

AKC FILTER MEETING NOTES – JANUARY 7, 2006

(LET THE CONFUSION BEGIN)

1. Non- Expert; Do not fit-in well with this group of Experts. I am more like one you with no specific agenda and always looking for more knowledge.
2. Opinions about filters are sort of like Behinds, Everyone has one. Most folks believe filter is close to the best, if not the best. And they don't mind talking about it. I, on the other hand, **generally, let my filter speak for itself**, which it does quite often and well, during pond tours, at KOI Club meetings and when friends come over.
3. Burt Ballou, the Pond Construction Guru at AKCA, has published in conjunction with AKCA a Filter Construction Guide. It is thought provoking and helpful. One big point I learned is that **All** Biological Filters need a Gravity-Fed PREFILTER in front of them. Many manufacturers will tell you otherwise.
4. Unless you have built a pond or two, you should take your time and not rush the process. Take a year or two. Go on pond tours. I recommend you visit most of the ponds of the AKC Members before you start. Virtually all types of filter systems can be found.
5. My filter is a **Propeller** Bead Filter with **3-inch** ports manufactured by Aquaculture Systems Technologies (AST) with automatic backwash controls. It is generally found in the **Aquaculture Industry** and less frequently in KOI Ponds. I can vary both the frequency and the duration of the backwash. And yes, I do have a gravity-fed prefilter. My pond system is 16,000 gallons.
6. The **5,000 Gallon Filter** Should:
 - A. **Be** properly sized for the “pond”, ie, the desired **Flow Rate** and anticipated **Fish Load** (Lb. of fish) (Really the “**Food Load**”, ie, 1 to 1.5 % of mature fish weight) (See: Aquaculture Systems Technologies' web site = www.BeadFilters.com) I used this with good results. However, at the moment this part of their site is being overhauled. I hear it should be ready again in a couple of weeks.
 - B. **Sized** Based upon Flow (**Net** of all Head Losses) –

BEST	= 5,000 GPH or 83 GPM; (<u>60</u> minute turnover)
VERY GOOD	= <u>3,333 GPH or 56 GPM</u> ; (<u>90</u> minute turnover, like <u>Ga. Aquarium</u>)
GOOD	= <u>2,500 GPH or 42 GPM</u> ; (<u>120</u> minute turnover)
FAIR	= 2,000 GPH or 33 GPM; (<u>150</u> minute turnover).
 - C. **Do** both good Mechanical filtration and Biological filtration.
 - D. **Not be** outrageously expensive. BUT do not scrimp here! This is the place to splurge, if your funds are somewhat limited. This is sort of a “Trick Question”.
 - E. **Be** easy to clean. Automatic Cleaning is best.
 - F. **Have** Controls for Automatic Cleaning that cost only Hundreds and not Thousands.
 - G. **Have** a Shade Cover over the pond, if there is a Sun or Leaf exposure. OR, if not inside, you need a shade cover.
 - H. **Have** a bog pond with vegetation for additional Small Particle Settling and Nitrate Removal.
 - I. **Have** a Gravity-Fed Prefilter. Many manufacturers and distributors will tell you “Their filters will do it all and do not require a prefilter of any type .” That's BS in my opinion!
 - J. **Use** a Propeller Bead Filter like the PBF-5, PBF-3, and PBFS-5 OR check out the new **Polygeyser Bead Filter**. After further investigation, my gut feeling is that I would prefer this one for the **5,000** gallon pond.
7. Talk with manufacturers; they always know more about their products than distributors and dealers.