

## *Great Lakes Early Detection Network Smart Phone App*

### SITUATION

Community leaders, natural resource managers and landowners across the state and throughout the region are being impacted by a variety of non-native invasive plants, insects, mammals, aquatic organisms, and plant and wildlife diseases that command increasing amounts of time and resources to manage. Many of them have the potential to radically change our rural forests, our urban streetscapes and landscapes, and impact how we manage many of our natural resources. Early detection can play a crucial role in any master plan to eradicate or manage these infestations.

### RESPONSE

In order to harness the capacity of volunteers, woodland owners and resource professionals, SENR worked with the University of Georgia's Center for Invasive Species Ecosystem Health to create the Great Lakes Early Detection Network (GLEDN) smart phone app. The app allows users to use their smart phone to correctly identify the invader, take a photo of it and report the sighting to expert verifiers. The app contains both text and images to allow better field identification of suspect species.

An effort was made to include not just insects and plants, but also aquatic and wildlife invasives and invasive pathogens of plants and wildlife such as feral hogs, white-nose syndrome of bats, invasive fishes and other aquatic organisms, viral hemorrhagic septicemia of fish, and many more. As an example of the usefulness of the new app, researchers at SENR are using it to help locate invasive red swamp crayfish. When graduate students find this Gulf States crustacean, they will use the mapping feature of the app to describe the developing Great Lakes range of the invasion to assist their research.

### IMPACT

Since the android launch in September 2012 and the iPhone launch in May 2013 the app has been downloaded over 2000 times. These downloads have resulted in 11 reports of invasive species – everything from viburnum leaf beetle and emerald ash borer to garlic mustard and bush honeysuckle. The maps and information that these reports will generate will aid educators and researchers in future projects dealing with the management of non-native invasive species.

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