



Southwest Region

Fish and Aquatic Conservation

The Fish Are Here!

We arrived at Emerson Elementary School just as students were returning to their classrooms from recess. As we made our way down the hall moving through the sea of chaotic youth scrambling to get to their destination we heard excited whispers of "The fish are here!", as students saw us and recognized U.S. Fish & Wildlife Service (Service) Fisheries Biologist Angela James who was leading us to our destination.

The much anticipated day of the fish delivery had finally arrived. I was lucky to catch up with James on the day she was delivering Rio Grande Cutthroat Trout from the Seven Springs State Hatchery in Jemez, New Mexico to Emerson and Monte Vista Elementary Schools. We were also accompanied by Glenn Selby, a Biologist with the Navajo Nation Department of Fish and Wildlife.



Rio Grande Cutthroat Trout in their new home at Emerson Elementary School. Credit: USFWS/Jessie Jobs



James and Selby drain some water from the aquarium to replace it with water from the hatchery. Credit: USFWS/Jessie Jobs

After we arrived at each school, James and Selby brought the fish in by buckets while all the students from the participating classes assembled for a presentation on fish feeding. The students learned how to calculate the amount of food to give the fish by using the average weight and length of a sample of the fish population. As James weighed and measured the fish the students filled in the information on the data sheets. When that was complete James then assisted the students in calculating the average to determine how much food the fish would need. After completing the fish feeding activity James then answered questions from the students before closing out the day's activities.



Warm water system at Monte Vista Elementary School that was purchased by the Parent Teacher Association. Credit: USFWS/Jessie Jobs



Top: James and Selby load fish into buckets from the tanks on the truck. Bottom: James and Selby carry buckets of water and fish up two flights of stairs at Monte Vista Elementary School. Credit: USFWS/Jessie Jobs



When we completed our activities at Monte Vista, we went down the hall and stopped by another classroom to check on their fish in a warm water aquarium system. This system belongs to the school and was acquired through fundraising with the Parent Teacher Association. While their companion class down the hall will be raising Rio Grande Cutthroat Trout from the Seven Springs State Hatchery, this class will be raising Western Mosquitofish, Red Shiners, Flathead Chub, River Carpsucker, Fathead Minnows, and Longnose Dace that were acquired directly from the Rio Grande.

With these deliveries of fish to the classrooms, the Native Fish in the Classroom Program (NFIC), run by the Service's New Mexico Fish and Wildlife Conservation Office (Conservation Office), is in full swing for the season. The program is in its fourth year and is administered by James. This year's program will reach 16 classrooms in six schools of the Albuquerque, New Mexico area. This includes the return of five schools from last year (Emerson Elementary, Monte Vista Elementary, Valle Vista Elementary, Governor Bent Elementary, and Bosque School) and a new school co-sponsored by the U.S. Forest Service Rocky Mountain Research Station (Albuquerque Sign Language Academy).

Although the fish were not delivered to the classrooms until January, plenty of work was put in to lead up to the delivery. Beginning in September and October, James and Service Fisheries Biologist Stephen Davenport worked with students from Bosque School to collect fish from the Rio Grande. Over a period of several days, they worked with students to collect fish while teaching the students how to seine, identify fish, and follow the monitoring protocols for the Rio Grande Silvery Minnow.

Following the fish collecting activities James held a teacher workshop in early November. This workshop brought together teachers from the different schools so that they could share ideas and methods to integrate the program into their curriculum.

James met the students participating in this year's program in early December when she visited each school over a two week period to set up the aquaria and give an introductory presentation. The presentation included an introduction to the Service, the work done through the Conservation Office, native species, and student responsibilities.

In the interim before fish arrival, the students were able to practice caring for the aquarium. As part of the set up, they were provided with kits to test the water pH and nitrate levels. They also established a water change schedule, and learned how to complete tank cleaning.

With deliveries of fish to the classrooms completed, the program is just getting warmed up. The students will raise and care for the fish until early May. Then, to close out the program, the students will have a fun-filled Releasing the Natives Field Day. On this day, fish will be released back into their respective native cold and warm water environments of the Rio Grande. ♦ *Jessie Jobs, Southwest Region Fish and Aquatic Conservation*



*Top: James weighing a trout for the fish feed calculation.
Bottom: James and students calculating feed rates for the Rio Grand Cutthroat Trout. Credit: USFWS/Jessie Jobs*



Glenn Selby of the Navajo Nation Department of Fish and Wildlife travelled to Albuquerque, New Mexico to assist Service Fisheries Biologist Angela James with delivery of fish for Native Fish in the Classroom Program and to learn more about the program itself.

Selby would like to start a similar program in the schools on the Navajo Nation. Although it may be another year or two until the program is started, Selby anticipates starting with two pilot schools. He is currently planning to use bluehead suckers and speckled dace from Crystal Creek as classroom subjects.

Right: Selby draining water from the aquarium at Emerson Elementary School. Credit: USFWS/Jessie Jobs