



**Ralph J.  
Garono, Ph.D.**  
**Manager**  
**Lake Superior  
National  
Estuarine  
Research  
Reserve**

## Ralph Garono

### Manager

#### Lake Superior National Estuarine Research Reserve

PO Box 2000  
14 Marina Drive

University of Wisconsin Superior  
Superior, Wisconsin 54880

Phone: 715-392-3141; FAX: 715-392-3144

Email: [ralph.garono@ces.uwex.edu](mailto:ralph.garono@ces.uwex.edu)

For more information, visit this website: <http://www.uwex.edu/ces/cnred/>

---

## Programming Areas

- Research
- Education
- Outreach
- Stewardship

---

## Audience and Partners

- Federal
- State
- Local
- Tribal

---

## Team Membership

Economic Development - Community and Economic Development

Preparedness

---

## Educational Resources

### Publications

- Yeates, Alice G., Shon S. Schooler, Ralph J. Garono & Yvonne M. Buckley. 2011. Biological control as an invasion process: disturbance and propagule pressure affect the invasion success of *Lythrum salicaria* biological control agents. Biol Invasions DOI 10.1007/s10530-011-0060-5

- Armitage, B.J., S.C. Harris, G.A. Schuster, J.D. Usis, D.B. MacLean, B.A. Foote, M.J. Bolton, and R.J. Garono. 2011. Atlas of Ohio Aquatic Insects. Volume I. Trichoptera. Ohio Biological Survey Miscellaneous Contribution Number 13. iv + 88 pp.
- In Press. Ferrarese, E. and R. J. Garono. Purple loosestrife biocontrol agent aggregation and overwintering are influenced by tidal inundation. February 2011, Wetlands .
- 2010, Ferrarese, E., and Garono, R.J. Dispersal of *Galerucella pusilla* and *G. calmariensis* via passive water dispersal in the Columbia River Estuary. Biological Control 52(2):115-122.
- 2006, Garono, R. J., E. Thompson, and F. Grevstad. Tidal Wetland Restoration. In. D. Apostle. Restoring the Pacific Northwest: The Art and Science of Ecological Restoration in Cascadia Island Press, Washington DC.
- 2004, Garono, R. J., C. A. Simenstad, R. Robinson, and H. Ripley. Using High Spatial Resolution Hyperspectral Imagery to Map Intertidal Habitat Structure in Hood Canal, WA US. Can. J. Remote Sensing 30(1): 54-63
- 2001, Garono, Ralph J., Richard L. Kiesling, James G. Kooser, Eric N. Wold, Shon S. Schooler, and David D. Bradsby. Adult Insect Assemblages as a Conservation Planning Tool. Verh. Internat. Verein. Limnol. 27:4032-4041.
- 2001, Garono, R. J. and J. G. Kooser. The relationship between patterns in flying adult insect assemblages and vegetation structure in wetlands of Ohio and Texas. Ohio Journal of Science 101 (2):12-21.
- 1996, Garono, R.J., R.T. Heath and S. J. Hwang. Detrended correspondence analysis of phytoplankton abundance and distribution in Sandusky Bay and Lake Erie. Journal of Great Lakes Research. 22(4): 818-829.

### Research and Outreach

- measuring factors that control and regulate the abundance and distribution of purple loosestrife and four biocontrol agents in the Columbia River Estuary;
- measuring landscape patterns in eelgrass beds and tidal marshes using high spatial resolution, hyperspectral remote sensing;
- using geographic information systems to characterize wetlands and watersheds, and to develop restoration and monitoring plans;
- using invertebrate assemblages as a wetland assessment tool; factors that influence the abundance and distribution of aquatic insects in wetlands;
- and, examining the role that nutrients play in structuring aquatic and marine ecosystems.