

# IMPROVING SCIENCE LITERACY THROUGH VISUAL COMMUNICATION

Mary McFadzen and Melissa Brown, Center for Invasive Plant Management, Land Resources and Environmental Sciences Department, Montana State University, Bozeman, Montana 59717

Communicating science effectively to diverse audiences including natural resource managers, policy makers, and the general public, has broad implications for implementing science-based solutions to environmental problems such as those associated with non-native species invasions. If audiences are able to understand and assess scientific information, they are more likely to make decisions based on facts rather than on hearsay or speculation. Frequently, popular press articles on invasive species are designed to promote fear-based responses. Previous work in an ecological publication identified that even invasion biologists use militaristic and combative language as metaphors, often leading to an inaccurate perception of invasive species and loss of scientific credibility, which can be counterproductive to achieving conservation and management goals. Scientists and educators are natural collaborators to increase the science literacy about the biology and ecology of non-native species invasions to audiences, while consistently maintaining scientific integrity and credibility. Further, as increasing numbers of research granting entities require an outreach and education component in project proposals and outputs, proven ability to effectively present and disseminate scientific information to diverse audiences is becoming highly valued. This poster presents examples of how visual design strategies and learning theory can be used to engage audiences and communicate science effectively.