The Most Popular Mobile Applications (Apps) for Invasive Plant Managers

by Celestine Duncan, Melissa Munson, and Nann Parrett; TechLine Invasive Plant News, Helena, MT

Introduction: Mobile-device applications (apps) designed to assist vegetation managers with invasive plant identification, survey and control are becoming more widely adopted. In January and February 2018 a web-based survey was conducted to find out which apps managers are using in the U.S. and how

well those apps meet user needs.

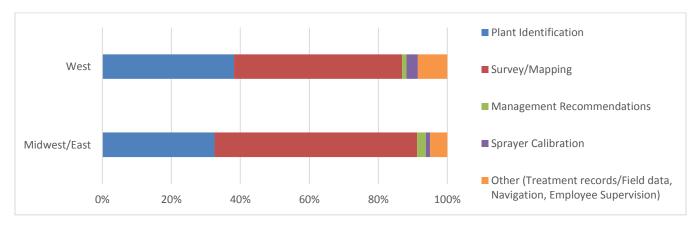
Methods: Respondents that used mobile apps in their invasive plant program were asked to provide the name of each app and indicate how satisfied they were with its performance. Respondents could list and rate a total of two apps in each of five categories: plant identification, survey/mapping, management recommendations, sprayer calibration, and other.

Results: Responses from 220 individuals across 26 states were grouped into West and Midwest/East regions. In the West 143 invasive plant managers participated in the survey with 78% of responses from Montana, Oregon, Washington, and Idaho. Western respondents cited 75 different apps used in invasive plant programs. In the Midwest/East, 77 invasive plant managers participated in the survey with more



Collector for ARCGIS. ESRI.COM

than half of responses from Minnesota, Wisconsin, and Michigan. Midwest/East respondents cited 44 different mobile apps used in invasive plant management programs. Respondents from the Midwest/East were more likely to use apps as part of an invasive plant management program than respondents from the West (73% vs. 66%, respectively). Respondents in both regions primarily used apps for survey/mapping, followed by those used for plant identification (see graph below). These two categories combined accounted for 87% and 91% of app use in the West and Midwest/East, respectively. Sprayer calibration apps and management recommendation apps were cited the least among survey respondents.



Percentage of respondents using apps in each of six categories in the West and Midwest/East regions.

Conclusions: Invasive plant managers are using a large number of apps in their programs across the U.S. This suggests that managers are willing to try and adopt new technology to meet program needs. The two apps cited by about 90% of respondents were EDDMapS and the Environmental Systems Research Institute (ESRI) "family" of apps used for survey/mapping. Region-specific apps and EDDMapS were used for plant identification. Only 8% of respondents cited using apps for management recommendations and sprayer calibration, an area where app development is needed. Details on respondent demographics, apps cited and comments from each region are available here.

Test v	your knowled	lge of most	popular ap	ps for invasive	plant managers
	Jour Kilottice		populai ap	po ioi illuadite	piaire illaniagers

SPAEINVYGUMPR	
	Category of app used most widely by invasive plant managers
DSMDPEA	
	Popular app for invasive plant management across the country
SSSETONAAAMRNG	
	Popular app for plant identification in the West*
OEADCELEIMIPCOTPILBVNA	
	What "app" is short for
ANNMAOT	
	Respondents from this state made up nearly half of the responses in the western region*
SYBREAOAANIICLRTRP	
	One of two categories of apps not widely used by invasive plant managers

*See "Details on respondent demographics, apps cited and comments. . ." for answer

Solutions are posted to the MSU Extension Invasive Rangeland Weed website: http://msuinvasiveplants.org/extension/monthly weed post.html



