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Oral Presentation

USING CITIZEN SCIENCE DATA TO BETTER UNDERSTAND THE DISTRIBUTION OF SOME KEY INVASIVE SPECIES IN TEXAS

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E. O. Wilson once stated, “On a global basis...the two great destroyers of biodiversity are, first, habitat destruction and second, invasion by exotic species.” The ecological impacts of invasive species are becoming increasingly worrisome. Invasive plant species do not provide significant food or shelter for native wildlife and displace the native plants that do. The Atwater Prairie Chicken National Wildlife Refuge is besieged by Chinese tallow and McCartney rose, which shade out the native grasses the prairie chicken needs for survival. Every invasive plant species creates its own problems and Texas habitats and wildlife are increasingly suffering as a result. The *Invaders of Texas* Program was developed to address this conservation need. The *Invaders of Texas* Program trains citizen scientists to detect and report invasive plant species throughout Texas. Citizen scientists have reported over 7,000 observations that have been validated and delivered into a statewide database. This information contains the ecological information collected at the site along with the GPS coordinates for every observation. Land managers and biologist can load this information into their choice of analysis software, allowing them to create better invasive plant management plans and priority areas for management and restoration. The program dramatically and systematically increases early detection, reporting and monitoring of invasive species in critical wildlife habitats, reducing damage to the native landscape and helping to preserve threatened and endangered species. Citizen science data from the *Invaders of Texas* program has allowed us to better understand the distribution of some key invasive species, in Texas, such as *Arundo donax*, *Triadica sebifera*, and *Lonicera japonica*. Citizen scientists have gathered valuable ecological information about the location of key invasives species throughout the state, allowing people to better understand the distribution and management of these invasive species.