

## STEM Scholars Summer Field Site Experience E. O. Wilson Biophilia Center

### Participating School Districts



#### Panhandle Area Educational Consortium

Patrick L. McDaniel, Executive Director

Calhoun

Franklin

Gadsden

Gulf

Holmes

Jackson

Jefferson

Liberty

Madison

Taylor

Wakulla

Walton

Washington



#### Heartland Educational Consortium

Dr. Debra Elliott, Executive Director

DeSoto

Glades

Hardee

Hendry

Highlands

Okeechobee



#### North East Florida Educational Consortium

James Surrency, Ph.D., Executive Director

Columbia

Flagler

Gilchrist

Lafayette

Levy

P.K. Yonge

Putnam

Union

Through the Panhandle Area Educational Consortium's *FloridaLearns STEM Scholars* Project STEM Talent Development Program, talented and gifted high school juniors and seniors from small and rural districts across Florida had the opportunity to take part in locally-available Field Site/Workplace Experiences this summer. These experiences, made possible through partnerships with leaders in STEM (Science, Technology Engineering, and Math), such as industries, local businesses, agencies, the military, and higher education faculty, gave students an opportunity to actively engage in doing "real" STEM work.

Jadorian Paul and Logan Daniels, South Walton High School students, and Keara Bogart from Walton High School spent eight days of their summer vacation as participants in a STEM Talent Development experience at the E. O. Wilson Biophilia Center in Freeport, Florida. Gopher tortoises from around the state are dug up from areas that are being developed and sent to the Biophilia Center to be rehabilitated, if needed, and released into pens to promote breeding to raise the population of tortoises. Throughout the opportunity, students learned about the natural history of the Gopher tortoise in the longleaf pine ecosystem as well as the dynamics of longleaf pine ecosystem restoration. Specifically, students assisted in all aspects of gopher tortoise relocation which included the intake process of measuring, weighing, marking, and releasing tortoises, inspection and repair of tortoise enclosures, and burrow camera inspection of tortoise burrows. The students' work at the Center was considered to be both STEM and service learning. Bob Walker, Wildlife Biologist and Environmental Instructor at the Biophilia Center coordinated the students' activities and Brande Manning, Environmental Science teacher at Walton High School was the onsite teacher leader.

Students reported learning how to survey land for tortoise burrows, seeing firsthand many aspects of wildlife they had never seen before, and becoming able to recognize a large variety of plants indigenous to the area. Greater insight into STEM career options, a keener understanding of the relevance of the rigorous STEM courses they are taking while in high school, and a greater appreciation for the importance of wildlife restoration and preservation efforts were important outcomes for students.



Jadorian Paul carefully collects data from one of the tortoises that will soon be relocated. Students measured the carapace, plastron, concavity of the plastron, counted the annuli, weighed, and drilled holes to give each tortoise a number.

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Students use pink flagging tape to mark burrows as they estimate how many turtles are in each pen and to pinpoint unused burrows.



Keara Bogart releases a tortoise into one of the pens.



Logan Daniel carries a clump of gopher grass which will be moved into a pen area and planted for gopher tortoises to eat.