iMapInvasives Network
2021 Annual Report

iMapInvasives is an online invasive species database and mapping system powered by the international non-profit, NatureServe. Natural resource professionals & community scientists use iMapInvasives in their work to protect natural resources from the negative impacts of invasive species in North America.

2021 Data Snapshot

- **122,876** Presence records
- **9,515** Not-detected records
- **1,792** Treatment records
- **3,961** New users

Breakdown of 2021 Presence Records
by data collection tool, taxonomy, and habitat

Filter Records

- General
- Presence
- Treatment
- Not Detected
  - Confirmation Method: Photo ID
  - Has Photo: Yes, No

New Options for Filtering Data

Users can now filter on parameters specific to data type - e.g. the reason a species was not-detected, or the date that treatment started.

New Geographic Layers

- Local Municipalities
- Map of Biodiversity Importance (MOBI)
- Improved Waterbodies Layer

Users can view geographic layers in the map interface alongside invasive species data, generate exports and summary reports for selected boundary areas, and create custom distribution maps using these layers.

Publications That Used iMapInvasives Data


iNaturalist Data Exchange

Invasive species records submitted to iNaturalist in the past five years are now viewable within iMapInvasives.

New users of iMapInvasives creates new geographic layers and improves data collection tools.

Learn more and create an account at imapinvasives.org

Highlights From Participating States & Provinces

Confirmed records of Multiflora Rose overlaid with NatureServe’s Map of Biodiversity Importance in Maine.

Tree-of-heaven by municipality, PA and NY (2021)
The SKCDC utilizes iMapInvasives to provide all citizens of Saskatchewan a means to document invasive species in the Province. iMapInvasives is being used by partner organizations on several invasive species projects including Flowering Rush mapping, Aquatic Invasive Mussel Monitoring (AIMM) for zebra and quagga mussels, and documentation of Lily Leaf Beetles for potential impacts to native Western Red Lily populations.

With many partner agencies having their own data collection protocols, the majority of Oregon's iMap data comes in via bulk upload. Many thousands of records for were uploaded to iMapInvasives in 2021 from local, state, and federal agencies as well as community scientists in Oregon. These essential contributions tell us where invasives are and alert managers to new locations of priority species.

In summer 2021, the new iMap Survey123 form was used by Pure Water Partners, a coalition surveying the area of the Beachie Creek Fire and other recently burned areas in the North Santiam Watershed for early detection/rapid response species. Managers will use this information to treat newly resprouted or introduced invasives as part of post-fire recovery.

Many key datasets were bulk-uploaded to iMapInvasives, including buffelgrass records from the Arizona-Sonora Desert Museum’s Save Our Saguaros Map-a-thon 2021, Arizona records from the USGS Nonindigenous Aquatic Species database, non-natives in the Grand Canyon fish database, and data from the Arizona Game & Fish Department.

“\textit{I really enjoyed participating in the 2021 Water Chestnut Chasers Challenge (WCCC). Being my first time, I wasn’t exactly sure what to expect when I signed up to volunteer. But the use of the iMapInvasives mobile app and website made gathering data and submitting findings a breeze…}"

... Together, between the support from the WPC and the functionality of the iMapInvasives app, becoming a “community scientist” and participating in the WCCC was a great experience. It was also a good excuse to plan a trip, get outdoors, learn something new, and help support the efforts of invasive species management.”

- Quote from Brian Beinhauer, Volunteer iMap user

An Invasive Plant Academy was held by the Maine Forest Service and MNAP to train foresters, land trust stewards, landscapers, arborists, licensed herbicide applicators, and other natural resource professionals in how to use iMapInvasives to map invasive plants and prepare invasive plant management plans. Seventy-five new iMap users mapped 944 new locations of 24 species of invasive plants as a result of this new project.

In 2021, MNAP staff surveyed nearly 13,000 acres of state lands for invasive plant species, and about 2,000 acres of private lands for Japanese stiltgrass and perennial pepperweed. Treatment and follow-up was conducted on over 74,000 acres on state lands and 350 acres on private lands.

In partnership with the NYS Department of Agriculture and Markets, NYNHP launched a community science mapping initiative to complement statewide monitoring efforts for a high priority invasive pest, spotted lanternfly, and its preferred host, tree-of-heaven.

State partners selected priority locations across NY for volunteers to “claim” and survey throughout the year. Volunteers submitted presence & not-detected records using the iMap Mobile app, and NYS agency staff confirmed reports by reviewing photos and conducting on-the-ground surveys as needed.

Through partnerships with statewide, regional, and local organizations, we were able to promote this effort widely, leading to the submission of 2000+ observations in 2021.