CREATING A SUCCESSFUL CITIZEN SCIENCE MODEL TO DETECT AND REPORT INVASIVE SPECIES

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The *Invaders of Texas* program is a successful citizen science program using volunteers to survey and monitor invasive plants throughout Texas. Invasive plants are being introduced at alarming rates and our limited knowledge about their actual distribution is becoming increasingly worrisome. *Invaders of Texas* trains citizen scientists to detect the arrival and dispersal of invasive plants in their local areas and report them into an online, statewide mapping database. Since its inception in 2005, the *Invaders of Texas* program has trained over 870 volunteer citizen scientists, logging over 3,400 hours in the field and submitting over 9,000 observations. To test the value of citizen scientists' data we compared *Invaders of Texas* citizen scientists' observations of *Arundo donax* (giant reed) to previously recorded *A. donax* in USDA PLANTS database and The Atlas of Vascular Plants of Texas (ATLAS). We found that the *Invaders of Texas* data increased the known distribution of *A. donax*, in Texas, by 149% compared to the distributions given by ATLAS and PLANTS combined. By using an online data submission tool and a web-based mapping system we have engaged a cadre of citizen scientists to identify and report invasive plants throughout Texas, contributing valuable information about the distribution of invasive plants in Texas, and we feel this model could be used on a much larger scale.