

Invasive Plant Management: Prioritization Tools

A variety of tools are freely available that assist with invasive plant management decisions and how to optimally allocate limited management resources. Below is a list of some of the tools that are available for use in California (and in some cases elsewhere). The list is followed by a diagram which shows how these tools could be used to inform invasive plant management.

California Invasive Plant Council

Invasive Plant Inventory

- Description: The Inventory categorizes plants as High, Moderate, or Limited, reflecting the level of each species' negative ecological impact in California.
- Format: web, download report, download database
- Location: <http://www.cal-ipc.org/ip/inventory/index.php#inventory>

CalWeedMapper

- Description: Cal-IPC combined expert knowledge and GIS datasets to produce statewide maps for all species in the Cal-IPC Inventory. They also modeled the potential suitable range of some species based on climate data to project where species might spread in the future.
- Format: web, download maps and reports
- Location: <http://calweedmapper.cal-ipc.org/>

WHIPPET

- Description: WHIPPET is the Weed Heuristics: Invasive Population Prioritization for Eradication Tool. It prioritizes weed infestations for eradication based on potential impact, potential spread, and feasibility of control. It was originally developed to prioritize populations of California's A-rated noxious weeds at a regional (multi-county) scale (Skurka Darin 2008, Skurka Darin et al. 2011).
- Format: on-line tool, downloadable reports and data
- Location: <http://whippet.cal-ipc.org/pages/view/guide>

Manual: Prevention BMPs for Land Managers

- Description: This manual presents a set of voluntary guidelines and ready-to-use checklists to help those managing wildlands in California to prevent the accidental spread of terrestrial invasive plants.
- Format: downloadable manual
- Location: <http://www.cal-ipc.org/ip/prevention/landmanagers.php>

Other Tools

CDFA/USDA Pest Plant Rating List and CDFA Encycloweedia

- Description: Identification, biology, and management of plants defined as noxious weeds by California and federal law
- Format: web, downloadable data sheets
- Location: http://www.cdfa.ca.gov/plant/ipc/weedinfo/winfo_table-sciname.html

WeedSearch. Weed eradication feasibility analysis

- Description: A model that combines population dynamics and search theory to calculate the probability that a weed invasion will be eradicated based on the amount of time invested in searching for it (search effort)
- Format: Users guide and downloadable software (runs in Excel)
- Location: <http://www-personal.une.edu.au/~ocacho/weedsearch.htm>

USFWS: Prioritizing Species and Areas for Inventory (November 2014)

- Description: A tool that helps conservation land managers prioritize species and areas for inventory. The tool capitalizes on existing invasive plant ranking and early detection systems, and incorporates site-specific considerations to formulate ranked lists of species and areas to focus inventories.
- Format: desktop database and users guide
- Location: tool not yet widely available. Contact giselle_block@fws.gov if you want to test drive

NatureServe Invasive Species Assessment Protocol

- Description: NatureServe, in cooperation with The Nature Conservancy and the U.S. National Park Service, developed this Invasive Species Assessment Protocol as a tool for assessing, categorizing, and listing non-native invasive vascular plants according to their impact on native species and natural biodiversity in a large geographical area such as a nation, state, province, or ecological region.
- Format: downloadable users guide and database
- Location: <http://cmecscatalogue.com/getData/plantData.jsp>

Alien Plant Ranking System:

- Description: The Alien Plants Ranking System (APRS) is a cooperative effort among the National Park Service, Northern Arizona University, Ripon College, University of Minnesota, and the U.S. Geological Survey. APRS is a computer program that helps managers prioritize decisions concerning invasive non-native plants. It is an analytic tool that can be used to: Separate harmless non-native plants from invasive, harmful non-native plants at a site, identify weeds that could impact a site in the future, address control of each weed at a site so that control costs can be weighted against the weeds' impact.
- Format: downloadable software
- Location: <http://sbcs.wr.usgs.gov/research/projects/swepic/aprs/ranking.asp>

- Cal-IPC: Inventory
- Cal-IPC: CalWeedMapper
- USFWS: spp./area prioritization tool
- CDFA pest plant rating list
- NatureServe invasive spp. assessment protocol
- Alien plant ranking system

