 15' cord \$92.99

AERATION

Increased oxygen levels in the pond will aid in the biological breakdown of organic debris in the pond. Improved water quality will also benefit the health of Koi and goldfish. This is especially important if the pond is overstocked and also during periods of hot, humid weather. Aerators can also be used to prevent icing over in winter by keeping airstone closer to surface. Extra weather protection is necessary for both units. Do not make cover airtight.

KOI POND AERATION KITS

6 Month Limited Warranty

Large size linear air pumps have aluminum covers and internal noise absorbing systems, making them very quiet and rugged. Operate at a maximum depth of 4'. Keep airstone close to the surface during winter, approximately 18" deep. Pump housings are waterproof and designed for outdoor use. Weather protection is recommended.

- 25 watts, 6' power cord
- Includes 50' of 3/8" air tubing and one 7" air diffuser with 3/8" barb (not shown)

Koi Pond Kit (9720 pump) \$181.99



LAGUNA OPTIMA AIR PUMP KIT

A small aerating pump to add air and oxygen to the pond. Beneficial to fish during hot, humid weather. An effective tool to over winter fish outside. Keep airstone 12-18" from the surface during winter. Kit comes with 30' of tubing and air stone and styrofoam float

- 5 watts, 6' power cord
- Pump requires protection from the elements

\$77.99

INFORMATION PAGES

Planting Aquatic Plants

SOIL: All aquatic plants should be planted in a rich clay based topsoil. Try to avoid soil with a lot of compost or peat, as the lighter materials tend to float. Most commercially bagged and sterilized soil is not suitable for aquatic plants, because they contain these materials. The commercially bagged soil that we recommend is Fafard Water Garden Soil (See page 30). It has been tested at our nursery and has proved to allow for good development of water lilies and aquatic plants.

CONTAINERS: Plastic containers are recommended because they are sturdy yet light in weight. Marginal or bog plants can be planted in any suitable container, usually 8-10" across, but the bigger the better. Keep in mind that aquatic plants will grow proportionately to the size container in which they are planted. Too small containers will slow their growth by allowing them to become overcrowded quickly. For more stability, use wide base pots for tall, emergent plants. Most water lilies require large containers from 15-24" across, with a capacity of 27 litre (3/4 bu.) of soil per lily or larger. Dwarf lily varieties can be planted in 10-12" pots, but at least an 18 litre (1/2 bu.) container is recommended. Lotus require at least a 27 litre container, but prefer larger containers with rounded corners. Even Dwarf Lotus should have at least a 27 litre container. Use 8" pots or shallow trays to plant oxygenating plants. (See page 30 for planting supplies).

Planting Bareroot Hardy Water Lilies

Bareroot hardy lilies may be planted from late April until June. May and June are the best months. Add moistened soil into the bottom half of an 18 to 27 litre (1/2 to 3/4 bu.) container.

Be sure soil is tamped to firm. Some hardy lilies (such as Chromatella) should be planted almost vertically. Other lily roots grow at a 45° angle while odorata rhizomes grow almost horizontally. Check the angle at which the leaves and rhizome meet. This is the correct planting angle. Place the lily in the tub so that the cut end is close to the edge of the container, with the crown (from which the leaves grow) toward the middle of the tub. This allows the most room for growth. Add more moistened soil to fill the tub to within a couple of inches from the top. Water lilies must be planted so that the crown is even with or slightly above the surface of the soil. Push 5-6 fertilizer tablets into the soil a few inches away from the crown of the lily to prevent burning. Tamp soil down gently, being sure to fill the holes made by the fertilizer tablets.

Cover soil with a layer of gravel, making sure there is **NO SOIL OR GRAVEL ON THE CROWN**. The gravel will keep the soil from being stirred up and discolouring the water and also prevents the fish from uprooting the plants. It is a good idea to soak the soil with some warm pond water before placing the containers in the pond. This allows air bubbles to escape and avoids muddying the pond water. Water lilies are heavy feeders and should be fertilized with 4 fertilizer tablets once a month from April to August for maximum bloom and growth.



2013 Photo Contest – Hannah Mach

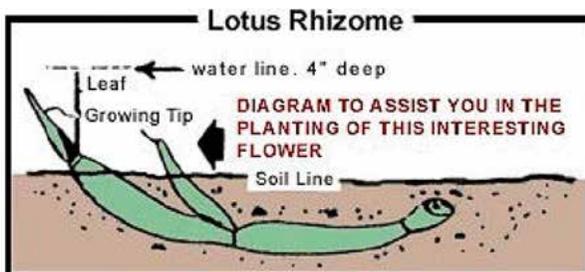
Transplanting Potted Hardy and Tropical Lilies

Potted hardy lilies can be transplanted into larger containers until September. Transplant tropical lilies in June when the water temperature has warmed to above 70°F (20°C). Cold water will cause the young plants to become dormant. Tropical lilies and hardy lilies must be transplanted from their original pots to an 18-27 litre container or larger. If left in the original containers, the lilies will become pot bound, which will stunt their growth. Therefore, a large container allows room to grow, so that your lily will grow to its full potential and bloom frequently. Fill the large container half full of moistened, tamped down soil. Carefully remove the original pot from the lily and place the lily (soil and all) into the centre of the large container. Fill the remaining space with moist soil leaving about 1" from the top of the pot. Tamp soil down gently. Push 5-6 fertilizer tablets into the soil a few inches from the crown of the lily to prevent burning. Cover soil with a layer of gravel, making sure there is **NO SOIL OR GRAVEL ON THE CROWN**. The gravel will keep the soil from being stirred up and discoloring the water and also prevents the fish from uprooting the plants. It is a good idea to soak the soil with some warm pond water before placing the containers in the pond to avoid muddying the water. Water lilies are heavy feeders and should be fertilized with 4 fertilizer tablets once a month from April to August for maximum bloom and growth.

Positioning Your Lilies

Position your lilies in the middle of the pond about 5-6 feet apart. Initially, it is best to have the lilies at the shallower depth (6" of water) and then gradually move them deeper as the lily grows. You may need to use blocks to raise the lilies to the proper depth. Water lilies will grow in 6" up to 3' of water, depending on the variety. Do not place water lilies close to waterfalls or fountains where they will be splashed.

Planting Lotus



Bareroot lotus may be planted from late April to early June. Lotus should be planted into a 27 litre (¾ bushel) container or larger. The container must be solid with rounded corners, i.e. no holes, or the lotus will escape from the tub. Fill the container ¾ full of moistened, firmed soil. Set the lotus rhizome on top of the soil. Dig a trench in the soil beneath the rhizome 2" deep. Set the rhizome into the trench. Cover the rhizome with soil, just enough to fill the trench, being careful not to damage or cover the growing tips which are very fragile. Push 6-8 fertilizer tablets per 27 litre tub into the soil around the rhizome and cover any holes with soil. Gently tamp down soil. Add thin layer of pea gravel, making sure there is no gravel on the growing tips, as they will have a hard time growing up through the gravel. The gravel will keep the soil from being stirred up and discolouring the water. Soak the soil with pond water before placing the containers in the pond to prevent muddying the pond water. In the spring, lotus tubs should be placed so 1-2" of water is above the top of the tub. Blocks may be needed to raise the tubs up in deeper areas. This allows for more sunlight and heat to stimulate growth. As growth becomes established with aerial leaves, water depth may be increased to 6" or 8" of water above the top of the tub. Similar to lilies, lotus should not be placed close to waterfalls or fountains where they will be splashed. Lotus are heavy feeders and should be fertilized every 2 weeks with 2-3 fertilizer tablets from April to August, for maximum growth and bloom.

Planting Oxygenating Plants

Oxygenating plants should be planted in moist soil in their own pots. An 8" pot is large enough to accommodate 1 bag of oxygenating plants. Remove oxygenating cuttings from the mesh bag and tuck half the plant stem into the moistened soil. Bury the root system of the individual plants in the soil. Leave the soil level about 1" below the top of the pot and fill the remaining space with gravel. Soak the soil with pond water to prevent muddying up the water when the plants are placed in the pond. Place pots directly on the bottom of the pond between the lily tubs. **Note: Hornwort does not need to be planted. It floats in the pond.**

Positioning Your Oxygenating Plants

Position your oxygenating plants in between the water lilies in the middle of the pond, 12-24" deep. Put one pot for every 5-6 square feet of open surface area. **Hornwort is a floating oxygenating plant.**

Planting Bareroot Hardy and Tropical Shallow Water Plants

Bareroot hardy plants can be planted from late April to late June. Tropical plants can be planted from late May (when there is no risk of frost) to August. Marginal plants should be potted into an 8" pot or larger. Keep in mind that wide based pots are more stable for tall plants. Fill the 8" pot half full of moistened, tamped soil. Don't cover the holes at the bottom, as they allow for the roots to grow out into the water. Place the plant into the centre of the pot. Then add more soil so that the roots are well covered. Leave the crown of the plant, from which the leaves grow, protruding from the soil. Push 2-3 fertilizer tablets into the soil around the crown. Tamp soil down gently. Cover the soil with a layer of gravel and soak with pond water before placing the pot into the pond to prevent muddying up your pond water. Fertilize monthly to encourage growth and bloom.



Transplanting Potted Shallow Water Plants

Potted plants may be transplanted at any time. Half fill an 8" pot (or larger) with moistened tamped soil. Carefully remove the original pot from the plant and place the plant (soil and all) into the centre of the pot. Fill the remaining space with moist soil leaving about 1" from the top of the pot. Tamp soil down gently. Cover soil with a layer of gravel, leaving the crown of the plant protruding. The gravel will keep the soil from being stirred up and discolouring the water and also prevents the fish from uprooting the plants. Soak the soil with some warm pond water before placing the containers in the pond to avoid muddying up your pond water. Fertilize monthly to encourage growth and bloom.

Positioning Shallow Water Plants

Marginal plants are often situated on the pond shelves; adjustments may be required for proper depth. See Hardy and Tropical Marginal pages (13-20) for proper planting depth. If shelves are full, try using blocks or inverted pots to position plants at proper depth anywhere in the pond.

Fertilizing

Directions for Trico Fertilizer Tablets:

Use 6 tablets per 18-27 litre lily or lotus container in the spring or when first planting. Use 2-3 tablets per 8" pot for shallow water plants. Your lilies should be fertilized monthly with 4 tablets per lily container and 1-2 tablets per 8" pot for shallow water plants. Be sure to keep the tablets a few inches away from the crown to prevent burning. Push the fertilizer tablet as far down as you can with your finger. Then fill in the holes with soil to prevent the fertilizer from leaching into the water. Do not fertilize hardy plants after mid August.

Directions for Laguna Fertilizer Spikes:

Use 3 spikes per 18 litre lily container, 4-5 spikes per 27 litre lily or lotus container in the spring or when first planting. Use 1 spike per 8" pot for shallow water plants. Do not fertilize hardy plants after mid August.

FISH INFORMATION

Stocking rate

Recommended stocking rate is a maximum of 1" of Goldfish or 0.5" of Koi per square foot of surface area. Be sure to allow for growth and reproduction (Koi grow very rapidly). A large population of fish and overfeeding may result in an unbalanced pond with poor water quality. A large fish population may require extra filtration. Biofiltration is necessary when fish numbers are high. See page 28-29 for filters and page 38-39 for more information on filters. Overstocking puts stress on the fish, and stressed fish are disease prone (See page 21 for our fish selection).

Feeding Your Fish

Fish will naturally consume mosquito larvae and other insects in the water. If fish are fed regularly at the edge of the pond, they will soon become tame and approach visitors. Feed once per day only as much as will be consumed in 5 minutes. **DO NOT OVERFEED!** Excessive feeding will lower the water quality and fish are likely to become sick. Fish eat less in cool water (i.e. early spring and fall), as their metabolism slows down. Low protein foods may be fed when water temperature is between 10°C, 50°F, and 15°C, 60°F. Do not feed when water temperature drops below 10°C (See page 21 for fish food).



Photo courtesy of Alan Noon

DETERMINING THE CORRECT PUMP FOR YOUR POND

Ponds that are ecologically balanced with plants and a few fish do not absolutely require a pump for recirculation and aeration. However, water movement adds to the aesthetic enjoyment of the pond and contributes to the well being of fish. The addition of water features such as waterfalls, fountains and statuary as well as various types of filtration require appropriately sized pumps. When in doubt, choose a larger pump. It is easy to decrease the flow, but impossible to increase the flow beyond the pump capacity.

Factors to take into account:

Mechanical Filtration – the general recommended flow rate is 1/2 the pond volume per hour.

Biological Filtration – Biological filters have a specific flow rate according to manufacturer and size. Slow flow rates allow the aerobic bacteria more exposure to the water to break down impurities. A fast flow may actually dislodge the bacteria from the filter.

Waterfalls – factors to consider:

1. the **height** of the waterfall above the pump;
the higher the waterfall, the larger the pump needed.
2. the horizontal **distance** from the pump to the top of waterfall, or discharge point.
10' horizontal distance = 1' of height or "head".
3. the **width** of the waterfall and the **effect** desired.

Flow Required at Top of the Waterfall (gph)

Desired Effect	Width of Waterfall					
	6"	12"	18"	24"	36"	48"
Trickle: ¼" water thickness (50 gph per inch of width)	300	600	900	1200	1800	2400
Regular Flow: ½" water thickness (100 gph per inch of width)	600	1200	1800	2400	3600	4800
High Flow: ¾" water thickness (150 gph per inch of width)	900	1800	2700	3600	5400	7200
Very High Flow: ¾" water thickness (200 gph per inch of width)	1200	2400	3600	4800	7200	9600

Calculating Pond Capacity

Calculation of Pond **VOLUME** is important when choosing a filter. **SURFACE AREA** is important for stocking fish and plants.

Shape of Pond	Pond Volume (US Gal)	Surface Area (sq. ft.)
Rectangular or Square	Length x Width x Depth x 7.5	Length x Width
Circular	Radius x Radius x Depth x 23.55	Radius x Radius x 3.14
Oval with straight sides	Length x Width x Depth x 6.7	Length x Width (approx.)

FILTRATION

A variety of filters is available. Some primarily protect the pump and fountainheads from clogging with debris. Other larger filters will aid in keeping the water clear. To filter adequately, pumps should have Gallons Per Hour (GPH) rating equal to about half of the pool volume. The addition of waterfalls, fountainheads and filters will reduce GPH.

Natural Plant Filter – Attractive, Low Maintenance and It Works!

A plant filter works with nature. It is easy to construct and requires little maintenance. No more cleaning filter media – let the bacteria and plants do all the work!

Just connect a small shallow pond, approximately 10% of the surface area of the main pond, to the main pond. Increase the size up to 25% if a large population of fish or Koi is anticipated.

Add bog plants in containers of soil and/or pea gravel and floating plants. Water Hyacinths, Water Cress, Water Celery are but a few choices that thrive in plant filters. Circulate the water slowly throughout the entire filter pond to the main pond. Enjoy clear water and luxuriant plant growth.

Plant filter ponds may be constructed from liner, preformed containers or preformed ponds with spillways. All available at Moore Water Gardens (See page 25, 30 & 31).

FILTRATION *cont'd*

Mechanical Filters

Mechanical filters are used in front of or before the pump to prevent floating debris in the water from entering and clogging the pump and fountainheads. Usually comprised of foam and/or screen, they may sometimes be found in the first layer of biological filters as well.

It is recommended that all pumps be protected by some sort of mechanical filter to prolong their life (See page 28).

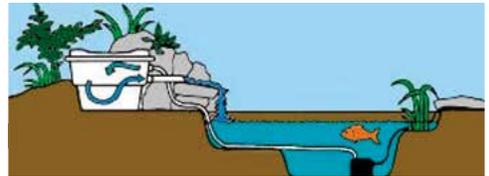
Biological Filtration

Biological filtration is a proven method for maintaining good water quality for fish and plants. These filters include high capacity media providing large surface area for colonies of "good" bacteria to thrive on waste by-products of fish and plants. Biological filtration does not produce solid waste so little to no maintenance is required once the filtration begins. **To filter adequately, pumps should recirculate the pond volume through the biofilter once every two hours.**

NOTE: A bio-filter is designed for continuous duty. If it is left idle for more than a half-hour, the bacteria will die and emit toxins back into your pond. The entire process of colonization will have to start over, which could take several weeks. Bacteria starters may be added to expedite this process (See page 23).

When choosing a biofilter consider the following factors which require more filtration:

- Koi eat more and produce more waste than Goldfish
- A large fish population will increase waste pollution.
- Shallow ponds will require more filtration.
- Exposure to full sun also encourages algae growth.



Ultraviolet Clarifiers

Green water is caused by the growth of tiny single cells of algae. As water passes through the UV clarifier, the single celled algae are clumped together. The filter can now remove these larger algae particles. UV Clarifiers can be added to new or existing filter systems.

INSTALLING A POND

Installing the Liner



Step 1

Try to locate in full sun, away from overhanging trees. Use a rope or hose to create the desired outline. A depth of 18" or more is recommended. Shelves for marginal plants should be approximately 12" wide and 8" deep or more. Slope the sides for stability. Be sure to level the top edge of the pond to avoid having exposed liner.



Step 2

A cushion of sand or geotextile felt (see pg 26), may be used to line the excavation and protect the liner. Drape the liner loosely and evenly over the pond. The liner is more flexible on a warm day. Anchor the liner with small weights. Do not place the weights near the edge of the pool.

(continued on page 40)

INSTALLING A POND cont'd



Step 3

Start filling the pond with water, removing the weights as necessary to allow the liner to take the shape of the pond. Adjust the creases and wrinkles in the liner as the pond fills. When the pond is full and settled, excess liner may be trimmed, leaving a 12" flap. Secure flaps until edging or coping is in place.



Step 4

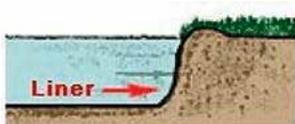
Complete the finishing treatment of the pond's edges using the method of your choice (see below). Concealing the liner gives a more natural appearance and protects the liner from U.V. rays. It may be necessary to rinse the pond and refill it before stocking with plants or fish.

Finishing Treatments



FALSE SHELF

Build a false shelf to support rock, which will completely hide the liner. This achieves a more natural look and protects the liner from U.V. damage.



SOD

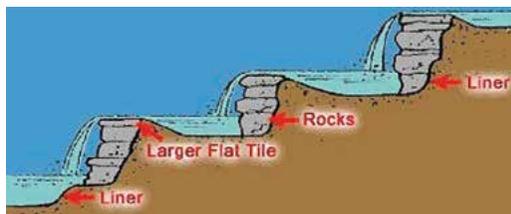
Pond liner may be tucked in a trench 8-12" from the edge and covered with topsoil. Some topsoil may spill into pond.



Blocks, railway ties or cedar may be used to form the sides of above ground pools. Be sure to add a sitting edge.

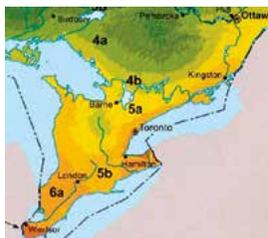
Creating a Waterfall

Waterfalls may be added to the pool with a submersible pump. Small pumps will give a nice effect at 2-3'. Large pumps should be used for greater heights to create the desired effect. See Determining the Correct Pump for your Pond (page 38). Diagram of a watercourse showing the way a liner is used to waterproof a channel. Smooth rocks or stones may be used to conceal the liner and create pouring lips for the waterfall. Be sure the waterfall lining extends all the way into the pond to avoid the possibility of leakage. Avoid having water run behind rocks by using a sealant (See page 32).



OVERWINTERING YOUR PLANTS

Hardy Plants



Hardy plants are perennials and can be kept for many years. Some varieties may require extra protection due to differences in your zone and actual microclimate of your pond.

Plant Hardiness Zones for many areas in Ontario are shown to the left.

For more information on Hardiness Zones visit the Agriculture and Agri-Food Canada website at:

<http://sis.agr.gc.ca/cansis/nsdb/climate/hardiness/intro.html>

(continued on page 41)

OVERWINTERING YOUR PLANTS *cont'd*

Hardy Water Lilies and Lotus

Hardy water lilies and lotus will overwinter if their roots do not freeze solid. Foliage will die back mid to late fall but roots will remain alive. Steps to overwinter lilies should be taken at this time. DO NOT COVER the pond or bring plants inside until late fall when dormancy has begun.

Methods:

A. Move containers to the deepest area of the pond. Remove dead leaves on lilies but not on lotus. It is recommended that your pond be at least 2 1/2' to 3' deep in one area if this method is chosen. Colder zones in Canada should increase this depth. You may cover pond with boards or framed plastic to provide extra insulation. Do not make airtight. Return containers to original positions in spring.

OR

B. Use this method if your pond is shallow and will likely freeze solid. Remove the old leaves from the lily and bring planted containers indoors to cold storage, approximately 40°F (5°C), for the winter. Keep containers moist and dark at all times. More lilies are lost from drying out than from freezing. Return plants to the pond after the ice has melted the following spring.

Note: Northern sections of Canada should bring plants indoors or use a pond heater just to be safe

Hardy Shallow Water Plants

Some hardy shallow water plants can tolerate being frozen solid while others need their roots or tubers to remain in the water. Irises, Rushes (except Pickerel Rush), Sweet Flag, Cattails, Horsetail, Marsh Marigold, Bulrush, Houttuynia, Golden Creeping Jenny, Watercress and Water Forget-Me-Not may be left in shallow water where they will likely freeze. Most other varieties should be moved to deep water or brought indoors to cold storage (See method B above). Return all plants to growing shelves as soon as the ice has melted in the spring.

NOTE: Do not remove dead leaf stocks from emergent plants such as cattail and rushes until spring. This will allow the root system to "breathe" during the winter.



2013 Photo Contest – Alana Palm

Tropical Plants

May be grown outdoors during the summer, but are considered annuals unless heated greenhouse facilities are available.

Tropical Water Lilies

When brought indoors, tropical water lilies and plants continue to grow during the winter months and must receive sunlight and heat. Growth slows considerably in December and January when there is very little sunlight and the leaves will become yellow and small. Most people treat tropical water lilies as annuals due to the considerable effort required for their continual growth.

Method: Before the first heavy frost in your area, bring the tropical lily indoors to a heated greenhouse or sunroom. Place the containers in a tank, fertilize sparingly and ensure water temperature will not fall below 21°C (70°F). This will prevent the lily from going into a dormant state even though growth slows considerably. The following spring when the pond water temperature has warmed to a consistent 21°C (70°F), in early June, place the lily back in your pond.

Tropical Shallow Water Plants

Like tropical water lilies, shallow water plants must continue to grow during the winter months. Growth will be reduced considerably as daylight hours diminish. Umbrella Palm, Dwarf Papyrus, Little Giant Papyrus and White Arum lilies will survive the winter indoors and make excellent houseplants. Other varieties are best treated as annuals.

Method: Remove tropical plants from the pond before the first severe frost and bring indoors to a heated greenhouse or sunroom. Plants must remain in water and be kept at a temperature of approximately 18°C (65°F). Remove old growth if it yellows. Return to the pond in spring when there is no risk of frost.

Note: Small amounts of fertilizer may be required to encourage plants to keep growing during the winter.

(continued on page 42)

OVERWINTERING YOUR PLANTS *cont'd*

Many people treat Tropical Shallow Water Plants and Water Hyacinths as annuals due to the cost and effort required to overwinter. Simply compost plants in the fall and restock the pond the following spring.

Water gardeners in Canada frequently use the previous overwintering methods for plants. These suggestions can be used alone or in any combination to best suit your own situation. There is no guarantee that your plants will survive the winter. By trying these commonly used methods your chances of success will be increased. We would be glad to hear from you if you have found other successful ways to winterize your plants.

OVERWINTERING YOUR FISH

Goldfish and Koi

Choose a method that will best suit you and your budget. First determine if your pond is likely to freeze solid. The pond's location, size of fish and the number of fish all have an effect on the success of overwintering goldfish. Reduce feeding as the temperature cools in the fall. Fish metabolism slows down considerably and they may not be able to digest food. Spring & Fall Diet fish food (See page 21) is recommended for fall feeding (and also in the early spring). Do not feed when water temperature is below 10°C or 50°F. The following methods are suggestions for smaller ponds that allow for drainage and capture of fish. When drainage is not practical, as in large or natural ponds, wintering is best left to Mother Nature. Drainage may not be necessary, if there is little debris and/or leaves in the pond. However, a 1/3 partial water change is recommended in the fall and the following spring. During water changes, replace water slowly using nozzle spray and add a water treatment that removes chlorine and chloramine (See page 24).

Methods:

- A. Minimize the leaves that fall into your pond. The use of netting will help to eliminate this problem. Drain the pond in late fall after the leaves from nearby trees have fallen. Move the fish to covered containers filled with pond water. Clean leaves and other debris from the pond, then refill. Let fresh water sit at least 24 hours to allow chemicals and dissolved gases to dissipate. If chloramines are present a neutralizer may be required. Place the fish back in the pond. Make sure fish are not stressed during this procedure by keeping their water cool and oxygenated.

OR

- B. First, be sure excess leaves and debris have been removed from pond. Use a pond heater or bubbler during the winter to keep a small area of your pond free from ice. This allows toxic gases that collect under the ice to escape and oxygen to dissolve in the water. Keep in mind that you do not need to run your heater or bubbler constantly, just enough to keep a small area ice-free. Be careful that the heater does not touch or melt the pond liner.

OR

- C. Remove the fish from the pond and bring indoors to an aquarium or tank for the winter. Keep the tank relatively cool and feed moderately. Oxygenation, filtration and partial water changes are recommended. Return the fish to the pond the following spring, being careful not to shock the fish with a sudden temperature change.

NOTE:

- More fish die from toxic gases produced by rotting vegetation trapped in the water than die from freezing.
- Healthy Goldfish and Koi have a greater chance of surviving the winter.
- Try to minimize stress when overwintering.
- When transferring fish, ensure water temperatures are similar by floating containers before release.

Water gardeners in Canada frequently use the previous overwintering methods for fish. These suggestions can be used alone or in combination with one another to best suit your situation. There is no guarantee that your fish will survive the winter. By trying these commonly used methods your chances for success will be increased. We would be glad to hear from you if you have found other ways to overwinter your fish successfully.



Pond Deicer at work.

TROUBLESHOOTING

Fish Problems

When fish are stressed, they become susceptible to disease and sickness. Water quality can affect the health of fish and other aquatic life. Temperature, low oxygen, pH level, excess ammonia and nitrites affect water quality. Rapid temperature changes, spawning and rough handling will also stress fish. **The application of herbicides, lawn & garden fertilizers and pesticides nearby can lower water quality and even kill fish.**

Signs of fish problems:

Gasping at surface – usually indicative of low oxygen levels, often in humid weather. May also indicate that there are too many fish for the pond capacity. To solve this problem keep your pump running, especially at night when oxygen levels are at their lowest.

Lethargy/inactivity – indicative of poor water quality which may have many causes. **OVERCROWDING** and **OVERFEEDING** will lower water quality by increasing ammonia and nitrite levels. Also, chemicals from spraying your lawn and gardens can enter the pond, causing inactivity and even death. We recommend testing your water for excess amounts of ammonia and nitrites. If ammonia and nitrites are high, do a partial water change. Drain 1/3 of the pond's water and replace it slowly using fine nozzle spray from a garden hose. Then add a water treatment to neutralize the water (See page 24). Repeat in 4-5 days. The use of biofilter (See page 28-29), particularly when Koi are present, will greatly reduce problems associated with water quality. Bacteria in the biofilter will rapidly convert ammonia and nitrites into harmless nitrates.

Fungus, Tail Rot, White Spots – often occur when fish are stressed. First identify the disease and then treat with an appropriate medication (See page 22).

Algae Problems



Severe algae problem



Green water

Both newly planted ponds, as well as established ponds, provide ideal conditions early in the season for the growth of suspended algae, causing green, murky water. This is a completely natural occurrence and is not harmful to plants or fish.

Contributing Factors

1. **Sunlight** – when plant growth is not yet sufficient to provide shade
2. **Warm Water** – resulting from inadequate plant cover and/or shallow water
3. **Dissolved Nutrients** – present in the water, providing food upon which the algae thrives
4. **A Large Fish Population** – fish waste is eventually broken down into nitrate fertilizer
5. **Excessive Feeding of Fish** – unconsumed fish food and excess fish waste

Recommendations

Be Patient!!! Allow the pond time to achieve a natural ecological balance between plant life, nutrients, light and temperature. Once the plants start to grow, they will filter the sunlight; thus providing shade and lowering water temperature. In addition, these plants will consume excess nutrients in the water, thus depriving the algae of food, or use a biofilter.

Do Not Change the Water. This merely provides a fresh supply of dissolved minerals for the algae to feed upon, and thus prolongs the time for a natural clearing to take place. Further, sudden temperature changes place stress upon the plants as well as fish.

(continued on page 44)

TROUBLESHOOTING cont'd

Do Not Add Algaecides. This will create artificially clear water, which may become green again as chemicals lose their effectiveness. Most important, any chemical that will kill algae, a simple form of plant life, is likely to hinder the growth of more desirable aquatics such as lilies and marginal plants. Improper dosage can result in the loss of all plants and even fish. If coagulants are used to settle suspended algae, filtration is usually necessary to remove the coagulated plant material before its decomposition can harm fish.

String Algae. String algae is sometimes a problem in mature, balanced ponds with clear water. A small amount is beneficial in keeping the water clear and providing natural food for the fish. Excessive amounts can be removed manually or by gently altering the pond chemistry to create conditions unfavourable to the growth of string algae. Barley straw and peat pellets are natural products recommended for this purpose (See page 24). Stubborn, persistent growth may require the repeated application of Pond Balance. Be sure to follow directions carefully and remove organic debris by filtration or vacuuming.

Be Sure You Have Sufficient Plants for a Balanced Pond. Oxygenating plants do a great deal to absorb dissolved nutrients. We recommend 1 bag per 5-6 square feet of exposed surface area. Larger, deeper ponds require less. Allow for growth.

Add water hyacinths or another lily to provide shade and use up nutrients. Hyacinths are inexpensive and usually multiply rapidly. Other floating plants such as salvinia and duckweed are also very helpful.

A good supply of snails and/or vacuum will help to remove slime and accumulated debris, thus helping to keep the water clear. If fish population is large, especially Koi, a biofilter may be needed (See page 28-29). We firmly believe that an ecologically balanced pond will provide more profuse growth and bloom, thus giving the water gardener more pleasure and satisfaction for their efforts. "Plant for balance", be patient and prepare to sit back and enjoy a summer full of healthy, exotic flowers and lively fish.

Water Lily Problems? Check These Points:

1. The use of chemicals in the pool to control algae is not recommended
2. Planting containers are too small
3. Lilies are not getting enough sunlight (need 6 hours minimum)
4. When planting did not use heavy top soil and/or fertilizer as recommended
5. Many commercially packaged soil mixtures are not suitable for good growth
6. Is there soil or gravel on the crown of the plant?
7. Needs fertilizer - did not fertilize monthly or as directed
8. Root-bound (hardy lilies need dividing every two or three years)
9. Too much or too little water over the crown of the plant
10. Hardy lilies start to go dormant in September
11. Tropical lilies do poorly in cold water and go dormant after heavy frost
12. Use of herbicides or pesticides in your yard or the neighbour's
13. Splashing or turbulence from nearby fountain or waterfall
14. Large Koi or Goldfish may be eating new growth and possibly disturbing the root system
15. Excess of aphids, which may be sprayed off with hose and eaten by fish

Cross Section of a Typical Pond





Moore Quality...

Moore Knowledge...

Moore Service...