

Zebra Mussel Treatment at Fairport

The stocking truck is filled with filtered water. Water is filtered through sand filters and then filtered through a second filter with a 25 micron felt filter bag in it. Smallest veligers are about 54 microns. We want to be sure there are no veligers on the truck.

Fish are treated 1 hour in the raceways with 750 mg/l of KCl prior to loading on to truck.

Just prior to loading 25 mg/l of formalin is added to the tanks on the truck.

When fish are dipped out of the raceway, they are held in the dip net for a time to let water drain off them. Time depends on species and size. We use our judgment and try not to stress fish too much.

Water to transfer the fish is always taken from the truck. Even though the treatment should kill the veligers, we do every thing possible to limit the amount of veligers that could be transferred.

Fish are held at least 2 hours on the transport truck as it travels to the stocking water. If the stocking site is close, the truck is held at the hatchery so that it will get the minimum 2-hour treatment before the fish are stocked. No salt is added until the 2-hour treatment is done. Adding salt reduces the effectiveness of the treatment.

At the stocking site, the fish are dipped off the truck and stocked. We do not tube the fish off the truck directly into the stocking water. If we need water to transfer the fish, water is taken out of the area being stocked. The truck is drained away from any water body so that no water may find its way to the stocking site.

I have looked for veligers in our filtered water and have not found any yet. So I am assume our filter system is doing its job. I have not looked for live veligers in our trucks after transferring fish. I have attended several seminars and all the experts say that it is hard to keep veligers alive let alone find out what kills them.

We have not found any adult zebra mussels in any water I have stocked. I have transferred fish to the Rathbun Hatchery for as long as we have had zebra mussels in the Mississippi and we have never seen any adults there.

The treatment I use is from, Field Testing of Protocols to Prevent the Spread of Zebra Mussels during Fish Hatchery and Aquaculture Activities, Edwards, Babcock-Jackson and Culver, North American Journal of Aquaculture, 64:220-223.

I have used the treatment on river and lake strain walleye, saugeye, largemouth bass, bluegills, channel catfish and white amur and have not had any problems with any of them.

We use a filter to remove zebra mussel veligers from the water that we use prior to treatment with KCL. The following are some of the specifications for the filter and the pump motor, etc. of the nameplates:

Jacuzzi Laser Sand Filter

Model	225L-S15LR6	
Part No.	94084076	Serial No. 018298
Filter Area	2.64 cubic feet	
Height	32.5 inches	
Tank Diameter	22.5 inches	
Filter	53 gallons per minute	
Backwash	40 gallons per minute	
Silica Sand Eff. Size	0.4 to 0.55 mm	250 lbs.

Motor

A.O. Smith	Catalog: BZ01-15
Horsepower:	1.5 SPL
Part:	7-177760-23
Type:	SP FR: R48Y
Phase:	1
Hz:	60
RPM:	3450
Volts:	115
Amps:	12.4
Time:	CONT
Encl:	DP
Form:	PHS
Code:	K
Insul Class:	B
AMB:	40 degrees Centigrade

[Picture attached on Next Page]

I can't remember at this time where we purchased it, but I am sure that with a little detective work, anyone could find out where to find one. There are probably several different suppliers. Just have to find the one with the best price.

Herb Bollig, Project Leader
Gavins Point National Fish Hatchery
31227 436th Avenue
Yankton, South Dakota 57078-6364
(605) 665-3352

