Sara Wigginton

In recognition of her research on sustainable transportation infrastructure, the University of Rhode Island Transportation Center (URITC) selected Sara Wigginton as its 2014 Outstanding Student of the Year.

Wigginton is a Master’s student in URI’s College of Environmental and Life Sciences, in the Biological and Environmental Science Program, with a concentration in Ecology and Ecosystem Sciences. Her thesis is on the effects of road and roadsides on invasive plant species and storm water filtration.

“Sara’s work on the management of roadside vegetation to enhance stormwater filtration and reduce the spread of invasive plant species will contribute to improved understanding of the solutions needed to address these challenges,” said Arthur Gold, professor and chair of the Natural Resources Science department at URI.

Gold and URI Associate Professor Laura Meyerson nominated Wigginton for the award. Meyerson is also Wigginton's major advisor and the Primary Investigator (PI) for her lab group.

“Professor Meyerson has taught me how to think like a scientific researcher, lead smalls teams of undergraduates, and think ‘outside the box’ about conservation and restoration efforts – a necessity when performing research on roadsides and other highly constructed ecosystems,” said Wigginton.

Like most people, Wigginton admits that she never really considered roadsides as important ecosystems prior to conducting her research.

“I now appreciate the role roadside ecosystems can play in habitat restoration and species conservation,” stated Wigginton. “I have also learned that managing roadsides for native biodiversity can save money through reduced mowing regimes and reduce the emissions of the greenhouse gases that contribute to global warming.”

Wigginton’s research involved working closely with members of the Rhode Island Department of Transportation (RIDOT).

“Working with RIDOT has allowed me to understand the complexities that are involved in managing unnatural systems, such as stretching limited budgets, dealing with public opinion and overseeing large amounts of public land,” said Wigginton.

The young researcher’s career goal is to find employment with a government organization, such as the Department of Environmental Management or the Nation Park Service, or an non-governmental organization (NGO), such as The Nature Conservancy. Her ideal position would be a land manager for one of these organizations.

“I’ve learned how to lead small teams, communicate the importance of my research and extend ecological theory to real world applications has made me wel-equipped for a career in public land management,” stated Wigginton.