## Let's Talk Nutrition!

During our September meeting Lone Star Koi Club members discussed nutrition. Beth Grunden asked me to talk about my experiences and feeding habits because, for some reason, Eric and I have VERY healthy koi that GROW like dust bunnies. Well, OK. Not quite THAT big. We do not medicate, tweak, dose, or adjust the pH—we simply maintain salt levels, feed, and I have Eric clean the filters. So, what are we doing right? (Besides

establishing that cleaning filters is the MAN'S job regardless of who wanted the pond), quite a bit it seems! Lots of info came from reading books and listening to experienced club members, but the rest is common sense.

Before I lay down the deluge of nutritional information I gathered, let me start with our basic feeding habits.

WHAT: Kol food analysis comes later; right now let's go over supplements.

Bananas – oranges – lettuce - watermelon – squash – peas lettuce – spinach – tomatoes – green peppers – grapefruit – kale – etc. Koi like fruits and veggies. It's good for them and watching your pets play "lettuce volleyball" like Beth's koi or "Waternbeloh Qhiddich" like mine, is fun!

Diane Caulk wins the Recipe of the Month' award for her method of supplementing the koi diet. Use a small amount of LOW SODIUM tomato juice, pour it over a bowl of koi food, stir, let soak in, then feed to your koi (in the pond). She says it does not cloud the water and keeps her pets in top shape. GREAT idea Diane!

Another type of supplement, specifically MINERAL, comes from koi habitat. Most minerals are absorbed from the water and not from a food source. This is another EXCELLENT endorsement for regular water changes. As minerals are absorbed, levels in the water are depleted and can only be replaced with new water.

HOW: By hand to better view your koi and monitor their health- by feeder if you are not able to feed them multiple times daily (H2O temps permitting).

HOW OFTEN: Little and often. (I offer what they can eat in about 2 minutes, 4 or more times daily or what they eat in 5-10 minutes for single feeding.) Consider how they eat in their natural habit. Large herds of insects do NOT suddenly kamakazi into ponds offering a sudden and HUGE amount of protein to koi. They 'graze' on bugs, plants, smaller fish, etc. all day long. Koi have no stomachs so a large amount of food followed by fasting is not good for their health or that of ANY "grazing" animal.

When the water temperature is high I may only get a single feeding in around 7 am. Do NOT feed after 6 pm even though during the summer that's when the water temps drop low enough to feed. Food takes about 4-5 hours to go through a fish in 68° water (faster in warmer water) - you don't want the ammonia getting dumped in your pond at night when the bacteria and oxygen exchanges are not operational.

SIZE: I am a believer that mimicking nature is often our best bet in keeping our pets healthy. Bugs do not often come in a one-inch round, hard compressed, dry, conditions. Fish DO have caudal teeth, as Bruce pointed out, but they aren't able to grind up their food they way we do. Besides, my koi are like vacuum cleaners. I have YET to see one of them stop and chew its food properly.

Dry pellets must be dissolved, processed, and passed through a fish. I use smaller sized food so more energy can go into absorption and less into the mechanics. Some say it's a good idea to soak the food before feeding, dump the water into the garden, and feed the koi pre-softened food. It makes processing easier and it helps water quality by removing the 'dust' (or use Diane's recipe for vitamin supplement rather than water).



### Summer is PEAK GROWTH TIME!

Are you feeding your fish as nutritiously as possible?

See this interesting, practical article from our friends at the Lone Star Koi Club.

Are you managing your water quality for maximum koi health?. Noted koi vet Dr. Eric Johnson recommends a 10% water exchange each week to help remove impurities, dissolved salts and other undesirable contaminants. He notes that ponds will lose water volume through evaporation but that harmful substances do not evaporate and may concentrate over time noting that topping off a pond is not a water exchange. For some more helpful information, see Dr. Johnson's web site: www.koivet.com.

# REMINDER MEETING NOTICE & POND TOUR SUNDAY - August 13 -1pm

Join us "pondside" for an afternoon of fun and information at the Frady's 8109 Cooper Street, Alexandria.

#### From the WASHINGTON BELTWAY:

take Route 1 South toward Fort Belvior, approximately six miles from the Beltway. You will pass Hybla Valley Shopping Center and the Mount Vernon Multiplex Cinema. At the 5<sup>th</sup> Traffic light past the Multiplex, turn *right* onto Frye Road. There is a Shell Station and Smitty at this corner. Go to the 3-way stop sign and turn left onto Pole Road. Go to the third street on the right and turn right onto Cooper Road to 8109.

#### FROM WOODBRIDGE/SOUTH

Exit I-95 North on Route 1, proceed past Ft. Belvoir. After Ft. Belvior, the Woodlawn Stab will be on your right. Turn left at the traffic lig onto Olde Mill Road next to Roy Rodgers. Proceed straight to the first stop sign. Turn rig onto Pole Road. Proceed on Pole to Cooper Street on the left. Turn left on Cooper to 8109

#### Participant's Report: 2006 Associated Koi Clubs of America Seminar

The Associated Koi Clubs of America held its 25<sup>th</sup> Annual Seminar in June in Buffalo, New York. The **ZNA Potomac Koi Club**, an AKCA member, was represented by **Chuck** and **Doris Poppe**, **Mike** and **Carolyn Frady** and **Bruce** and **Susan Grefrath**.

The Niagra Frontier Koi Club did a wonderful job of hosting the seminar. The emphasis of the seminar this year was **Koi Health**. Many seminar sessions were presented on Koi health by leading veterinarians from across the country. A very informative session was presented on **Wintering Your Koi**, a highly pertinent topic in Buffalo, which is sometimes called the "Snow Capital of the United States." The judge's session was also excellently presented. While some of the judges were evaluating live fish in one room, reporting results via closed circuit television, other judges discussed photos of Koi varieties and the finer points of key differences. The entire session allowed the hobbyist to gain a better sense of what the judges view as desirable characteristics in koi.

The day before the seminar started, many of the attendees – possibly homesick for their koi ponds and waterfalls – were treated to a tour of the *great* Niagara Falls from the American side. This included a boat ride on the famous "*Maid of the Mist*" which took us almost directly under the falls. Had it not been for the rain ponchos provided, we would have been completely soaked from the spray. (*Now that is oxygenated water!*) A wonderful lunch was included on the terrace with a view of Horseshoe Falls.

On Sunday, the concluding event was the Niagara Frontier Club Pond Tour. We visited six ponds as well as the Olmstead Botanical Gardens. Each pond presented a different focus from waster gardening to koi keeping. All were attractively presented and showed the pride each koi keeper has in the hobby.

The next ALCA Seminar will be in June, 2007 in Phoenix, Arizona. These are educational events and very worthwhile to attend and gain as much knowledge as possible to better our Koi habitat and health. I am already looking forward to the train ride to the Grand Canyon and the heat of Arizona. See you there! Mike Frady

Choice ZNA Potomac Young Koi For Sale: Expertly Cared for and Quarantined by Doris Poppe - call for details - 703-360-5918 - or speak with her at the August 13<sup>th</sup> meeting.

Need a Bubble Bead Filter? Please contact John or Peggy Byers at 703-780-5328

Articles - Tips - Share the Wealth! We are looking for articles, items and related info about Koi, Koi Health, Water Quality and Nutrition. Like the item from our friends at Lone Star.

Please send items to share to Mike Walker, 2405 Cavendish, Alexandria 22308 or Walkerkoi@hotmail.com

MEETING ANNOUNCEMENT: SUNDAY AUGUST 13: ELECTION OF OFFICERS & NEW POND TOUR at Mike Frady's - 8109 Cooper Street, Alexandria, VA (Directions on other page)