



## Making Hypertufa Planters



Cardboard box forms

At the April meeting, a large turnout was treated to an interesting demonstration of how to make hypertufa planters. Since Jack and John's presentation sparked such interest, the following information will summarize some of what the club learned and extend that knowledge to building a trough shaped container. Two nesting cardboard cartons will be needed for molds, as seen in the middle photograph. There should be about a 2" space between the boxes, on all sides. A form can also be built of polystyrene foam used for house insulation, by holding the sides together with long nails or screws. Rough proportions for the mix by volume:

- 2 parts Portland cement,
- 3 parts sifted peat,
- 3 parts perlite.
- reinforcing fibers, about a handful.



Polystyrene foam box form

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# Genesee Valley Pond & Koi Club Newsletter

## "Wet -n- Dry" "News -n- Views"

Spring has arrived a little too quickly. Those of us that have been holding off on starting the spring pond clean up, because we knew that another cold snap was waiting to laugh at our eagerness to get started, have definitely fallen behind. The warm weather has stayed longer and more consistent than usual. The algae has blossomed and the plants have started to re-sprout. The frogs, toads and fish, at least in my pond, appear to have started their spring rituals and we will probably see the results of their courting shortly.

The demonstrations, handouts and presentation by Jack Zelenz and John Roguski on making and working with Hypertufa went very well. The idea of using a heavy duty plastic bag to prepare and mix the hypertufa blend really simplifies the process and definitely minimizes your dust exposure and area clean-up.

While Jack and John touched briefly on the affects of adding fiberglass strands to the hypertufa mix, I learned this week of another benefit of adding this ingredient. If your garden and especially your planters are bothered by garden snails and slugs, the protruding fibers of the hypertufa seem to irritate these critters and deter them from entering the pots. The fibers should not be burned off or torched so that they remain exposed for maximum effect.

Jack and John showed samples of their completed works and photos and descriptions of other works in process. This showed the versatility and potential aesthetics and decorative uses of this material. Their approach to the decorative

uses were quite interesting and will make great additions to their gardens.

### May Activities

Michelle Jones-Hamm from the Genesee Valley Chapter of the North American Rock Garden Society (gvcnargs@yahoo.com) will be the guest speaker for our May 5th meeting. She is very knowledgeable and enthusiastic about rock gardening and alpine plants. For our meeting, she will be demonstrating the techniques used in building a rock garden. I was fortunate to have a preview of a similar program that was very interesting. She is very much interested in discussing the advantages of combining rock gardening with various types of water features. She feels that there is a natural connection between the two because of the rocky features of most streams. Due to her schedule and time constraints, we have agreed to start with her presentation and we will start at 7:00 so please be prompt. The final details for our support at the NFKPC meeting on Friday, May 12th are being finalized. We can still use volunteers for this and for the book sales area at AKCA "Koi Over Niagara" especially on June 23 & 24.

Saturday, May 13th will feature a trip to Canandaigua to visit Willow Pond and Sonnenberg gardens. Willow pond has Koi breeding ponds that we should be able to see and learn about. Sonnenberg has several water features that should be in operation in the Oriental and Rock Garden areas. Several people have already indicated their interest in making this trip. We haven't made the final arrangements, so if you are interested please let us know by May 10th by calling 473-6276.

May 20th is the Genesee Land Trust Native Plant Sale at the

Brighton Town Hall on Elmwood Avenue from 9:00-2:00. We agreed to be sub-sponsors of this event to help bring the club name to another group of gardeners. This is also the date for the Bergen Swamp Preservation Society Pilgrimage. This is an opportunity to tour a section of the swamp with one of their members/guides. The tours take about 2-2 1/2 hours and start at 9:00 AM and 1:00 PM. The meeting site will be Turtle Park on Swamp Rd. in Byron. Turtle Park is located off Swamp Rd. a little East of the route 262 junction. (Note: This is Swamp Rd. in Genesee County not the Swamp Rd. in the Sweden- Brockport area of Monroe County.) Hot dogs, chips and soda will be for sale between 11:00 and 1:00. Reservations are required for scheduling purposes and may be made through Patti Coan on line at pcoan@rochester.rr.com or by calling 548-7304 RCGC will be holding their Proud Market plant sale on Saturday, May 27th from 8:00 until about noon.

### June Activities

This June, we will again be participating in LilyFest on June 3 & 4 at Bergen Water Gardens with our display to promote the club, answer questions regarding ponds, fish and water gardens. We can use volunteers both days to help staff the area. As you are dividing, separating and also removing extra water plants, please consider donating them to us for the plant and product auction at 2:00 pm on Sunday. Your support and participation at the auction is also helpful in providing funds for speakers and educational materials.

The AKCA Seminars, "Koi Over Niagara" will be from June 22-25. This is a great opportunity to learn more about the hobby through the

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many vendors that will have their products on display and the speakers on various topics during their presentations on Friday and Saturday. Preliminary details and reservation information was included in last month's newsletter. We hope to provide the final details and time schedules for the various seminars in the June newsletter. We are still looking for additional volunteers to staff the book sales area on Friday and Saturday. Please call 473-6276 if you can help so that we may finalize that schedule also.

As a follow-up to the pond salt questions and discussions at the last meeting, the attached information is taken from *Flowers and Fins* the Springfield Watergarden Society newsletter and is based on an article by Bonnie Hale. It should help to clarify some of the issues of the effect of salt on some of the pond plants at various concentrations.

There was also an article "Salt" by Lester Berkow in *Mid-Atlantic Koi*. He stresses the importance of choosing the proper salt -- one without additives such as iodine, anti-rust, non-caking and excess chlorine. He does not favor using salt on a permanent basis due to his concern that it may lose its effectiveness in curing various ailments. He does caution that, while at the appropriate dosage it can eliminate the vast majority of unicellular parasites, it can have a detrimental and some times disastrous effect on other fish especially Orfe and Ruud species. The normal range suggested and used for these treatments can vary from 0.1% to 0.3%. In general, the rule is that 1 pound of salt per 100 gallons will yield a level of 0.12%.

At the 0.3% level, the salt stimulates the production of the mucous layer which is very beneficial for fish health. This level may kill some of

the string algae too which will increase the oxygen demand on the water. Therefore, you must increase the aeration when doing a salt treatment not only to keep oxygen levels up but to also aid in the break down of other harmful products.

The salt should be pre-mixed with pond water to minimize pools of very high concentration that could occur if the dry salt was added directly to the pond. The total salt addition should be made gradually over a 2-3 day period and it should be distributed over several areas of the pond.

In some recent cases, salt treatment has not been as effective at these levels and it has been necessary to increase the level to the 0.5-0.6% level. Great care must be exercised at these higher levels. You must know the exact volume of your pond. If the level should exceed 0.85% due to a calculation error, the fish can become dehydrated through an osmotic effect. Therefore, be very careful with your calculations, in this case decimals can kill.

If you are not certain of the exact volume of your pond, but you have a salt test kit, this is a trick that you can use to obtain the proper volume. Measure the salt concentration of the pond in parts per thousand (ppt). Add a pre-measured amount of salt and after it is totally distributed through the pond re-measure the salt concentration. Then subtract the initial salt concentration from the final value. Now, divide the amount of salt added by the previous answer. Multiply this by 120 to obtain the result of the number of gallons in your pond.

After the salt treatment has been completed, the salt level should be reduced to the original value. Since the salt does not evaporate, it should be removed/reduced by

making weekly water changes of 10-25%.

If the salt fails to correct what was thought to be a parasite problem, there are other possibilities. The original problem may have been mis-diagnosed or could have been the result of one or more of the following: a grossly incorrect pH, undiagnosed ammonia/nitrite problem, heavy metal poisoning, pollution run off, hydrogen sulfide build up from an anaerobic area or possibly flukes.

Some of these concepts are re-enforced in the Q's and A's column in *Koi USA*. Gary uses minimal residual salt levels because "there is very little salt in fresh water and by making fresh water carp live in it is not how nature intended it to be." He does advocate using salt in the water when transporting fish and in some quarantine situations as a preventative since one or two parasites can multiply rapidly in the smaller amounts of water. They try to use it sparingly and state that "unfortunately, so many folks have overused salt that many parasites and/or bacteria have become immune to it." This is why a full or even extended quarantine is necessary to prevent the addition of possible resistant strains into your pond.

They agree that the extra slime coat is beneficial not only in fighting parasites but in protecting open sores and promoting healing. In addition, the slime coat can be helpful in times of stress, because more of the fish's energy can be directed toward fighting the bacteria that seem to attack stressed fish.

### Selecting Koi

We should have had an opportunity to inspect our fish to see how well they have survived the winter. You may have decided that you have too many, they may have gotten too big and need to be re-

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cated, or you may simply want to add some new Koi. Whatever the reason, you want to keep or obtain the best ones to fit into your pond for color, interest and excitement. Some of these sources and suggestions may be helpful in making these decisions.

There is a new *Koi Collector's Pocket Guide* published by Gardenside Publications. It is a handy, poster like, 7 panel, fan folded guide that is laminated for protection and durability. Fully open, it is approximately 24" long and 9" tall, yet it folds down to less than 3 1/2" wide and 9" tall, a size that is easily portable and can fit into some pockets. The guide features photos and descriptions, as well as pronunciations for the major Koi varieties. There is also an illustrated glossary of key Japanese Koi terms. This would be a fun resource for Koi keepers to learn more about their Koi and help them in making selections as they plan future Koi selections and purchases. Hopefully they will be available through local dealers shortly.

"Buying The Right Koi" was an article in *Koi USA* by Brady Brandwood that takes a very broad look at the best purchase plan based on your time and situation. This is a summary of some of his suggestions.

To keep from being overwhelmed by the excitement of Koi shopping, you must have a plan, a reason or goal in mind before you start. He recognizes that we all have unique situations and ponds. We have different amounts of time that we can devote to the fish, pond maintenance and our filter systems. The amount of available disposable income for purchasing appropriate size and quality Koi is also an important variable.

With these few examples in mind, we can see that we need to choose

Koi that best suit our lifestyle and most importantly the ones that we think we will enjoy the most. You can evaluate your lifestyle parameters by considering your answers to these basic questions.

- ◆ Are you a patient or impatient person?
- ◆ What is your schedule like? Do you have a lot of time to tinker or do you prefer to efficiently use your time?
- ◆ Do you think that you would enjoy the challenge and competition of showing your Koi?
- ◆ How much space do you have to devote to Koi?
- ◆ Do you really and truly have the pond volume and filtration necessary to grow Koi to larger sizes?
- ◆ What would your budget be for a single nice Koi?

If you are patient, you can purchase smaller fish with good potential and watch them develop. They also do well in a larger pond where their growth will not diminish an already peaking color pattern. You can feed them to develop both in growth and color.

If you are impatient, you can purchase fish that are closer to their full color potential and possibly at or near show quality. However, to prevent them from growing beyond their peak too soon, they are best kept in a smaller sized ponds. We all like to grow our fish to their largest possible size, but some Koi are more dynamic, colorful and better when actually kept smaller. If you are up to the challenge, helping a young Koi develop to it's full potential can be a very rewarding experience. It is usually a long term project. The fish needs a lot of space to grow, lots of food, heat, time (perhaps 6-8 years) and meticulous care before it may develop into a show quality fish. They are better suited for the Koi keeper that has a larger budget, a large pond, a

better filtration and recirculating system and an owner that is very patient and one that might enjoy tinkering with the water quality to maintain it at optimal levels.

In summary, before or when you go Koi shopping, consider your own goals. Ask yourself, "What do I want to do with Koi?" Then choose a new one that best satisfies you, your budget, your pond size, your lifestyle and your goals and aspirations.

## Simplify Algae Control

Higher oxygen levels usually mean less algae.

High pH usually aids in string algae growth.

There are many safe products on the market to control and kill string algae. As with any chemical product you must follow the instructions. However, Linda Siler in *Flowers and Fins* the Springfield Watergarden Society newsletter lists the following as potentially harmful algae control products to save us the time of researching them.

"No More Algae" is listed as not to be used in ponds with plants, snails and goldfish.

"Pond Block" (possibly the most commonly used and most harmful) is not safe for any plants in the pond and will harm goldfish.

"Pond Action Cleaning Pack" this is a beneficial enzyme for easy maintenance, however, it is not safe for ponds with plants or fish.



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## Plants Versus Salt

Results of experimentation  
by Bonnie Hale

The plants versus salt tests were conducted over a period of six weeks to see what plants needed to be removed from the pond when adding salt as part of a treatment program. The test was run two times to ensure validity. Healthy, actively growing plants were tested in a 600 gallon stock tank with aeration added to assure that the salt was evenly mixed and distributed. The salt was measured once a week using a refractometer and a salinity test kit. Each plant was removed from the tank and inspected before the salt was increased to the next level. Due to evaporation, water was added as needed to maintain the proper concentration. Every two weeks, salt was added to increase the level another 0.1%. The two week period was selected because the general recommendation is that salt be put in the pond for a maximum of two weeks for parasite treatment.

The letter "D" represents the salt level at which the plant died. The object was to see which plants can tolerate a 0.3% salt concentration for a period of two weeks or more.

Plant	0.10%	0.20%	0.30%	0.40%	0.50%	0.60%	Notes
Arum - Calla			D				
Bacopa		D					
Blue Bells Chic-Chi			D				
Bog Bean			D				
Bog Lily				D			
Button Bush				D			
Canna						D	Top die back at 0.5%
Cat Tail - Graceful				D			
Cat Tail - mini			D				
Cardinal Flower			D				
Cotton Grass			D				
Duckweed			D				
Fairy Moss						D	Turned brown at 0.5%
Floating Heart			D				
Forget-Me-Not			D				
Frog Bit			D				
Hibiscus						D	Top die back at 0.5%
Houttuynia			D				
Iris *					D		
Lavendar Musk		D					
Lizzard's Tail					D		Top die back at 0.4%
Manna Grass			D				
Papyrus, Dwarf				D			
Papyrus, Egyptian				D			
Parrots Feather				D			
Pickeral Rush			D				
Perennial Rice					D		
Primrose Creeper			D				
Rush, Blue					D		
Rush, Striped					D		
Rush, Zebra			D				
Sensitive Plant			D				
Star Grass		D					
Sweet Flag				D			
Taro - Black Magic		D					

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## Plants Versus Salt

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Plant	0.10%	0.20%	0.30%	0.40%	0.50%	0.60%	Notes
Taro - Green				D			Top die back at 0.3%
Thalia						D	Top die back at 0.5%
Umbrella Palm						D	
Water Babies Breath			D				
Water Celery						D	Top die back at 0.5%
Water Chestnut						D	Top die back at 0.5%
Water Clover				D			
Water Clover, Variegated				D			
Water Fringe		D					
Water Hyacinth *	D						
Water Lettuce *	D						
Water Lily					D		Top die back at 0.4%
Water Mint		D					
Water Snow Flake		D					

**Additional Comments** below were in the article and were obtained from [www.koivet.com](http://www.koivet.com) "Doc Johnson's Stomping Grounds!"

"This is what the hobby has required. The ability to reliably forecast the survival or loss of plants in the face of salt regimens. I admire and appreciate the investment of time and money in this project by Bonnie Hale. Items above marked with an asterisk \* are results which vary from my personal and clinical experience. I had die backs in these plants at 0.3%, but found them to be salvageable at the three week Mark." - Doc Johnson

Continue from color page

Example: To make an 18 x 12 x 9-in. planter, you need approximately 2 gallons of sifted peat, 2 gallons of perlite, 1-1/3 gallons of Portland cement (about 12 lb.), 1 cup of loosely packed reinforcing fibers, and water.

**MAKING THE MIXTURE:** Add water slowly, mixing with your hands until the material is the desired consistency. Grab a handful of the mixture, and squeeze it; it should hold together and only a few drops of water should emerge.

**SUPPORTING THE FORM:** Place tape over any seams or holes in the form. To keep the sides from bowing out, use concrete blocks to support the outside walls. Then place about 2" of mix in the bottom of the large box and pack it down with the end of a short 2x4.

**DRAINAGE HOLES:** To create drainage holes, push several wooden dowels, each about four inches long and at least a quarter-inch in diameter, into the middle of the cement, spaced three or four inches apart. They will be removed later.

**REINFORCING THE INNER BOX:** To reinforce the walls of the trough, fold the flaps of the smaller box inward, and tape them flush against the sides some people will also fill it with sand. Center the smaller box in the larger box so there are about 2" on each side.

**FILLING THE FORM:** Use a mason's trowel or your hands to fill the mold with cement. Use a short 1x2 or 1x3 stick to pack the wet cement. Periodically, tamp it down to eliminate any air pockets.

**FINISHING THE TROUGH:** Smooth the top edges of the cement. Cover the mold with a plastic sheet so that it remains moist while the cement sets. Let the trough cure two to three days or until your thumbnail does not scratch the surface of the trough. At that point, tear away the outer box. At this point, brush the outside of the trough with a wire brush to give it an aged look. Let the trough cure for five to six weeks before removing the inside box. Once the cement is set, tear out the inner box. Apart from developing an occasional cracks or pits, which might enhance its aged look, the trough can last for years.

Note: Some people will use three-quarter-inch mesh chicken wire to reinforce the trough. This is placed in the bottom and bent up the sides so that the wire is embedded one inch on all sides, bottom, and top edges.

# Genesee Valley Pond & Koi Club Newsletter

## Board Members 2006

President: Larry Hursh

Vice President: Bob Wheeler

Secretary: Kathy Hursh

Treasurer: John Roguski

Pond Tour Chairperson: Brian Nagel

Refreshments: Yvonne Wheeler and Kathy Hursh

Newsletter Editors: Hursh, James, and Nau families

Webmaster: Norm James - gvpakc@attglobal.net

Mentor and Technical Adviser: Larry Nau

## Purpose of the Club

- To promote, create and enlarge the hobby of keeping, breeding, appreciating and exhibiting Koi and goldfish.
- To promote and appreciate the hobby of Water Gardening.
- To disseminate information about Koi, goldfish and Water Gardening.
- To socialize and have fun.

We meet in a very friendly atmosphere at 7:00 pm, the first Friday of every month, at the Rochester Civic Garden Center (the Castle), 5 Castle Park, off Reservoir Ave., in Highland Park. Parking is free. Anyone interested in water gardening and/or Koi is welcome to join us. We ask that you consider joining the club after your third visit.

For more information call Larry H. 473-6276 or e-mail lkursh@aol.com or visit the club website at

**[www.ggw.org/gvpakc](http://www.ggw.org/gvpakc)**

## Calendar of Events

**May 5, 2006:** Guest speaker from NARGS on Rock Gardening Basics and how they can be used around ponds, streams and waterfalls for added interest and aesthetics.

**May 12, 2006:** NFKPC This is the date for assembling packages for attendees at the June Koi Over Niagara event. Please join us as a volunteer to assist them in completing this project.

**May 13, 2006:** Possible off-site to Canandaigua garden presentation with side trip to Sonnenberg and Willow Pond. You must let us know if you are interested.

**May 20, 2006:** Genesee Land Trust Native Plant Sale 8:30 am-2:00 pm Brighton Town Hall 2300 Elmwood Ave. : Bergen Swamp Pilgrimage--Tours at 9:00 am & 1:00 pm Reservations are required--details in newsletter.

**June 3-4, 2006:** LilyFest Club display and plant auction

**Please remember our commitment as a group to help support NFKPC at the AKCA Seminar in Buffalo, June 22-25, 2006**

**This is a first for our area and is a great opportunity to see great Koi and to learn more about them from the experts.**

**Plan your schedules now, so that we can not only staff the booksales area but attend some of the programs too.**

**“Naturally Green” - A live gardening show every Saturday from 9-10 am on WYSL 1040 AM.**