



Using the GODM Cyberinfrastructure to Involve Citizen Scientists in Moving from Data Isolation to Data Integration

Invasive plants, animals, insects and diseases cost the United States over \$120 billion per year. Government and private efforts to monitor and manage invasive species are often isolated and less effective than they could be. Involving citizen scientists will increase the effectiveness of efforts at little additional cost while informing the public on the science behind invasive species management. Using the internet as a data integration and dissemination mechanism will make the data and results widely available and enable more effective management and education.

The Global Organism Detection and Monitoring (GODM) system is a web-based cyberinfrastructure for the collection, analysis, and dissemination of information on the spatial distribution of invasive species. Our objective is to enhance GODM with the tools and information to make citizen scientists effective at monitoring invasive species while educating them on the science behind invasive species research. GODM is a joint effort between Colorado State University, the United States Geological Survey, the National Aeronautics and Space Administration and other organizations. These organizations work together to develop and evaluate the latest in invasive species prediction methods and then move these methods to the world-wide-web to make them available to the public.

The National Science Foundation has provided funding for the citizen science research under grant number 0636213.

Participating Volunteer Groups

- Invasive Tracers
- Tamarisk Coalition
- Colorado State Forest Service
- 4H Community Mapping Program (1 in CO, 1 in AZ, 1 in WI)-pilot study for possible adoption by national program
- ELK (Environmental Learning for Kids)

Results

Volunteer group survey:

- 128 respondents from government, profit and non-profit organizations
- 59% did not have a quality control process
- 37% felt they did not have adequate IT support
- 21% had their data available on the Internet while 77% were willing to share
- 71% would be interested in participating in working on this grant with us

Volunteer Group Interviewers

- 15 person interviews
- Consistent funding was the outstanding issue for volunteer groups

Newsletter distributed to 237

(and growing) citizen scientists quarterly.

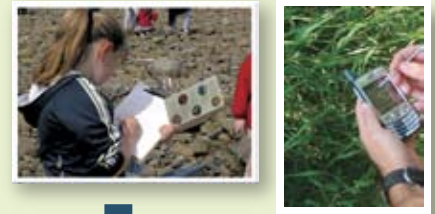


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From the field



To the GODM database



Map of new and existing surveys



Descriptive statistics and models



Results to help make management decisions

