



TROUT IN THE CLASSROOM

By Margaret Merlin

On a beautiful crisp morning here in Lytle Creek, as the sun-dappled on Alder trees, a few Big Leaf Maples and Cottonwoods, a group of dedicated members from the Deep Creek Fly Fishers Organization canvassed the creek and nearby vegetation hunting for insects and bugs that trout would naturally devour. Working together as amateur entomologists, they find Stone Flies, Crane Flies, Caddis Flies, May Flies, Damsel Flies, Dragonflies, Water Beetles, Aquatic Worms, and Midges in various life cycles. These are all collected carefully and placed in water-filled trays that are oxygenated. The trays are transported to USFS Applewhite Picnic Grounds to be displayed as part of the last class of a science/nature environmental education program for participating students in grades K-12; a wide variety of schools in the surrounding area participate in this program. "Trout in the Classroom" is a very popular program sponsored by Deep Creek Fly Fishers Organization and funded by a number of generous supporters and various partnerships.

USFS Applewhite Picnic Ground Hosts, Bonnie Hutter, and A.J. Squillante welcome all who are coming to participate in "Trout in the Classroom" by placing the "official mascot," a hand-carved bear holding a rod and caught wooden trout by local folk artist "Motto Joe" Huebner. Once inside the picnic grounds, several carved bears and carved Indians by "Motto Joe" along with magical creatures created by A.J. welcome visitors. There are informative posters from the USFS on the shack near the gate and on the bulletin boards located near the restrooms. Bonnie and A.J. keep the grounds well maintained and the facilities very clean, so visitors to Lytle Creek have an enjoyable experience. "Mr. Poop," Bonnie and A.J.'s beautiful Daniff can sometimes be heard excitedly barking "welcome" greetings from his enclosed compound; he is such a cute young dog!

The members of the Deep Creek Fly Fishers Organization arrive at the picnic grounds with their carefully collected specimens and begin to set up the educational sites at the cement tables and in the parking lot in anticipation of the bus that is to arrive around 9 A.M.-ish. Doug Spieske, "Trout in the Classroom" Coordinator and photographer, has been involved with this program for 21 years is here. President Jerry Searcy and Joaquin Chung, a member of the Fisheries Resource Volunteer Corps, present the bug and insect program. Mike Butler, wearing an appropriate trout tie, and Bob Williams present the art of casting with a fly rod for trout. Dave Allred presents the Life Stages of the Rainbow Trout and release of the 1" fry fish. Bill Reeves is here, accompanied by his grandson Aiden Jackson, 9. Bill is the club's Conservation Chairman, presenting a history of the different trout species and other fish facts. Jill Wagner, Secretary of the club, surprises the group with humongous warm cinnamon rolls fresh from Melody's Place, helps with the young 1" fry release part of the program and where needed. Sometimes this group will have 2 busloads of children to present their program to, but on this day one bus is expected from the Val Verde Unified School District, Avalon Elementary in Perris, the home of "The Falcons."



The bus finally arrives! Amy Clayton, who teaches 1st grade at Avalon Elementary, applied for a Field Trip Grant back in August from TARGET! She happily received \$700! The students were able to participate in this field trip for FREE! \$500 went for the rental of the bus, and \$200 went towards a picnic lunch for the 57 children, adult chaperon's, and 3 teachers! THANK YOU TARGET! Amy, Jason Remington, who teaches 5th grade, and Sue Scholl, who teaches Special Education day classes, accompanied their students.

The sun was shining and glinting off the water and the melodious babbling of the creek mixing with the breeze rustling through the trees along with the twittering of local canyon birds and the buzzing of insects and the occasional butterfly flitting by providing the perfect atmosphere for an educational day; Mother Nature in all her glory! *(Continued on Page 12)*

Trout in the Classroom

(Continued from Page 11)

All were excited to be here! The children were eager to release the young 1" fry fish that they had raised from eggs, with their teacher's tutelage.

Deep Creek Fly Fishers Organization receives Rainbow Trout eggs from the Department of Fish and Wildlife. Lately, these eggs have been shipped from the Mount Shasta area, being packed in large Styrofoam containers that have some ice in them, and delivered to the Department of Fish and Wildlife Ontario office. Deep Creek Fly Fishers distribute the eggs to participating schools, with about 100-200 eggs being distributed to each classroom. The eggs are treated and genetically modified to be sterile triploid eggs. If the eggs make it to the fry stage and eventually develop into adults, they will not be able to reproduce in the wild and affect the natural eco-system. Research has shown that the triploid fish grow faster and larger than the native fertile diploid fish.



The teachers tailor the program to fit his or her curricular needs, so each program is unique. Tanks are set up in the classrooms so the children can raise the eggs to young fry. They learn how to monitor the water quality and temperature and what happens when the electricity goes off accidentally during holidays! The water temperature went down to 55 degrees and killed many of the eggs, but after the water warmed up again with the electricity back on, amazingly some still successfully hatched. They learn about the life stages of Rainbow Trout, eco-systems, stream habitat, appreciation of water resources, the benefits of conservation, and learn to take care of the forest and respect it.

The children are divided into small groups to visit each set-up educational station. Dave Allred presents his Life Stages of the Rainbow Program at one table: In the embryonic egg stage, after 10-14 days of fertilization of the egg, the embryo has developed sufficiently for the eye to be seen; this is called the 'eyed ova' stage. Eggs that have turned white are not fertile and will not hatch. How quickly the eggs will hatch depends on the temperature and quality of the water; the higher optimal temperature takes about 60 days. When they are ready to hatch, an enzyme is secreted which softens the eggshell and allows the 'sac-fry' to break through. Now called alevin, they feed off the remaining yolk sac that is attached to their body for 10-20 days, remaining hidden in the gravel as protection from predators. Once the alevin absorbs the yolk sac and emerges from the gravel, they are in the Juvenile stage and called 'fry.' The fry are highly vulnerable at this stage and mortality rates are high. They are a few centimeters long and need plenty of food (plankton and floating organic matter) at this time and plants to hide in and shallow water. In the classroom, the fry feed on food that looks like instant coffee grounds. After Dave Allred presents this part of the program, he then expounds on the names and function of the body parts of an adult Rainbow trout using a large stuffed material trout with a detailed question and answer period that is grade appropriate. The children have really learned a lot in their classroom at school and enjoy Dave's review. After this part of the presentation, the 1" fry that have been raised in the classroom and brought on the bus are released gently, close to the water surface, one by one into the creek; Lytle Creek has been approved by the Department of Fish and Wildlife to release these fry.



At another table, Bill Reeves captures the attention of the children by asking "How many different kinds of fish are in the world?" Just over 27,200 different types with no exact number because 1 or more will go extinct every so often and sometimes a new variety is discovered. There are 10 Native Trout: Coastal Cutthroat, Steelhead, Kern River Rainbow, Little Kern Golden, California Golden, Goose Lake Redband, McCloud River Redband, Eagle Lake Rainbow, Lahontan Cutthroat, and Paiute Cutthroat. (Continued on Page 13)

Trout in the Classroom

(Continued from Page 12)

The German Brown Trout was introduced into the U.S. in the 1880's and have since been introduced throughout a lot of the U.S. where they have established wild, self-sustaining populations. Some areas of Lytle Creek are home to Rainbow and Brown Trout. The children learn how to identify different species of trout fish through markings and how these markings help to camouflage the fish. Bill has traveled to Washington DC, speaking about the importance of protecting the San Gabriel River and Deep Creek which is designated by the state of California as a "Wild Trout Stream." No glass containers are allowed within a mile of Deep Creek, it is a \$500 fine! Other restrictions apply since the fire in 1999, in an effort to preserve the habitat that is home to many endangered species. The Pacific Crest Trail travels along Deep Creek.

Trout usually have one or more resting lies where they are safe from predators. Typically this will be under a rock or log, tree root, or an undercut bank; another reason why areas in Lytle Creek should not be damned up with previously fallen tree logs or rocks moved to make ponds to play in. Consistent Enforcement of NOT ALLOWING tables and chairs in the creek should continue to help preserve the natural creek flow and habitat!



Mike Butler and Bob Williams taught the art of fly casting by showing the children how to stand, grip, and bring the rod to the ear, floating all the way back with a nice arch, then releasing the lure to fly forward into the target circle on the ground; Bull's-eye! The children really enjoyed this part of the class!

Jerry Searcy and Joaquin Chung's class at their table was quite impressive too. The children paid close attention as each bug, and aquatic insect was identified, especially to the Water Beetle, also known as the "Toe Biter" which, if a large specimen, can bite through a toenail! Some of the children were squeamish and wriggled around more than the bugs!! They were also surprised to learn that parent trout would eat their own eggs! Beginning at about 3 years old, depending on the size of the trout, anywhere from 700 to 6,000 eggs can be laid in gravel, and the parents wouldn't know whose eggs they are. Trout lay for about 3 years and can live 6-9 years. The morning caches of bugs were released back to the wild. What is so cool about Fly Fishers, they respect the environment, don't use live bugs, preferring a made or bought fly with many following the catch and release program.

After all the children rotated through the different class stations and the last Rainbow Trout fry was released, everyone enjoyed a fantastic picnic lunch with TARGET treating! It was an awesome day!

If you may be interested in visiting a California Department of Fish and Wildlife Hatchery, there are 2 close by the Mojave River Hatchery located in Victorville, and, the Fillmore Hatchery located in Fillmore. Call ahead to make sure they are open for visitors. Checking the Fish Planting Schedule of the California Department of Fish and Wildlife online, it doesn't seem that any trout have been planted in Lytle Creek in a while.



Interested in learning the art of Fly Fishing? Check out the club's website: www.deepcreekflyfisher.org

