## Putting you Fish to sleep: Anesthesia

Everyone is afraid to put their fish to sleep. Using anesthesia on Koi and Goldfish is not that hard. Actually the procedure is quite simple and much less stressful on the fish and us when we need to treat a sick fish. We have all read articles and medical studies on fish that show stress as a major contributor to diseases and even death. Once we have learned how to properly and safely put your fish "under" we will be able to administer first aid a lot easier. Even though it is not difficult to perform, anesthesia is not without some risk. However, adequately and humanly treating your injured or sick fish should be our most concern.

I will discuss two types of recognized anesthesia. One brand and fairly cheap is Clove oil or "Oil of Cloves" sometimes labeled "Eugenol." It can usually be found in most large pharmacies and health food stores in liquid form in small bottles. The proper dose is 5-10 drops per gallon of water. Begin with 5 drops per gallon and wait about 10 minutes. If your fish hasn't rolled over on it's side or is sedate enough to be worked on with little movement, add 2-3 more drops per gallon and wait ten more minutes. Another great option but a little more expensive is a product called MS-222 or Tricaine Methanesulfonate. Common brand name is Tricane-S. This is a commercial fish tranquilizer in a powder form and will have to be bought from a large pond or koi supplier. Dose exact according to product label directions. This is a very good and safe product.

## How to use Anesthesia:

- 1. First have everything you are going to need to treat you sick fish set up and handy to begin with. You will need two containers large enough to hold your fish and some pond water. The first container is where you will use the anesthesia and the second is to revive your fish after treatment.
- 2. Place enough pond water in both containers to allow the fish to float comfortably. Do not use containers too larger or you will need to use greater amounts of anesthesia. You only need enough water to barely cover the fish. Have a cover for the container to prevent your fish from jumping out and possibly getting injured. The net you use to catch you fish will work fine.
- 3. Use surgical gloves to handle you sick critter.
- 4. Measure the anesthesia into a small zip lock bag with a small amount of pond water. Shake the mixture until it is completely dissolved. Using warm water with clove oil will help emulsify the oil based product. Pour into the first container.
- 5. Use an air stone to aerate the water in both containers.
- 6. Carefully catch and place the fish into the first container with the anesthesia. Cover the container. Check the time. Observe the fish carefully through this entire process. The breathing will slow and the gill plates will slow down. It will want to struggle a bit at first so have the cover on the container. It usually takes about 5-10 minutes for the fish to go under. If it seems unaffected by the anesthesia after ten minutes place additional water from the tub back into the zip

- lock bag, add some additional anesthesia (perhaps 50% of original dose) mix well and pour into the container with the fish. You might have to do this a few times until your fish starts to sit on the bottom and eventually it will lay over on it's side respiring or breathing slowly. Larger fish will take a little more anesthesia.
- 7. When you can pick it up and it doesn't want to struggle or flop around it is ready to be treated. It's gills covers will still be moving slowly.
- 8. Complete your treatment and then place gently into the clean water container until it revives. Make sure the fresh water container has lots of aeration. Once the fish uprights itself and starts swimming it can be placed back into your pond or Q-tank. This normally happens very quickly when the sick fished is placed into the clean aerated water container. Moving the fish fore and aft to add water flow over the gills has proven helpful in waking the fish up. Do not release the fish until it is upright and swimming freely.
- 9. Your Done. Now that wasn't to bad was it. If you need help, you call one of your KHA's.

Joe