

**By: Paul A. Curtis**

We are amazed as to how well MinnFinn has been received. There has been such a positive response from MinnFinn users we could not be more pleased. Since our launch at the Koi show here in San Diego, February 11<sup>th</sup> to the 15<sup>th</sup> we have sold out the first production batch and the second is on the way.

Through the years of work and with the support of those like Dr. Nick Saint-Erne vet adviser for Koi Health Advisors and Terry Harrison of Harrison Koi, we are so pleased to have a product available to the Koi community, which it truly needed. Six years ago when I started working with MinnFinn Max, I was a hatchery manager and as always was looking for a new tool with which to treat fish. The benefit of this treatment was how environmentally friendly and non-toxic it is to the user and fish. This was remarkable as so many compounds can be very harmful.

### Product Responsibility

There are several aspects of MinnFinn that make it unique. The first is how well it works on such a broad spectrum of organisms. Also is the fact that the treatment is completely stopped by NeuFinn the neutralizing agent when added to the water. After the treatment is stopped there are no water changes needed and with water becoming more scarce and expensive what a feature. Most importantly is its environmental friendliness and non-toxic properties. We truly now have a green, environmentally friendly product that is effective against external invaders of our fish.

It is time that we become more responsible for the environment, the fish and ourselves. For too long now we have been putting toxic chemicals in our ponds that are cancer causing and remain in the environment for very long periods of time. Not only is this dangerous for the environment but also to the fish and to you the user.

**Now with MinnFinn there is a truly effective alternative traditional methods.**

## **Tech Notes:**

### ***Dosing Large Ponds (over 4000 gallons)***

**When dosing larger ponds where an entire liter of MinnFinn Max and bag of NeuFinn are needed, please add in a suitably diluted manner. With any treatment, when you are adding anything to your pond you do not want to add in concentrated plumbs. A fish experiencing the plumb may be overcome and it may cause serious damage to the animal. On the MinnFinn label, the user is instructed to dilute both the treatment and the neutralizer before adding to the pond. With large ponds needing larger doses it would be best to further dilute in two or three buckets of water when treating with all or nearly all of a one liter bottle and bag.**

**The following account from Brian Liljas illustrates this.**

*“My fish were jumping so I decided to do a scraping and use the microscope and found 1 Gyrodactylus. I tested 4 out of the 16 fish.*

*Pond size is 18,000 gallons. Temp was 51 degrees. Fish size from 18 inches to 38 inches. 9 of these fish are over 30 inches. I turned off the 2 bead filters, and 2 nexus filters and left the 2 aerators on*

*I mixed 2 bottles of the MinnFinn Max. Each bottle was mixed in a 5 gallon bucket with water, which was filled 3/4 full. Went around the perimeter of the pond with the MinnFinn Max and emptied all the solution into the pond and started my timer, and kept a constant eye on the fish.*

*Mixed the neutralizer in the 2 5 gallon buckets with 3/4 full of water, this slurry was extremely concentrated. No problems until 40 minutes when one of the fish jumped and was acting a bit odd. So I decided to add the neutralizer and 4 of the fish immediately went to the bottom of the pond.*

*I turned the pumps on FAST....one of the fish turned on her side and eyes rolled up I got a blue pan and filled one half full of pond water and half with the hose water. Put an air bubbler in.*

*In the pan, the fish just laid on its side and was listless, I kept moving the fish and holding her upright after about 48 minutes, she came around and I let back in to the pond and things are now great with the long fin which is approx. 25 inches.*

*I tested the pond in two days and the scraping showed they were clear of any skin flukes or parasites. Note the neutralizer killed all the algae on the areas where it first hit in the water and still has not come back in two weeks*

*Thanks for all your assistance, in the above matter.. Brian Liljas”*

## **Treating Large Fish**

**Fish larger than 26 inches appear to be more sensitive to MinnFinn than the smaller ones. If fish appear to be taking the treatment harshly remember all you need to do is neutralize to end the treatment. Normal reaction seems to be either increased activity or lethargy. This may not be the case in all instances as many large fish have been treated with no problem for the entire hour. These observations are normal and you need not worry. If you see fish starting to roll over on their sides, end the treatment immediately. This is a sign of the treatment being too strong.**

## **Pond Volume Calculation**

**If you do not have a good estimate on the size of your pond, here is a trick you can use. You will need a simple hydrometer from the fish store that will read salinity in parts per thousand. If you add a small known amount of salt to the water, and then measure salinity in parts per thousand, you can calculate the number of liters. Parts per thousand (ppt) salinity is the same as grams per liter. Therefore if you put 1 kg of salt in your pond and your measurement was 1 ppt or 1 g/liter than you know your pond is 1000 liters. For gallons divide the liters by 3.7854. For this example the pond is 264 gal.**

## Treatments (In the Field)

### *Chilodonella and Fungus*

**A diagnosis of Chilodonella and fungus in some Koi at Sunset Koi in Redding California was eradicated with one treatment of MinnFinn Max. The following is their account.**

*“Hi Paul,  
Sorry I haven't gotten back to you sooner.  
We had some small long fin come in on Feb. 26. They were very weak. March 8, I noticed one of them was moving very slow. The next morning it was dead and another one was lying over. We noticed they had some fungus starting on them.  
On March 9, I did some scrapes on them and noticed they had Saprolegnia and Chilodonella. I then treated with MinnFinn Max.  
March 10, I tested the water for Ammonia, there was none. I do have a large filter on that quarantine tank. Also did scrapes on 2 more fish. No evidence of Chilodonella or Saprolegnia.  
March 11, still no kick back on filter and fish are doing great.  
March 16, I did scrapes on 4 fish, found nothing and also tested the water (for ammonia), it was fine.  
We have not lost anymore and they are doing great.  
I only treated once with MinnFinn Max.  
I am very impressed with your product MinnFinn Max.*

*Thank you  
Clint Smith*

*Sunset Koi  
Redding Ca. 96002”*

### *Trichodina and Flukes*

**One fish dealer/wholesaler demonstrated the effectiveness of MinnFinn Max on a group of 50 4” to 5” fish getting cleaned up for sale. In the test on Trichodina, pre treatment scrapes showed more than 12 Trichodina per scrape and after only 30 minutes into the treatment, 12 for 12 scrapes showed no organisms remaining. More scrapes the next day also demonstrated no Trichodina.**

**Similar results were noted for treating flukes. The only difference was that two treatments were required to eliminate the infection.**

**Finally**

**As the developer I can't tell you how good it feels to see the successes and the enthusiasm from users like yourselves. It also feels good to get a product into people's hands that I truly believe in and that should make the hobby a better and safer one. To quote Terry Harrison from Harrison Koi in Riverside California,**

***"It just works!"***

**For more information**

**Please call 800-955-0221 or visit our website at  
[www.minnfinnmax.com](http://www.minnfinnmax.com)**

**MinnFinn**