
INVASIVE SPECIES OUTREACH TOOLKIT

ONLINE TOOLS AND RESOURCES

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-- DOD RESOURCES --

	<p style="text-align: center;"><u>Aquatic Plant Information System</u></p> <p>How to control aquatic plant infestations by giving access to information on ecology, biology, systematics, identification, and environmentally compatible management techniques. Contains text as well as photographs, diagrams, illustrations, and maps on over 60 species.</p>	
	<p style="text-align: center;"><u>Armed Forces Pest Management Board</u></p> <p>Recommends policy, provides guidance, and coordinates the exchange of information on all matters related to pest management throughout DoD, such as pesticide use, pesticides and pest control equipment lists, and pest management training and certification.</p>	
	<p style="text-align: center;"><u>Armed Forces Pest Management Board, Literature Retrieval System</u></p> <p>Online collection of scientific papers comprising over 100,000 documents in searchable PDF format, drawn from their extensive library of books, journals, reprints, reports, and other sources.</p>	
	<p style="text-align: center;"><u>Center for Environmental Management of Military Lands</u></p> <p>The Center is a team of environmental professionals experienced in the conservation and sustainable management of natural and cultural resources on DoD lands; provides technical services to support the military's mission.</p>	
	<p style="text-align: center;"><u>Conserving Biodiversity on Military Lands: A Guide for Natural Resource Land Managers</u></p> <p>Includes a chapter on invasive species, with impacts, vectors, federal guidelines, and control strategies specific to DoD land managers.</p>	
	<p style="text-align: center;"><u>DoD Natural Resources Conservation: Invasive Species/Invasive Species Management</u></p> <p>DoD installation-specific training materials, fact sheets, reports, manuals, and outreach materials developed from Legacy program funding. Most information pertains to a specific region.</p>	
	<p style="text-align: center;"><u>DoD Technical Information Center</u></p> <p>Provides technical research, development, testing, and evaluation information rapidly and reliably to support DoD needs. Can be queried for specific invasive species.</p>	
	<p style="text-align: center;"><u>Noxious and Nuisance Plant Management Information System</u></p> <p>Provides information on ecology, biology, systematics, identification, and environmentally safe weed management techniques. Contains text and photographs, diagrams, illustrations, maps, and identification keys.</p>	
	<p style="text-align: center;"><u>Wildlife Habitat Council: Legacy Invasive Species Project</u></p> <p>The Wildlife Habitat Council is managing invasive species on military installations in the Chesapeake Bay Watershed. Hosts news and resources.</p>	

-- GOVERNMENT RESOURCES: FEDERAL --

	<p><u>Department of Transportation Federal Highway Administration Roadside Invasives</u></p>	
	<p>Includes field guide that identifies common and showy roadside invasive grasses and forbs, all of which are on various state noxious weed lists.</p>	
	<p><u>Federal Interagency Committee for the Management of Noxious and Exotic weeds</u></p>	
	<p>Formal partnership between 16 federal agencies with direct invasive plant management and regulatory responsibilities spanning across the U.S. and its territories. Sponsors events and helps to implement National Invasive Species Council actions.</p>	
	<p><u>Federal Noxious Weed Disseminules of the United States</u></p>	
	<p>Contains fact sheets, images and guidance on identifying types of seeds.</p>	
	<p><u>Global Invasive Species Information Network</u></p>	
	<p>A platform for sharing invasive species information at a global level. Listserv, database and publications available.</p>	
	<p><u>Invasive Insect Biocontrol and Behavior Laboratory, U.S. Department of Agriculture</u></p>	
	<p>Develops cost-effective and sustainable strategies to control native insect pests and invasive species. Research publications, list of services and contacts available.</p>	
	<p><u>Invasive Species, U.S. Fish & Wildlife Service</u></p>	
	<p>Information on resources, laws/regulations, and integrated pest management practices.</p>	
	<p><u>Invasive Species Program, U.S. Geological Survey</u></p>	
	<p>Engages in detection and assessment of newly established invaders to facilitate development and testing of prevention, management and control methods. Includes research papers, database of species and a strategic plan and links to other publications.</p>	
	<p><u>Managing Invasive Plants: Concepts, Principles, Practices--National Wildlife Refuge System</u></p>	
	<p>Learning modules provide basic overview of invasive plant management concepts, principles, and practices. Detailed information provided in review and resources.</p>	
	<p><u>National Biological Information Infrastructure Invasive Species Information Node</u></p>	
	<p>Data management portal for invasive plants, animals and pathogens in the U.S. Provides an early detection and rapid response information system for controlling invasive species.</p>	
	<p><u>National Institute of Invasive Species Science</u></p>	
	<p>Consortium of government and non-government organizations formed to develop approaches for invasive species science. Field tools for download include EcoNab, which runs from a PDA, and Project Envelope, which facilitates in the surveying of a full environmental range.</p>	

	<p align="center"><u>Nonindigenous Aquatic Species, U.S. Geological Survey</u></p> <p>Provides information on nonindigenous aquatic species. Includes alerts, database and general taxa information. Includes maps and fact sheets with images and information on the occurrences, ecology, status, and impacts.</p>	
	<p align="center"><u>The Animal and Plant Health Inspection Service (APHIS)</u></p> <p>Responsible for protecting U.S. agricultural health, administering the Animal Welfare Act, and carrying out wildlife damage management activities. Emphasis on quarantines inspections.</p>	
	<p align="center"><u>The Aquatic Nuisance Species Task Force</u></p> <p>Intergovernmental organization dedicated to preventing and controlling aquatic nuisance species. Contains guidance for prevention, monitoring, control, education (brochures, posters, etc), images, and database for invasive species.</p>	
	<p align="center"><u>The National Invasive Species Council</u></p> <p>An inter-departmental council that helps to coordinate complementary, cost-efficient and effective Federal activities regarding invasive species. Includes the <i>2008-2012 National Invasive Species Management Plan</i>.</p>	
	<p align="center"><u>U.S. Forest Service Invasive Species Program</u></p> <p>Includes <i>National Strategy</i>, prevention, early detection, rapid response, control, restoration, emerging issues, species profiles, guidance on cooperative weed management areas, and research and publications.</p>	
	<p align="center"><u>U.S. Department of Agriculture Systematic Entomology Laboratory</u></p> <p>Technical site that provides research on identification and classification, offers identification services, and scientists respond to requests for information relating to taxonomy, biology, ecology, and distribution of insect and mite species.</p>	
	<p align="center"><u>Weeds Gone Wild: Alien Plant Invaders of Natural Areas, National Park Service</u></p> <p>Provides basic information on the threat and impacts of invasive plants. Includes fact sheets, lists, publications, and reports.</p>	

-- GOVERNMENT RESOURCES: STATE --

	<p style="text-align: center;"><u>Mid-Atlantic Exotic Pest Plant Council</u></p> <p>Coordinates regional efforts. Has brochures, annual conference information and even recipes for eating invasive plants. Published <i>Plant Invaders of Mid-Atlantic Natural Areas</i>, with color photographs and information on management and identification of highly invasive plants.</p>	
	<p style="text-align: center;"><u>National Invasive Species Information Center: State Resources</u></p> <p>A clickable map with links to state-specific information.</p>	
	<p style="text-align: center;"><u>Southern Research Station, U.S. Forest Service</u></p> <p>Conducts forestry research. Published a field guide for identification and control of invasive plants of southern forests.</p>	

-- DATABASES --

	<p align="center"><u>Agricultural Pest Information System Pest Tracker</u></p> <p>Publishes survey maps for pests of agricultural and forest commodities and has links to pest news and information and pest experts and coordinators. Contacts and news searchable by state.</p>	
	<p align="center"><u>Center for Invasive Plant Management Restoration Database: Invasive Species</u></p> <p>Database of web sites, technical reports and scientific literature for invasive species.</p>	
	<p align="center"><u>Federal and State Noxious Weeds in the Germplasm Resources Information Network, USDA</u></p> <p>Primarily taxonomy info, also distribution and some images of invasive species.</p>	
	<p align="center"><u>Forest Pests, Bugwood Network</u></p> <p>Photos and information on insects, diseases, weeds, and other agents (abiotic, human, or animal). Comprehensive database and photos.</p>	
	<p align="center"><u>Global Invasive Species Database</u></p> <p>Comprehensive database, searchable by habitat type, organism type, or taxonomic level. Includes biology, impact, distribution, and management information.</p>	
	<p align="center"><u>Invasive and Exotic Species to North America</u></p> <p>Information (identification, biology, control, and management resources) and images of invasive & exotic species, publications and links. Searchable by type.</p>	
	<p align="center"><u>Invasive and Noxious Weeds, USDA</u></p> <p>View Federal and state noxious weed lists, an invasive plant list, or an introduced plant list, each with links to more information.</p>	
	<p align="center"><u>NatureServe Explorer</u></p> <p>Includes option to search by priority. Leads to information on distribution, ecology, management, and impact rank.</p>	
	<p align="center"><u>Nonindigenous Species Database Network</u></p> <p>A database to access information on taxonomy, life history, native and introduced ranges, photos, maps, and impacts of aquatic species around the world.</p>	
	<p align="center"><u>The Information Management System for Invasive Species</u></p> <p>Access to three databases: Federal Noxious Weeds, the North American Non-Indigenous Arthropod Database, and the Identified Plant Pests Regulated by APHIS.</p>	

-- PRIVATE COMPANIES AND NON-PROFIT ORGANIZATIONS --

	<p align="center"><u>A Resource Guide for Invasive Plant Management in the Sonoran Desert</u></p> <p>This resource guide describes the various organizations working in invasive plant management, compares existing approaches and identifies opportunities for cooperation and coordination that will lead to effective management of invasive plants in the Sonoran Desert.</p>	
	<p align="center"><u>Best Management Practices Handbook</u></p> <p>Introductory resource for invasive plant control technologies. Describes how to manage invasive and exotic aquatic plant species while protecting aquatic ecosystems.</p>	
	<p align="center"><u>Biological Control: A Guide to Natural Enemies in North America</u></p> <p>Includes images and descriptions on 100 species. Specific information on parasitoids, predators, pathogens, and weed feeders.</p>	
	<p align="center"><u>Center for Invasive Plant Management</u></p> <p>Creates visual elements to enhance education. Promotes ecologically sound management of invasive plants by aiding partnerships among scientists, educators and land managers. Posts presentations from annual conferences.</p>	
	<p align="center"><u>Development of a Categorized List of Invasive Non-native Plants That Threaten Wildlands in Arizona: Individual Plant Assessments by Species A to Z (in two parts)</u></p> <p>To request a copy of this document, please contact Jane Mallory, DoD Legacy Resource Management Program: Jane.Mallory.ctr@osd.mil.</p>	
	<p align="center"><u>Inter-American Biodiversity Information Network: Invasives Information Network</u></p> <p>Integrates information from Western Hemisphere countries to support the detection and management of invasive species. Contains Listserv, fact sheets, and reports by country.</p>	
	<p align="center"><u>Invasive Plant Atlas of New England</u></p> <p>Comprehensive web-accessible database of invasive and potentially invasive plants in New England. Links to news items and calendar of events. Includes data and maps.</p>	
	<p align="center"><u>Invasive Plant Control, Inc.</u></p> <p>A company whose purpose is the management of invasive species nationwide. Offers various pest management services and describes project on Fort Detrick, MD.</p>	
	<p align="center"><u>National Association of Exotic Pest Plant Councils</u></p> <p>Open to the participation to all non-profit organizations whose primary mission addresses issues of invasive exotic pest plants in natural areas and wildlands. Links to comprehensive, state-specific information.</p>	

	<p align="center"><u>North Carolina State University Aquatic Plant Management</u></p> <p>Offers basic information to County Extension Personnel and others interested in management of vegetation in ponds, lakes and streams.</p>	
	<p align="center"><u>Pacific States Marine Fisheries Commission</u></p> <p>Promotes, as well as supports policies and actions to conserve, develop and manage our fishery resources in California, Oregon, Washington, Idaho, and Alaska.</p>	
	<p align="center"><u>Smithsonian Environmental Research Center: Marine Invasions Lab</u></p> <p>Seeks to understand biological invasion patterns and processes in marine ecosystems. Hosts publications and links to other resources, including databases.</p>	
	<p align="center"><u>Southeast Exotic Pest Plant Council</u></p> <p>Provides a forum for the exchange of scientific, educational and technical information. Provides publications, newsletters, information on invasive plants in the southeast, and links to state chapters.</p>	
	<p align="center"><u>SDAFS Aquatic Plant (Biotic) Habitat Manual</u></p> <p>Includes instructions on how to build exclosures to keep invasive species out, as well as other limited information.</p>	
	<p align="center"><u>Sonoran Desert Invasive Species Council Weed Management Areas Brochure</u></p> <p>To request a copy of this document, please contact Jane Mallory, DoD Legacy Resource Management Program: Jane.Mallory.ctr@osd.mil.</p>	
	<p align="center"><u>Southern Integrated Pest Management Center</u></p> <p>Fosters the development of Integrated Pest Management: a science-based and beneficial approach to managing pests. Contains news and article updates from a cooperative extension point of view.</p>	
	<p align="center"><u>The Global Invasive Species Team, The Nature Conservancy</u></p> <p>Provides comprehensive information on planning and strategies, and on control methods. Also includes alert species and an image gallery.</p>	
	<p align="center"><u>Weed Science Society of America</u></p> <p>Includes identification tools, publications on species, and information on biological and chemical management. Links to the Weedometer, which predicts emergence and the range for several weeds on a site simultaneously.</p>	

Yellow Star Thistle Management Guide

To request a copy of this document, please contact Jane Mallory, DoD Legacy Resource Management Program: Jane.Mallory.ctr@osd.mil.

-- FUNDING SOURCES --

	<p><u>Cooperative Ecosystem Studies Units</u></p>	
	<p>A national network of 17 cooperative units that provide research, technical assistance and education to resource and environmental managers. DoD is a member of the national organizations and 11 regional units. Any installation may participate, thereby taking advantage of a low fixed overhead fee and access to a network of university resources, including student labor and faculty expertise.</p>	
	<p><u>Legacy Resource Management Program</u></p>	
	<p>DoD program that provides funding to natural and cultural resource projects that have regional, national and/or multi-Service benefit. The application process is moderate with an almost 50% chance of funding from the full proposal stage.</p>	
	<p><u>Environmental Security Technology Certification Program (ESTCP)</u></p>	
	<p>DoD program that promotes innovative, cost-effective environmental technologies through demonstration and validation at DoD sites. Proposal requests are released annually. Successful efforts are usually cutting edge with high DoD or Department of Energy relevance. The pre-proposal stage is highly competitive.</p>	
	<p><u>National Fish and Wildlife Foundation: Grants</u></p>	
	<p>Provides funding on a competitive basis to projects that sustain, restore and enhance the Nation's fish, wildlife, plants, and their habitats through <i>Keystone Initiative Grants</i> and other <i>Special Grant Programs</i> (see Pulling Together Initiative below). All funds require some level of non-federal match, thereby ensuring a public-private partnership.</p>	
	<p><u>National Invasive Species Information Center, USDA: Grants and Funding</u></p>	
	<p>Provides resources for general grants and funding information for invasive species. Categorized by federal and state government, university/academic, and other organizations. Also available is a listing of specific requests for proposals and information on funds awarded.</p>	
	<p><u>National Public Lands Day Funding and Awards</u></p>	
	<p>DoD Legacy Program provides funds for National Public Lands Day through the National Environmental Education Foundation. Funding supports volunteer partnership projects on military lands open to the public for recreation. Each site can receive up to \$6,500.</p>	
	<p><u>Pulling Together Initiative</u></p>	
	<p>A challenge grants program administered by the National Fish and Wildlife Foundation, aimed at combining private and public resources to create weed management areas and other on-the-ground efforts to combat the spread of invasive species. Funding is competitive and requires a non-federal match.</p>	

	<p align="center"><u>Strategic Environmental Research and Development Program (SERDP)</u></p> <p>DoD's environmental science and technology program. Funds basic and applied research with the goal of supporting the long-term sustainability of DoD's training and testing ranges, and reducing current and future environmental liabilities. Applications are solicited against narrowly defined topic areas identified in yearly Statements of Need. Application process is rigorous and funding is highly competitive.</p>	
	<p align="center"><u>U.S. Fish and Wildlife Service: Grants-at-a-Glance</u></p> <p>The Fish and Wildlife Service administers natural resource assistance grants to governmental, public and private organizations, groups and individuals. Site includes information about and applications for available grants, as well as links to external grant sites.</p>	
	<p align="center"><u>USDA Partnerships and Grants</u></p> <p>Includes a publication that contains basic information on programs in USDA that could be used to fund invasive species related projects. Also has information on Cooperative Weed Management Areas.</p>	
	<p align="center"><u>Weed Science Society of America</u></p> <p>Links to current, specific requests for proposals from other funding sources.</p>	

-- NATIVE PLANTS --

	<p style="text-align: center;"><u>Native Plant Information Network</u></p> <p>Native plants database. Allows user to search for native plant info by plant traits or names, browse through collection of 23,000 native plant images, and pose plant questions to resident horticulturalist.</p>	
	<p style="text-align: center;"><u>Native Plant Network</u></p> <p>Founded through a public-private partnership. Contains a database with propagation protocols. Also available is a subscription to the Native Plants Journal.</p>	
	<p style="text-align: center;"><u>Plant Conservation Alliance</u></p> <p>Includes outreach tools, e.g. coloring books for children, publications and articles, and links to native landscaping guides and websites by state or region.</p>	
	<p style="text-align: center;"><u>PlantNative</u></p> <p>Contains lists of native plants by state and links to local nurseries across the U.S. PlantNative is dedicated to moving native plants and natureescaping into mainstream landscaping practices. Land managers can check with their local nursery for more information on pollinator-friendly plants specific to their region.</p>	