

TROUT IN THE CLASSROOM



By: Jim Nash, Ray Neirle TU Chapter Coordinator

TROUT IN THE CLASSROOM

A national program that involves National Trout Unlimited, State and local TU chapters, and in our case, the New Jersey Division of Fish and Wildlife.

The program is designed to involve school age children in the process of raising trout in a fish tank from the egg stage to the fry stage of growth and then releasing the trout into designated streams in New Jersey. The objective is to make children aware of coldwater conservation and the environment that trout need to survive, as well as to introduce them to Trout Unlimited and N. J. Fish and Wildlife.



Brook Trout - The State Fish

What Does The Program Involve

The New Jersey Division of Fish and Wildlife

- ▣ The Pequest Trout Hatchery.
- ▣ The involvement of dedicated N. J. Fish and Wildlife personnel in a number of capacities.
- ▣ The production of brook trout eggs and fry at the hatchery.
- ▣ The coordination of the program between the schools, the hatchery and the local TU chapters.
- ▣ Monitoring the progress of the program and solving problems.

This Is Where It All Starts



The Pequest Trout Hatchery

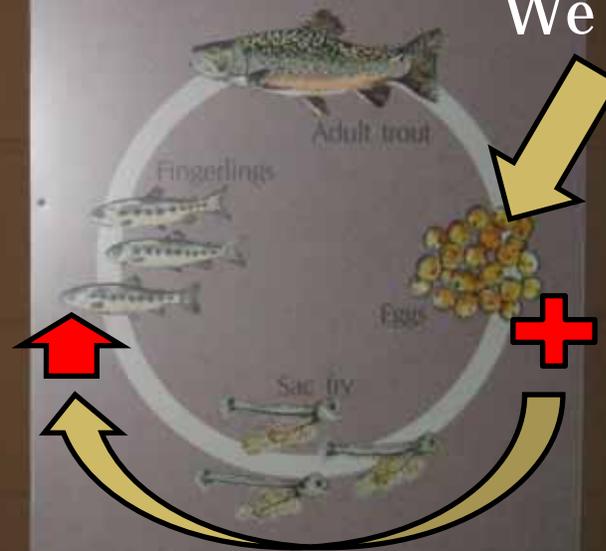


The Hatchery Egg Development Process

The hatchery does all this



LIFE CYCLE OF A TROUT



We get these

The kids go from here to there

The Pequest



Stream rocks & bugs

What Does The Program Involve

The School

- ▣ Schools vary in size, interest and participation.
- ▣ A teacher that wants to involve the class in a biologically based long term experiment.
- ▣ Funding for a fish tank, chiller and some additional equipment.
- ▣ A location in a classroom that can support the equipment, allow the children access and that can be monitored regularly.
- ▣ Commitment!
- ▣ Over 14,000 students participate in the program.

Somers Point New Jersey



The Classroom Environment



What Does The Program Involve

The Teachers

- ▣ The teachers are from various schools throughout the state and our region.
- ▣ They teach children at almost all levels of education up to high school.
- ▣ They are varied in their commitment to the program and ability to carry out the program.
- ▣ They rely on local TU chapter representatives, the State TU Chapter and Jessica Griglak from the N. J. Division of Fish & Wildlife to coordinate the program and trouble shoot problems.

Teachers Are Directly Involved



Camden High School



Cinnaminson High School



Camden Catholic High School



Somers Point



What Does The Program Involve

Trout Unlimited

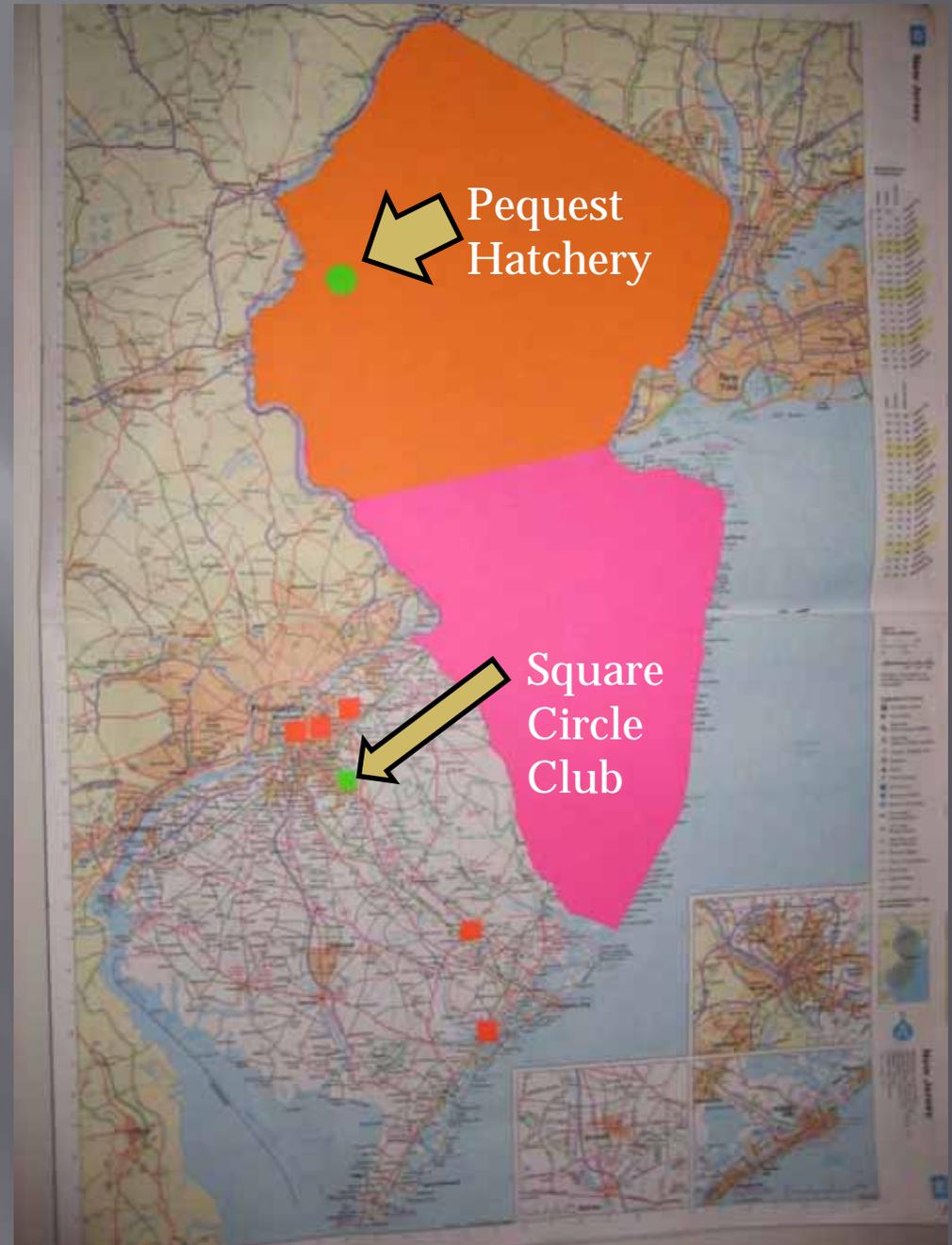
- ▣ A Local Trout Unlimited Chapter that wants to be involved in the program.
- ▣ One or more committed members of a Trout Unlimited Chapter.
- ▣ The commitment of personal time that is calendar and time sensitive.
- ▣ A commitment that may vary by school and teacher.
- ▣ For members to be involved with teachers & students, travel long distances & solve problems.

New Jersey Trout In The Classroom

We currently cover 1/3 of the State and have five schools that we are responsible for. Three in the Camden area, and two toward the Jersey Shore (Somers Point and Egg Harbor City).

The program is now in its 5th year and serving over 14,000 students in New Jersey at more than 100 schools spread throughout the state supporting 121 tanks. Schools are added to the program each year. One teacher is in her 15th year.

Year 1: 25 schools
Year 2: 67 schools
Year 3: 80+ schools
Year 4: 90+ schools
Year 5: 100+ schools



State TU Rep. Brian Cowden – Original Program Coordinator



State TU is directly involved in program support

TU members getting eggs and food in October



Local TU members make it happen from the beginning

At The Musconetcong River Release Site

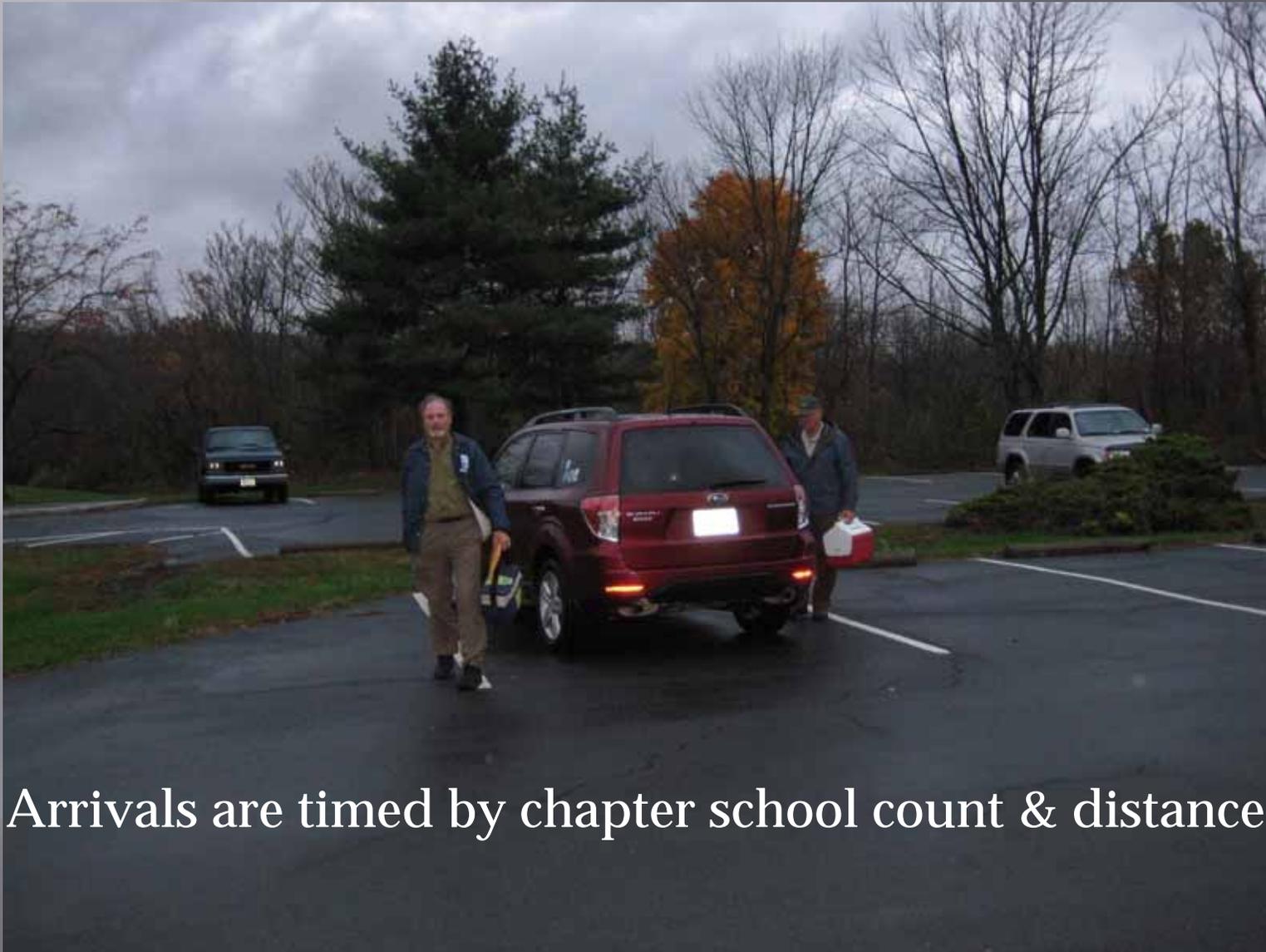


And local TU members are there at the end each year

The Egg Delivery Process

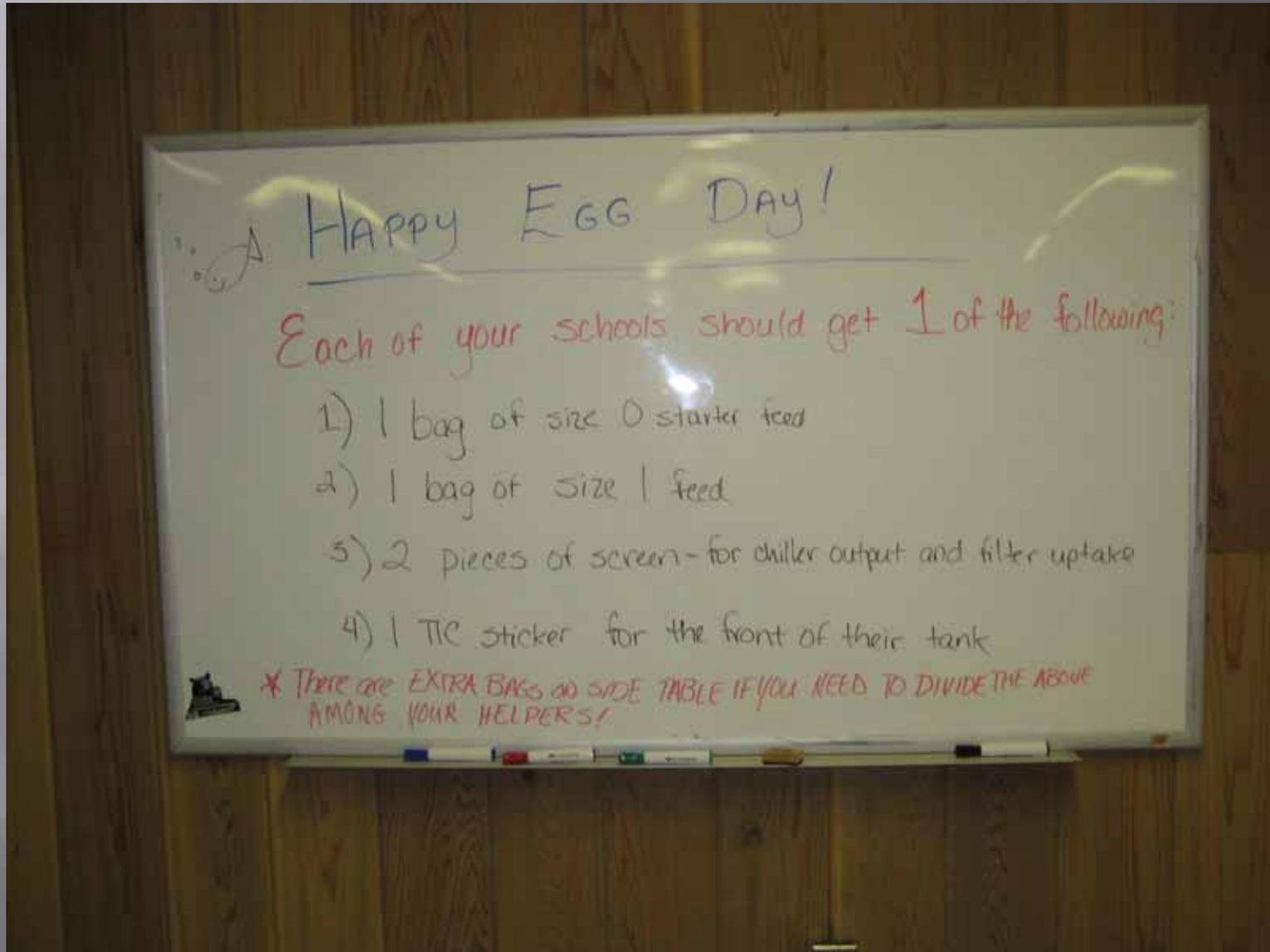
- ▣ TU chapter members arrive at the hatchery at timed intervals.
- ▣ We check in at the information center with our cooler.
- ▣ Receive the Brook Trout eggs and make sure we have all of the egg packets for the schools .
- ▣ Get the bag of food, netting and other information for the schools and head out.
- ▣ We deliver eggs to each school, check the tank temperature and help put eggs in the tank.
- ▣ Answer questions & have fun with the kids.

Arrive Early At The Pequest Hatchery



Arrivals are timed by chapter school count & distance

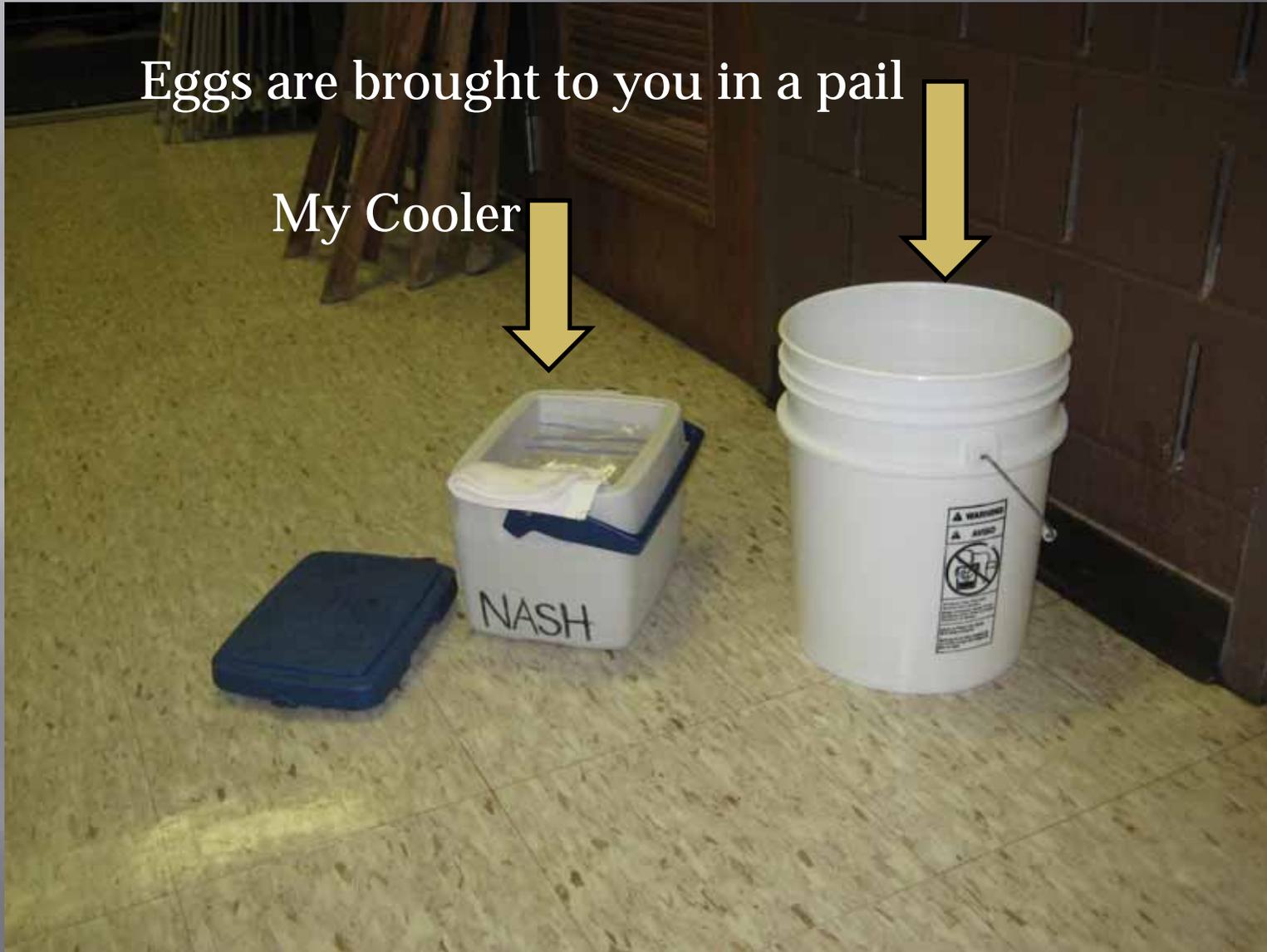
Get The Latest Information And Instructions



Hatchery Personnel Bring Your Eggs

Eggs are brought to you in a pail

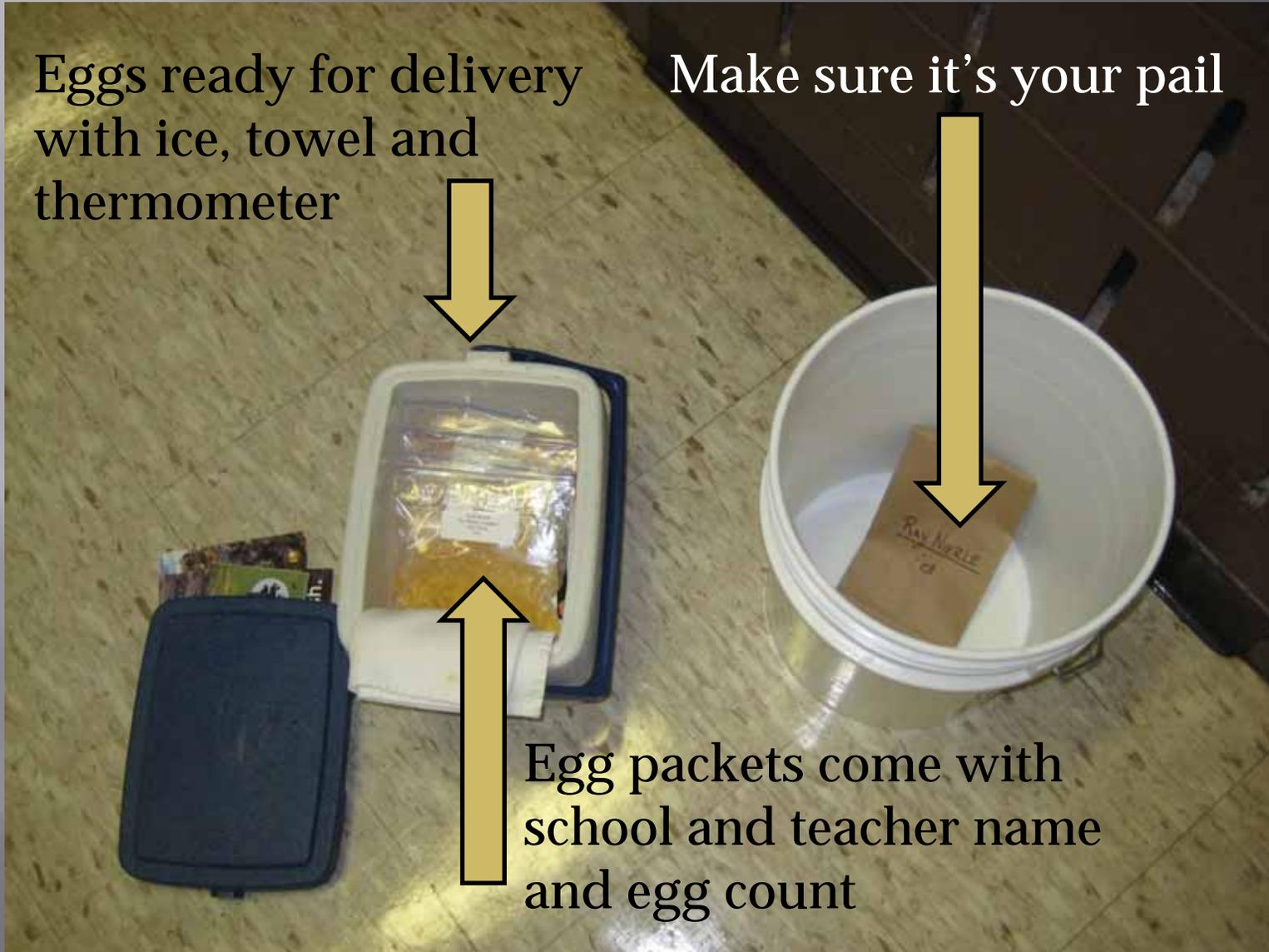
My Cooler



Transfer Eggs To Your Cooler

Eggs ready for delivery
with ice, towel and
thermometer

Make sure it's your pail



Egg packets come with
school and teacher name
and egg count

TU Members Pick Up Food And Netting Bags



Make sure it's your bag

TU Chapter Members Gather Their Delivery & Do Final Check



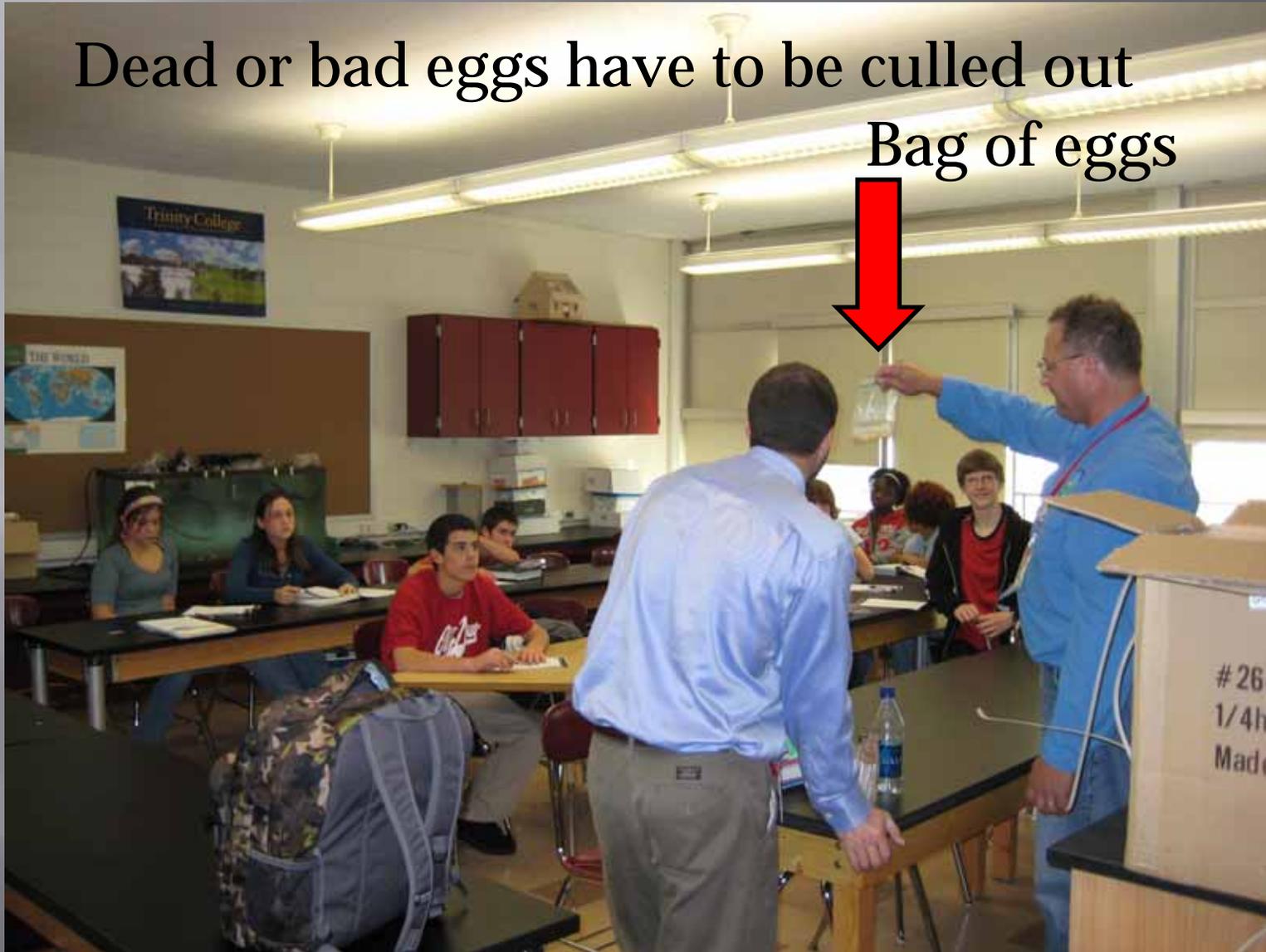
What The back Of My Car Looks Like



Egg Delivery Day At The School

Dead or bad eggs have to be culled out

Bag of eggs



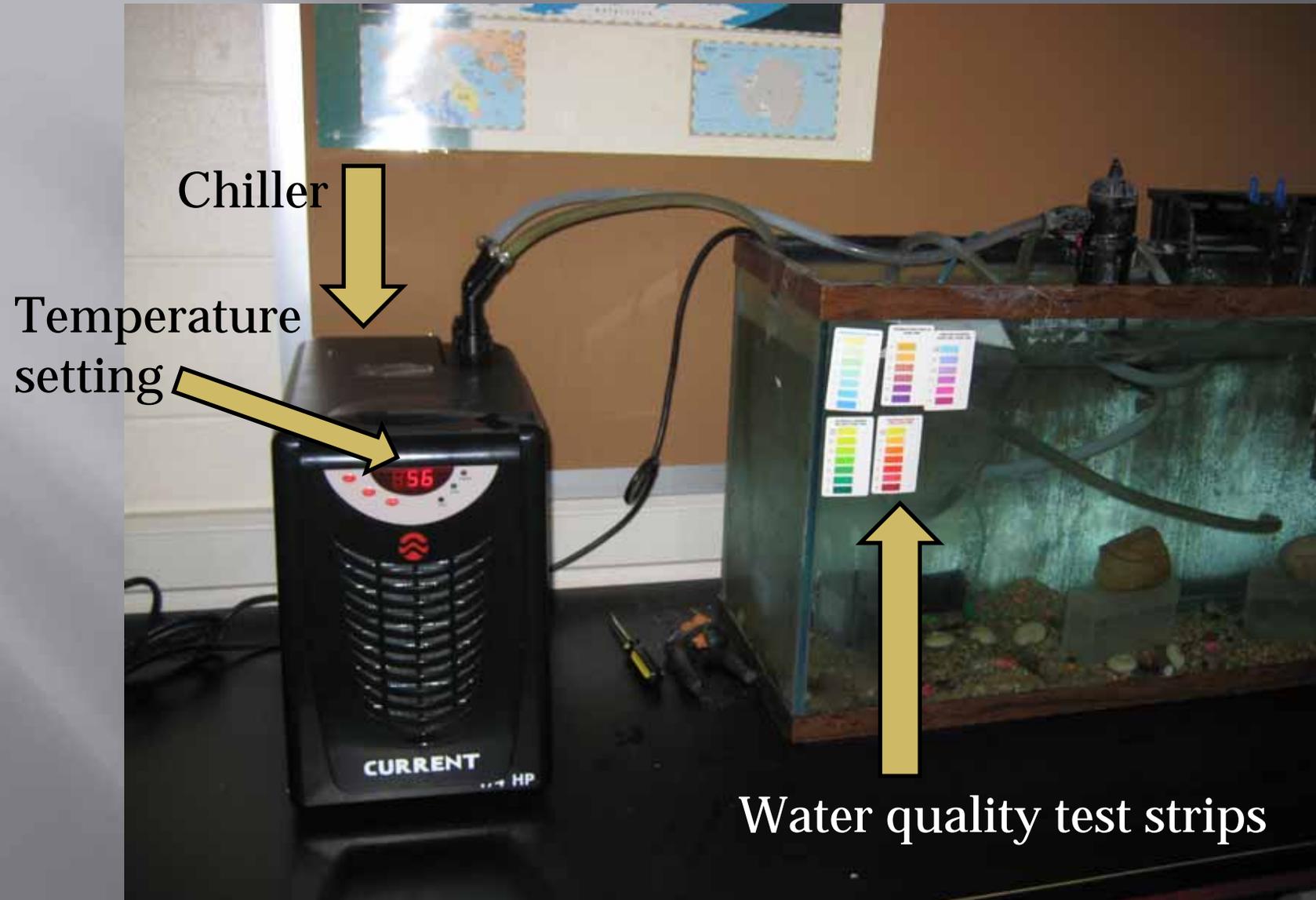
The Set-up

- ▣ A fish tank – the size varies.
- ▣ A chiller and pump.
- ▣ A filter with a pump.
- ▣ An airstone and air pump.
- ▣ A temperature monitoring device.
- ▣ An egg holding structure.
- ▣ Fine mesh screening for pump intakes.
- ▣ Chemicals to balance the pH levels and biomass of the water and food.

The Fish Tank



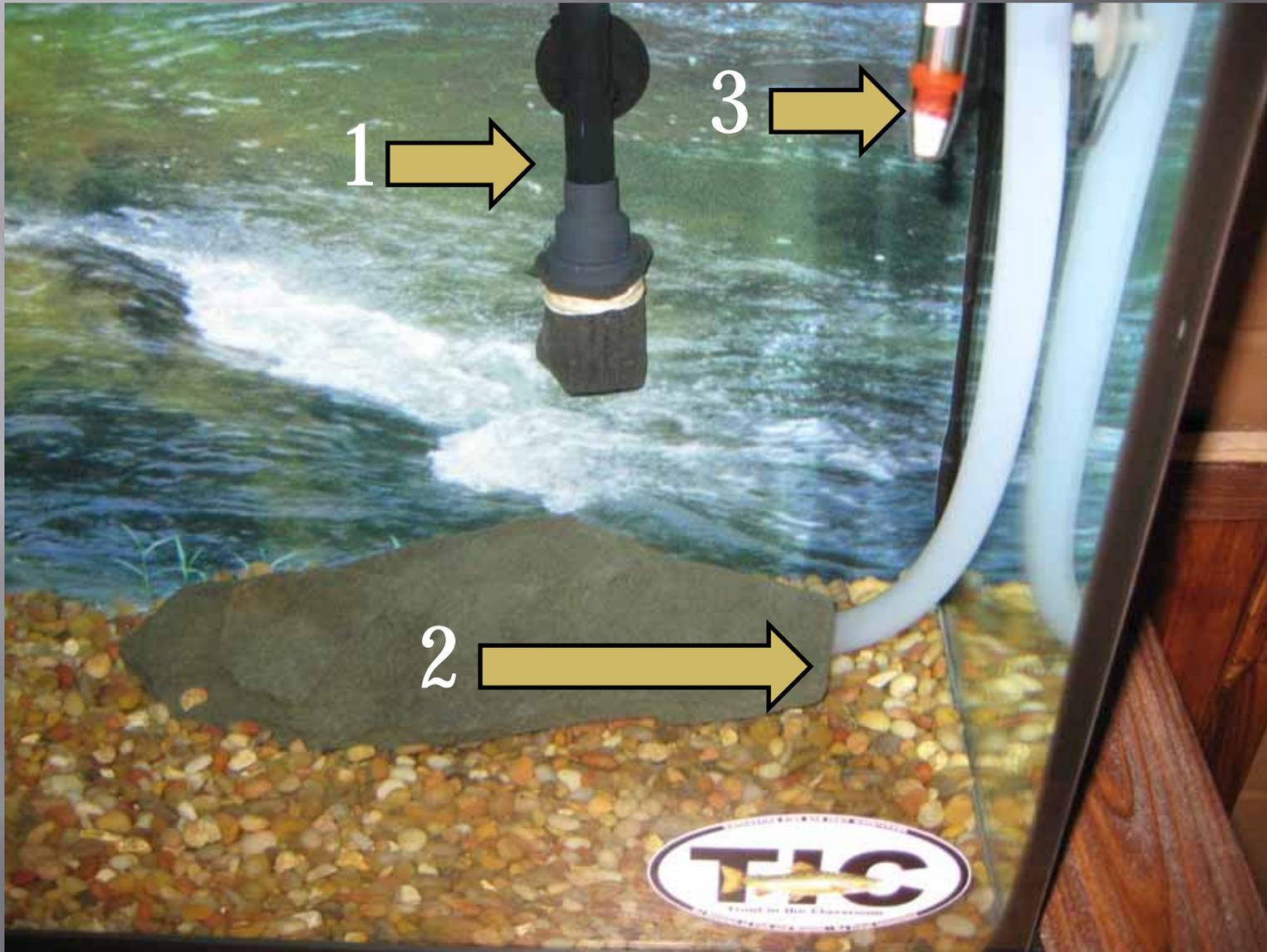
The System Chiller



Intake Pump to Chiller



Filter intake – Chiller outflow - Thermometer



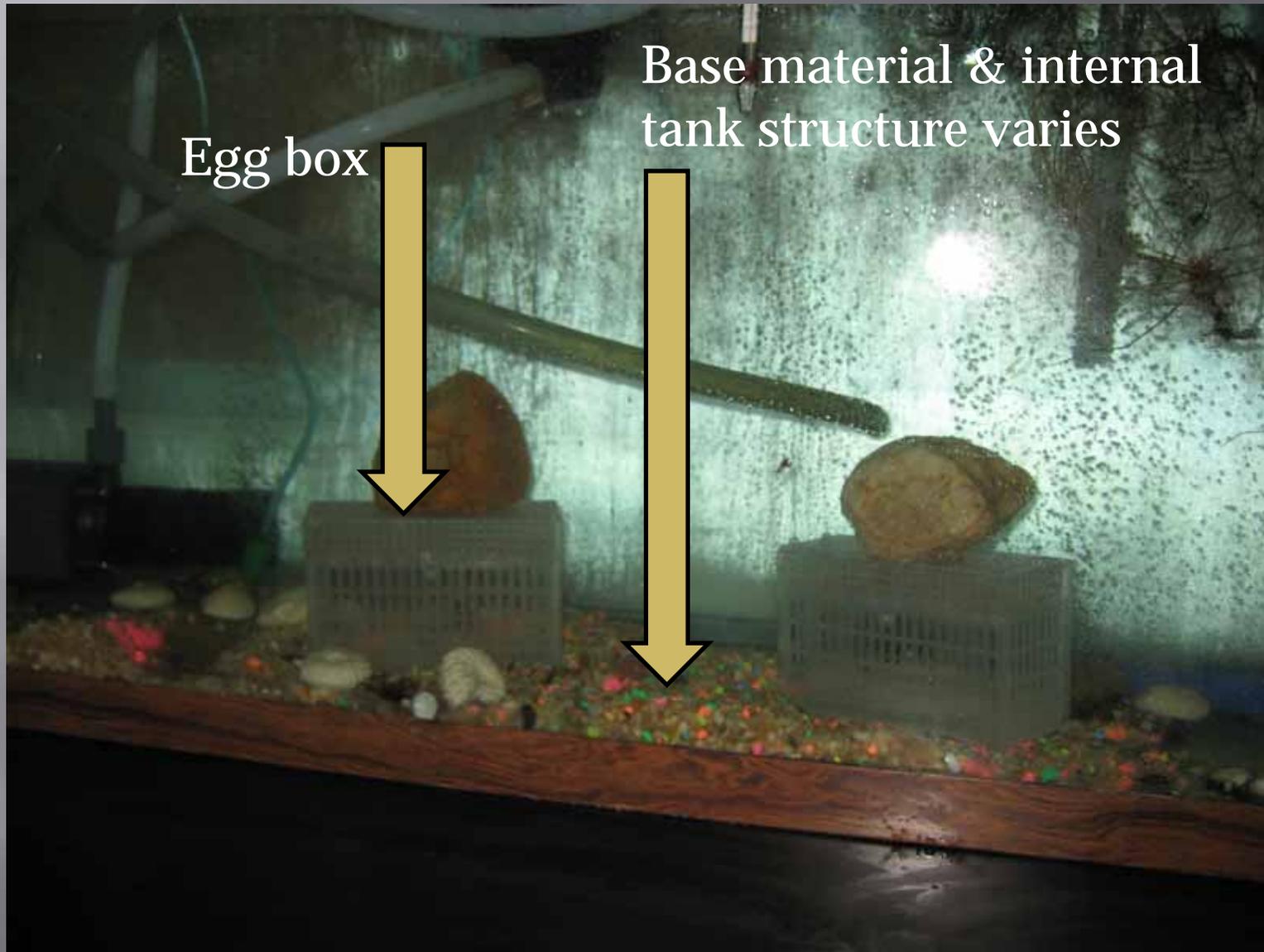
Egg Holding Netted Cradle



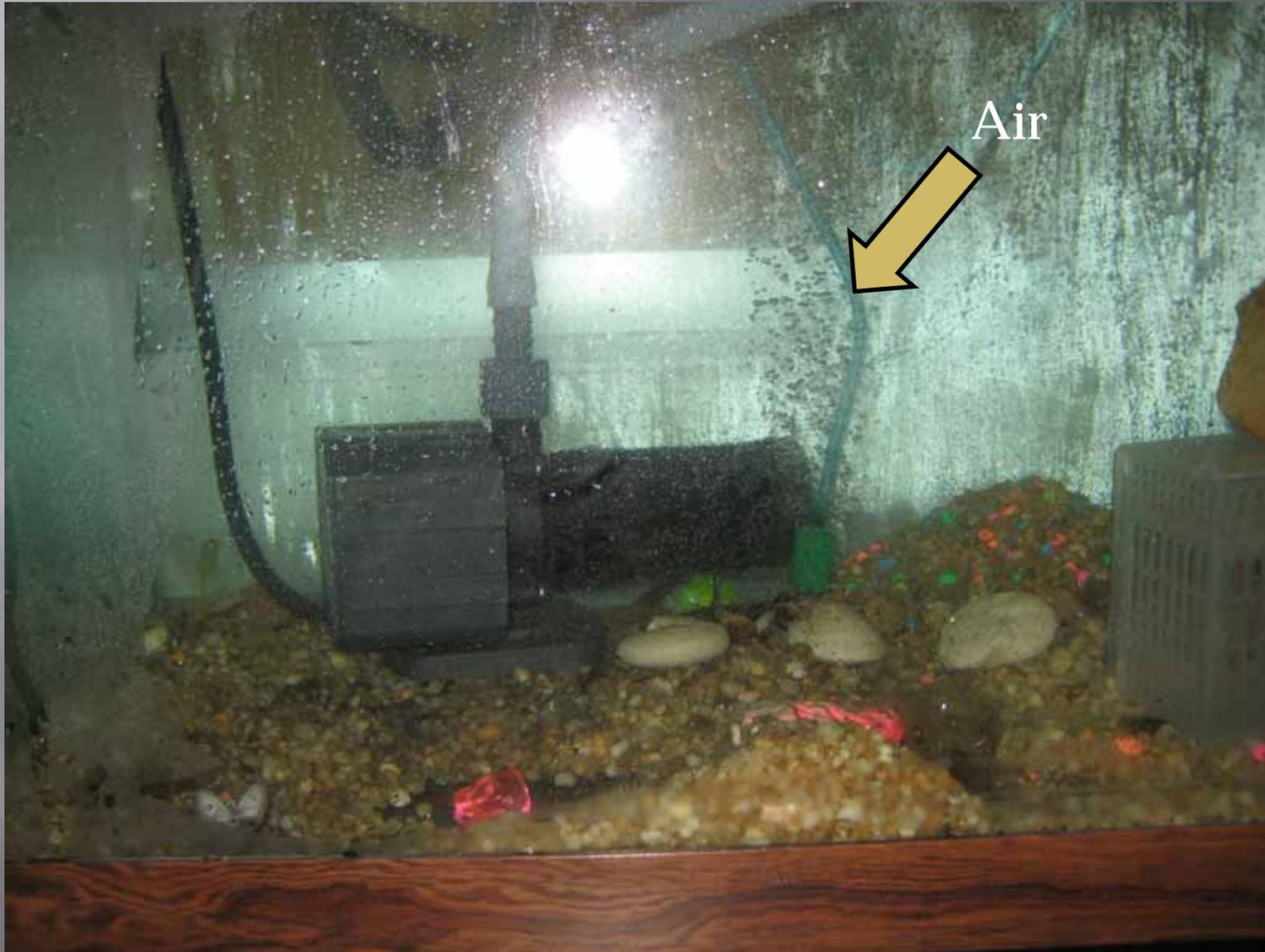
View From The Tank



Vibert Egg Box



Lots of Air and Cold Water



Air Stone and Air Pump

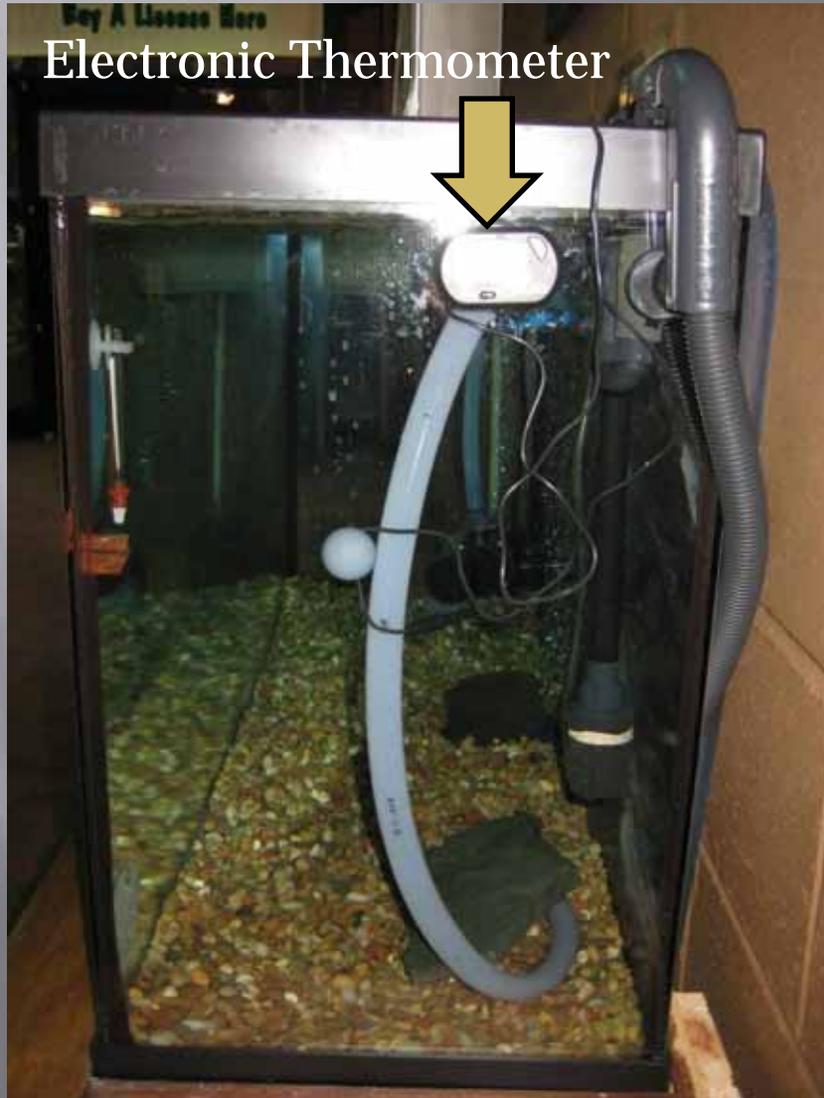


Water Filtration System



End View of the Tank

Electronic Thermometer



Vibert Box



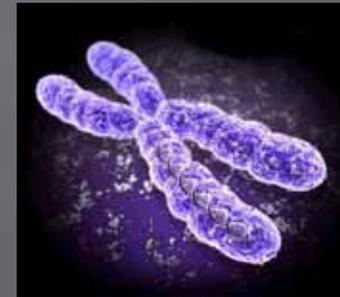
The Fish



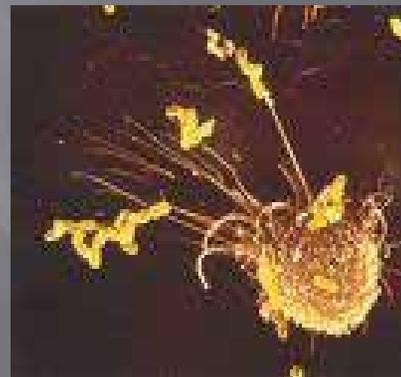
What It's All About

- It's about the kids, getting them involved.
- It's about educating kids and getting them to experience the outdoors.
- It's about learning about coldwater conservation & habitat education.
- It's about an introduction to the New Jersey Division of Fish & Wildlife and Trout Unlimited.
- And – having fun!



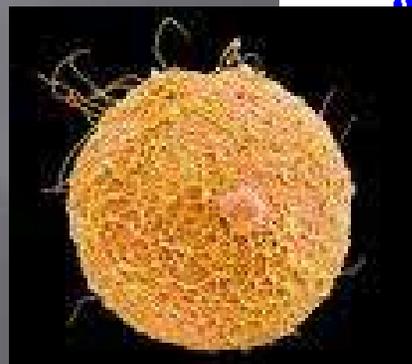
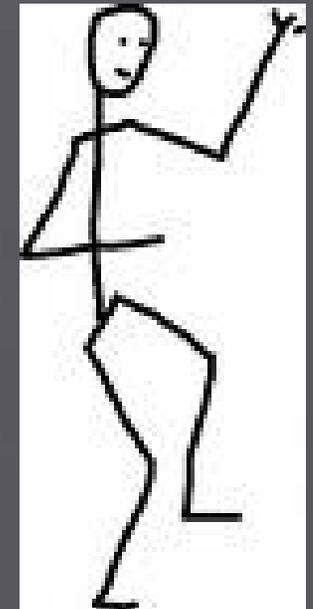
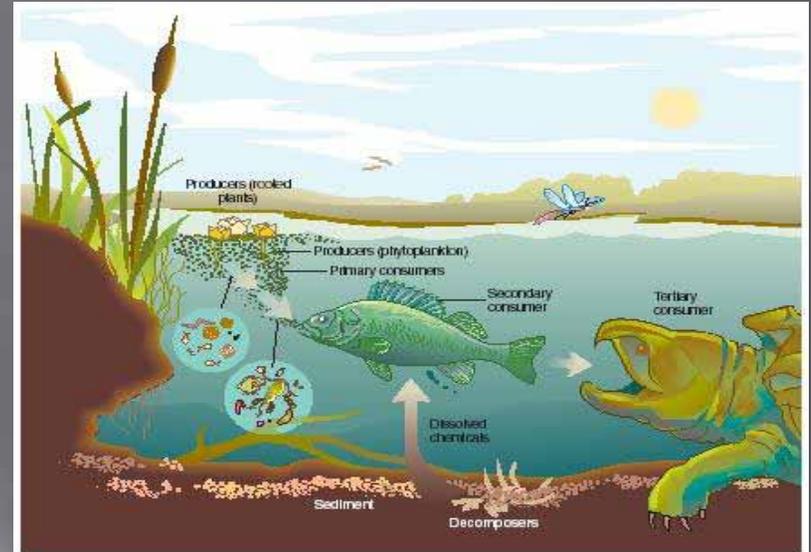


INTRODUCTION TO BIOLOGY



Studying Life

- ▣ Biosphere
- ▣ Ecosystem
- ▣ Community
- ▣ Population
- ▣ Organism
- ▣ Groups of cells
- ▣ Cells
- ▣ Molecules



They Get Excited When You Come



The Fish – They Often Name Them



A Special Class Trip – Release Day



Getting The Fish Ready For Transport



At The Musconetcong River Release Site



The Fish Are Ready For Release To Their New Home



Their New Home And Habitat



The Release Begins



The Fish Are On Their Own



Saying Goodbye



The Fish Are In



Taking Time To Explore The Stream & Learn About The Habitat



Lunch With Old And New Friends A Chance To Talk About TU And Fishing



Another Release Site – The Toms River



A Different Habitat



Another View – This Is A Trout Stocked Stream



Other Opportunities

- ▣ We may be invited to go on the class trip & help release the fish.
- ▣ You may be able to help the kids catch fish at the hatchery (big fish).
- ▣ You may be invited to class to give a lecture or fly tying demo.
- ▣ You may travel to a stream and show the kids the habitat, fly fishing equipment and flies.
- ▣ You can become involved with the hatchery in other activities – they always need volunteers.

The Pequest Trout Hatchery Education Pond



The Kids Get To Fish & Get A Fish Of A Lifetime



Smiles & Excitement All Around



Big Fish – Big Fun! – We Help



It's All About The Fish & The Kids



*Jim Nash
2009*

The TIC Program

2011 Presentation

Jim Nash, TIC Chapter Coordinator & Bob Powell, Chapter President