

Spring 2012

# Does Branch Structure of an Invasive Shrub (*Elaeagnus umbellata*) Alter Bird Perching Behavior?

Heather Herakovich  
*Valparaiso University*

Marcy De Vries  
*Valparaiso University*

Laurie Eberhardt Dr.  
*Valparaiso University*

Follow this and additional works at: <https://scholar.valpo.edu/cus>

---

## Recommended Citation

Herakovich, Heather; De Vries, Marcy; and Eberhardt, Laurie, "Does Branch Structure of an Invasive Shrub (*Elaeagnus umbellata*) Alter Bird Perching Behavior?" (2012). Celebration of Undergraduate Scholarship. Paper 151.

This Poster Presentation is brought to you for free and open access by the Office of Sponsored and Undergraduate Research at ValpoScholar. It has been accepted for inclusion in Symposium on Undergraduate Research and Creative Expression (SOURCE) by an authorized administrator of ValpoScholar. For more information, please contact a ValpoScholar staff member at [scholar@valpo.edu](mailto:scholar@valpo.edu).

## **Does Branch Structure of an Invasive Shrub (*Elaeagnus umbellata*) Alter Bird Perching Behavior?**

Heather Herakovich, Marcy De Vries, Dr. Laurie Eberhardt

*Departmental Affiliation:* Biology  
College of Arts and Sciences

Autumn Olive, *Elaeagnus umbellata*, has been introduced throughout the United States. Research on the impacts of invasive plants like *E. umbellata* on bird behavior has produced conflicting results with some birds preferring to use invasives while others avoid them. Branch structure has been implicated in bird preference for certain woody species. Thus, we asked the question, does *E. umbellata* differ in branch structure from common natives in the landscape and, if so, how does this difference impact the behavior of native birds? We examined this question during the non-fruiting season at study sites with mixed open and shrubby second growth forest habitats in Michigan and Indiana. We found that *E. umbellata* branches were twice as dense and 45% smaller in diameter than those of native cherry, *Prunus serotina*, but did not differ from two other native shrubs. Birds did not show a preference for perching in native shrub branches in choice tests using bird feeders in situ with invasive or native branches. Mist net capture rates for birds also did not differ between *E. umbellata* and native shrub sites. We concluded that native birds do not avoid *E. umbellata* during the non-fruiting season for perching despite a unique branch structure.

### *Information about the Authors:*

Heather Herakovich is a senior biology major and will be graduating this spring. She became interested in this project after taking field courses during her undergraduate career. She plans on continuing invasive species research in graduate school. Marcy De Vries is a senior biology major interested in the environment and ecology of organisms. She hopes to continue exploring these topics in graduate school.

*Faculty Sponsor:* Dr. Laurie Eberhardt

*Student Contact:* [heather.herakovich@valpo.edu](mailto:heather.herakovich@valpo.edu)