



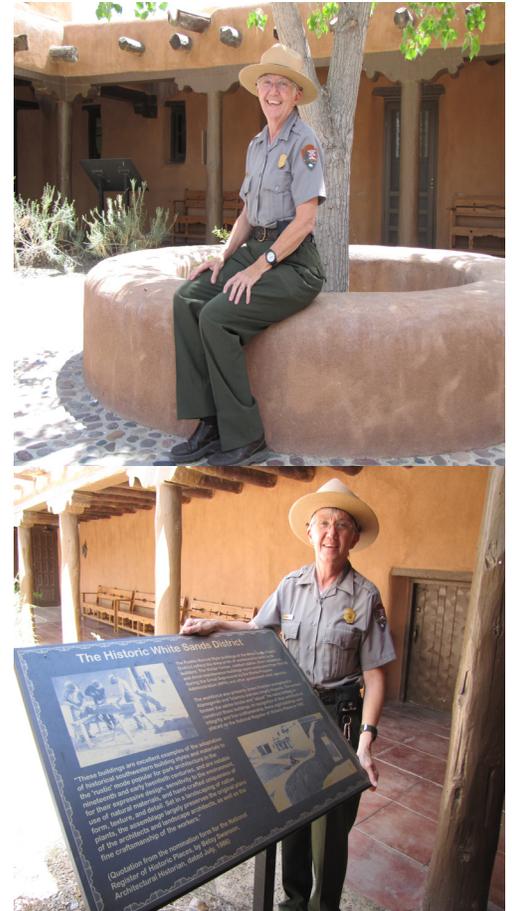
## White Sands E-Newsletter

### *How I Spent My Summer!*

Hi, my name is Rita Kujawa-Holsten, and I spent my summer at White Sands National Monument as a Teacher to Ranger to Teacher (TRT). What's a TRT? It's a teacher who has the awesome luck to work as a ranger for eight weeks -- talking to visitors from around the world, walking the dunes and pointing out the subtle beauties, exciting children with the geological story of rocks to crystals to sand.

Every day holds the challenge and fun of learning many of the cool facts of the white sands environment, and then passing on that knowledge! I had the opportunity to give patio talks about kangaroo rats that never drink water, "high five" with a child who just completed her Junior Dunes Ranger book, take a photo of an older couple celebrating their 45th wedding anniversary, and construct a life-size cardboard mammoth with children at space camp.

The eight weeks flew by and before I knew it, it was time for school to start in August. My main project this past summer was researching and organizing three Teacher Resource Trunks: Giant Geology, Practical Plants, and Amazing Animals. Look for the directions about how you can reserve a Teacher Resource Trunk to use in your classroom on the back page of the newsletter! Also in this paper, there is information about taking your class to White Sands, having a ranger talk to your students about a variety of interesting topics, and how to obtain a fee waiver. Check out the article on how you can become a Teacher to Ranger to Teacher!



### **TEACHER TRUNKS: White Sands in YOUR classroom!**

Our 2010 TRT (Teacher to Ranger to Teacher) developed and organized three Teacher Resource Trunks for teachers to use in the classroom. There are three Teacher Resource Trunks: Giant Geology, Practical Plants, and Amazing Animals. Each trunk includes resource books, reference materials, equipment, and lesson plans targeting grades 3 to 8. The benchmarks and standards for New Mexico are identified and linked to the specific activities in each trunk. Background information and additional resources also are supplied.

Giant Geology trunk highlights the story of White Sands: how the sand is produced and how the dunes form. The trunk also contains lesson plans and activities on the concepts of wind and water erosion, historic geology and how it is important in the present, and how to observe and identify rocks and minerals. The activities that help teach these concepts involve the science, history, language arts, and visual arts strands. This trunk contains lesson plans, photographs and puzzles, a fan and wind tunnel, scale, marbles, legos, measuring tools, gypsum rock and selenite crystal samples, DVD and book resource materials.

Practical Plants trunk highlights the adaptation needed by the plants in order to live at White Sands. The trunk also contains lesson plans and activities on the plants, the concepts of basic plant needs for sustaining life, and the adaptation of a plant to its surroundings in order to live. The activities that help teach these concepts involve the science, music, language arts, and visual arts strands. This trunk contains lesson plans, photographs and word search puzzles,

plant identification photographs and information, CD ROM and plant books for identification.

Amazing Animals trunk highlights the interesting animals at White Sands and how they have adapted to this unique environment. The trunk also contains lesson plans and activities on the concept of the various ways animals at White Sands adapt, as well as the behavior of animals due to their environment. The activities that help teach these concepts involve the science and visual arts strands. This trunk contains lesson plans, photographs of animals and their tracks, puzzles, and animal sign, track, and scat identification resources, including poster, background information, and books.

In order to check out one of the Teacher Resource Trunks, please visit the monument website: [www.nps.gov/whsa/forteachers/index.htm](http://www.nps.gov/whsa/forteachers/index.htm) to find out how to reserve the Teacher Resource Trunks. Please fill out the reservation form and submit by email to [WWSA\\_education@nps.gov](mailto:WWSA_education@nps.gov) or fax to 575-479-1116.



**Cool Fact:** You can walk on the white sands in the middle of the hottest summer day and never burn your feet! The white of the sand reflects the sunlight, and the mineral gypsum (the material that makes the sand) holds no heat.

## **FLASH! New at White Sands**

• Two new restrooms in the monument: New restroom facilities have been installed at the trailheads of the Dune Life Desert trail and the Interdune Boardwalk trail. These two new structures provide the public with restrooms at 3 miles and 4.5 miles along the Dunes Drive. There are still many restroom facilities located in the Heart of the Dunes, the picnic areas, and at the Alkali Flat Trailhead.

• Nature Center overtaken by moving dune: The Heart of the Dunes Nature Center has succumbed to the relentless movement of sand across the landscape. The dunes in the Loop Drive move on an average of 10-15 feet a year. The dunes finally moved within inches of the front door of the Nature Center. The only solution was to remove the Nature Center before it was buried. The next Nature Center in the Heart of Dunes will be moveable!

---

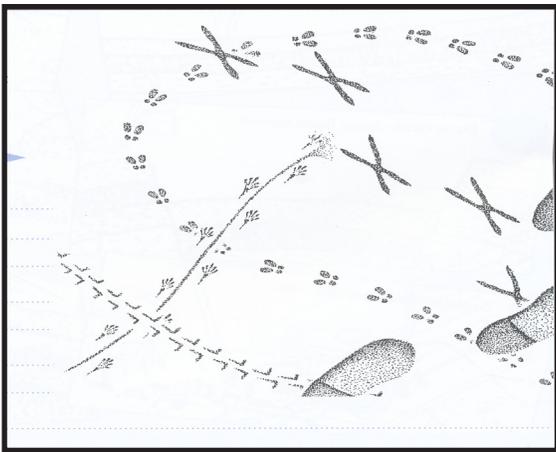
## **New Species of Moth: Lives Only at White Sands National Monument**

Brand new species of animal: The White Sands Moth was discovered 12 years ago by Dr. Eric Metzler, one of the many research scientists working with the National Park Service. Dr. Metzler has spent untold hours and effort in documentation of the moth and its habitat and activities. Scientific review has found that this moth is not a sub-species or color adaptation to this environment but a brand new moth species that makes its home only in the white sands of New Mexico and nowhere else on earth.



---

### **What Happened Here?**



Can you tell who walked in the sand first, second, third, so forth? How do you know who walked here last? What happened in the middle of this highway of tracks?

You can find this and other fun activities in the Junior Dunes Ranger booklet available to family groups at the information desk in the visitor center. School groups, youth groups, and other groups need to contact the Education Park Ranger at [WHSA\\_Education@nps.gov](mailto:WHSA_Education@nps.gov) to request group Junior Dunes Ranger activities to be done as a group. The content of the material is adapted for small groups, patrols units, and scout troops. All children participating in the group Junior Dunes Ranger activities will receive either a badge or patch upon completion.

---

## **Outdoor and Indoor Classroom: Field Trip to White Sands**

Everyone remembers going to White Sands in the spring for a class field trip. Lunch eaten on the dune in the sunshine, kicking off your shoes to run barefoot across the dune tops, and who can forget the brightly colored sleds slipping and sliding down the dunes? Great memories bring grown children back to visit the park for other discoveries.

Did you know that, as a teacher, you can bring your class to the monument and request a ranger to speak to your students? On the Education Fee Waiver form, there is a space to request a ranger to speak to your group about the significance of the monument or a topic that your students are studying. The ranger will work with you to develop a presentation to meet your standards and benchmarks in science, history, and social studies in a variety of topics.

The programs can be as short as 15 minutes about safety and good outdoor manners to 45 minutes about the animals, plants, and the

unique web of life that exists here at White Sands. Each presentation will be appropriate for the age, grade, and developmental level of the students ties to state standards.

Teachers can also apply for a fee waiver when they take a class to the monument. The education fee waiver is available to all school groups: public, private, home school, colleges and universities. This fee waiver allows all persons 16 and older to enter the monument free of charge when engaging in a curriculum-based activity from an accredited school. All children under 16 years of age are free in National Park Service areas. Visit our website: [www.nps.gov/whsa/forteachers/index.htm](http://www.nps.gov/whsa/forteachers/index.htm) to access the Education Fee Waiver form. Please email the form to [WHSA\\_education@nps.gov](mailto:WHSA_education@nps.gov) or fax to 575-479-1116.

If you can't schedule a field trip to White Sands, make a request for a ranger to bring White Sands to you. A park ranger will bring a variety of crystals and rocks, skins and skulls,

plant parts and pictures, or even a historic person to your classroom for an in-class presentation. New Mexico benchmarks and standards will be the basis of any presentation on a range of topics from geology, biology, botany, hydrology, ecology, astronomy, ecosystem, conservation, the National Park Service, land management careers, and human history. The classroom visit could take the form of storytelling, living history, scientific observation and experimentation, games, art and music, and show-and-tell. We are able to do programs at all grade levels, interactive and hands on, and with a sliding scale of complexity. Check out the White Sands web page: [www.nps.gov/whsa/forteachers/index.htm](http://www.nps.gov/whsa/forteachers/index.htm).

