

An interim report of activities performed by Bosque School's
Porcupine's Perch Program -
Gaining Perspective on Species of Greatest Conservation Need

For the

Mexico Department of Game and Fish and its
Share With Wildlife Program



Under Contract 24-516-0000-00031

Executive Summary

28 June 2024

As a direct result of funding from the New Mexico Department of Game Fish's Share With Wildlife program (NMDGF), Bosque School supported 317 K-12 students from other Albuquerque area schools in the Porcupine's Perch program during State Fiscal Year 2024. In so doing we were able to directly engage students in actual, hands-on wildlife field research while those young New Mexicans learned about their stewardship responsibilities for both common wildlife and Species of Greatest Conservation Need. Furthermore, students were able to share their learning and findings with others beyond their own classrooms. We have encountered no significant obstacles in moving towards our stated goal of having at least 500 participants in the Porcupine's Perch program during the calendar year 2024. We greatly value our partnership with the NMDGF, and look forward to fully completing all terms of our NMDGF Contract on time. We extend our heartfelt thanks to the New Mexico Department of Game and Fish and its staff.



Porcupine's Perch Students conducting habitat water testing with a NMDGF/SWW funded college intern before turtle trapping (left); And then explaining their turtle research to a KRQE News Reporter (right)

Background

Bosque School, a private independent school, is committed to providing students with transformative learning experiences. A primary way we do that is through field education experiences on ancestral and current homelands of Puebloan people along the Rio Grande and its riverside forest, the *bosque*. We offer opportunities for students to care for and learn from the environment as we strive to be good stewards of it. We do this for both our own students and those from other schools. All funds we have or will receive and expend under the NM Department of Game and Fish Share With Wildlife funding will support students from other than Bosque School.

Bosque School's *Cebrin Goodman, Youth, Leadership, and the Environment Program* is at the heart of how Bosque School does this work of guiding young people to conduct research about and take responsible action in support of New Mexico's wildlife. Within the Goodman Project, Bosque School hosts many hundreds of students from area schools, at no charge to them or their schools, to do science that matters beyond the classroom. We do this within our Porcupine's Perch program. In it, students first learn about local wildlife and how to safely participate in ethical wildlife research. Then they are supported as they help to conduct original research and monitoring activities related to both common wildlife and Species of Greatest Conservation Need. Finally, we support these students develop art and ecology and mathematical representations of their data and findings to share with others.

Our NM Department of Game and Fish funding is an important part of how we are meeting our curricular and programmatic goals in 2024 around the Porcupine Perch program. We are combining NMDGF funds with grants from several other organizations and donations from various families to make all of this happen.

Report of Progress on Scope of Work in Contract 24-516-0000-00031

We are reporting here from the time of full contract execution on 16 April 2024 through now, 28 June 2024, the following accomplishment are related to our agreed upon scope of work under contract 24-516-0000-00031. This report represents roughly, the first third of the time this contract will be in force (mid-April to December 2024).

Item 1a. Directly engage at least 500 students in the Porcupine's Perch program.

Bosque School is on track to exceed 500 student participants in our Porcupine Perch program. We have already supported 317 K-12 students from other Albuquerque area schools since mid-April. We already have several hundred other students scheduled or tentatively scheduled to participate from July through November 2024 in our programs. Currently, 70% of our participants are from Title 1 schools, though that will shift to above 75% by the end of 2024.



*Visiting students learn about aquatic mammals
As they study a beaver dam*

So far, our work involved hosting 12 different field days, with anywhere from one to six classes participating on the same day. The general schedule for each day involved students rotating through a series of field research activities and learning stations.

Most all of the days, the primary wildlife field work as well as supporting educational lessons were taught by Bosque School high school students who both profiled their own original wildlife research and, where possible, had visiting students help collect data. Some of that field work is in partnership with the NM Department of Game and Fish

Several of the days were taught either mostly or entirely in Spanish in support of English as a Second Language learners.

Item 1b. Develop/Adapt Species of Greatest Conservation Need Curriculum.

We have developed and refined several different programs that are aligned with NM Public Education Department science standards, incorporate Traditional Ecological Knowledge, and include education about Species of Greatest Conservation Need. Programs include:

Field Day Theme	SGCN	Common Wildlife	Field Research
Bosque Rodents	NM Meadow Jumping Mouse	Peromyscus, Hispid Cotton Rats	Small Mammal Live Trapping & Release
Bosque Birds	Western Bluebird	Spotted Towhee	Bird Banding and Release
Aquatic Turtles	Big Bend Slider	Red-eared Slider, Painted Turtle	Turtle Hoop Net Live Trapping & Release
Otter Day	River Otter	Beaver	Riparian Habitat Analysis, Wildlife Inventory
Fish Day	Rio Grande Silvery Minnow	Western Mosquitofish	Aquatic Habitat Analysis and Macroinvertebrates

Item 2. Provide Classroom Safety & Ethical Wildlife Research Orientations

All participating students received necessary orientations on how to safely and ethically participate in our Porcupine's Perch wildlife research programs. About half the students received a pre-field/study trip orientation in their classrooms, while the other half received that safety/ethics information on the Bosque School campus. Due to our NMDGF contract not being executed until mid-April, and the school year ending in May, some pre site visit and field visit content and activities were combined during some field days to accommodate various end-of-school year limitations for some of our participating teachers and their students.

Item 3. Field/Study Trips

All 317 student participants had at least one field/study trip day on the Bosque School campus and in the adjacent City of Albuquerque Open Space Division property (bosque, riparian habitat). Many students had some combination of both classroom and field experience with our program, though in our participant count of 317, each student is only counted once. This is true even when students had multiple field and/or classroom days with us.



Each of the field study trips included direct work of some combination of both observing and supporting direct wildlife research/monitoring, as was appropriate for the particular age group and abilities of the involved students. This regularly included participating students seeing first-hand and learning how radio telemetry works, as it relates to radio collared porcupines.

Bosque School 11th graders teaching about radio telemetry

Item 4. Student Data Analysis and Representation

All students were supported in collecting, recording, and analyzing collected field and wildlife data. Where possible this included both art and ecology and/or mathematical

visual data representation, though sometimes because of end of school year scheduling for a number of the classes, what was possible was limited to what could be accomplished at the end of the field visit to the Bosque School campus and its adjacent bosque riparian habitat.

Additional Work for the Second Half of this Contract

We still have several elements of the contract and our original proposal to either refine or still to complete. This includes our expectation to accomplish the following on a timely basis before mid-December 2024:

- A. Hosting field and other Porcupine's Perch activities for at least another 200 students (so as to exceed >500 NMDGF supported students).
- B. Sharing developed curriculum with the NMDGF for review by the Agency's Conservation Education Coordinator.
- C. Compiling and analyzing pre and post participant assessments and modifying and adapting programs accordingly.
- D. Submitting a final report by mid-December 2024.

Report of Expenditures in Contract 24-516-0000-00031

The \$9,426 for the first half of this contract has all been encumbered or spent within the line-item topics listed in our original proposal (those line-items are: field/study trip bussing for participating students; salary and benefits for Field Science Educator and student interns to develop and deliver curriculum; and educational supplies). It is our intent for that to also be the case upon the completion of this contract.

Report Submission Details

This report prepared and transmitted to the New Mexico Department of Game and Fish, Share With Wildlife Coordinator on Friday 28 June. This report, submitted with gratitude to the NM Department of Game and Fish and to the best of my knowledge is true and accurate. By:

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