

Land, Water and People
Get 'Em Outside!
By Mike Blakeman

As the groups of high school students spread out to collect their data, they are surrounded with the sights, sounds and smells of the wetlands. The whispering of the cattails in the breeze is drowned out by the calls of hidden marsh wrens and yellow-headed blackbirds. Out in the wetland ponds, a variety of ducks paddle around while a hawk circles high above in the blue sky.

The students at "Pond 3" hurriedly jot down the wildlife they see and then begin sketching a map of the pond in their field notebooks. Next, one of the students takes off his shoes and socks and wades into the pond with a net. The mud oozes through his toes. After making several sweeps with the net through the water, he comes back to the group and empties his bounty into a white tub filled with water. All the other students gather around the tub and begin identifying the aquatic "bugs". After all the "bugs" are identified and recorded, the tub is emptied and the group of students head off to "Pond 4."

These students are participating in an educational field trip at BLM's Blanca Wetlands. The students collect plant, soil, wildlife, and aquatic invertebrate data from four wetland ponds, analyze their results, and then develop hypotheses as to why the data differs between ponds.

Ultimately, they learn that a well feeds "Pond 1." As the water flows from one pond to the next, more and more of it evaporates, which increases the concentration of solids in the water. At "Pond 4," a playa, the solids are so concentrated that a distinct white alkali layer forms a ring around the pond. The students are amazed to find thousands of orange colored brine shrimp in this pond, which explains why there are so many Wilson's phalaropes swimming madly on the pond bobbing their heads in and out of the water.

The research continues to mount indicating this type of learning is extremely effective. Students are wide awake, moving and using all their senses when on a field trip. The cognitive and emotional centers of their brains are engaged. There is evidence that ADD and ADHD symptoms often lessen. Student achievement improves and conduct problems lessen.

Unfortunately, for reasons beyond the scope of this article, most kids are spending more and more time in the classroom and inside their homes. This has led to a new "affliction" called Nature Deficit Disorder and created a new movement called, *No Child Left Inside*.

Public lands provide the perfect antidote to Nature Deficit Disorder. They provide incredible settings for teachers to take their students on educational field trips. Besides the obvious science studies to be done outdoors, there are a multitude of possibilities for writing activities, thousands of math problems ready to be solved, and countless historic sites to relive the past.

Learning outdoors shouldn't stop after the student goes home. Parents can make a big difference too by spending time outdoors in nature with their kids. Doing so can develop special bonds between parent and child, and create memories that will last a lifetime. My 24-year-old daughter will still reach down into a creek to fetch a stone... and then smile as she watches the "bugs" squirm on the bottom of the rock.

Mike is currently the acting Public Affairs Officer for the SLV Public Lands Center. He sometimes sneaks away from the office to lead school field trips on Forest Service and BLM lands.