

Invasive Species Tools, Websites and Resources: Invasive Plant Management on Public Lands

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This document contains useful websites and invasive species management tools that provide a brief introduction to invasive species management for public land managers. The information in this document is not intended to be comprehensive but can be used as a starting point for invasive species management by refuge managers and biologists. A companion database containing papers and websites will also be available as a resource for NWRS staff searching for literature on invasive species. The Procite database and an M.S. Excel version will be posted on the Biological Monitoring Team's website: https://intranet.fws.gov/Region3/ScienceExcellenceandLandscapeConservation/bio_monitoring.html.

Useful Websites on Invasive Species for Refuge Managers and Biologists

The following websites are very useful for the purpose of gathering information on invasive species management. They all contain links to large amounts of information related to invasive species. I have given a rating for each website based on its usefulness and the fields in each rating box below. Also, I have indicated the kind of information available from each website in my ratings box, such as information on the following: **detection (D), prioritization (P), inventory (I), control (C), and management (M)** of invasive species. Also, since there are many different types of invasive species (**Aquatic (Q), plants (P), animals (A), microbes (M)**), I have indicated the kind of invasive the website is geared towards or contains information about (**general (G) = general information on invasives**). The first website listed is the most useful.

Name: National Invasive Species Information Center

Author/Citation: USDA National Agricultural Library

Website: <http://www.invasivespeciesinfo.gov/toolkit/main.shtml>

Brief Description: This website is the gateway to a huge selection of invasive species information. It covers federal, state, local, and international sources. It is very comprehensive.

Rating:

	Poor	Fair	Good	Very Good
Easy to Use (organization)				X
Documentation (for help)				X
Amount of information available				X
Type of information available (D,P,I,C,M)				D,P,I,C,M
Type of invasive information available (Q,P,A,M,G)				Q,P,A,M,G

Name: Invasive Species Information Node

Author/Citation: USGS, Biological Resources Division, Biological Informatics Program, National Biological Information Infrastructure (NBII)

Website: <http://invasivespecies.nbii.gov/projects.html>

Brief Description: This website has information on early detection/rapid assessment and response information, pinpointing and mapping invasive species occurrence, determining the pathways of spread and how to close them, determining the organization(s) responsible for implementing a timely reaction in all affected areas, compiling and making freely available, species information and management knowledge to enable appropriate action, and broadening awareness of the early detection/rapid assessment and response system to increase its use by scientists and the public.

Rating:

	Poor	Fair	Good	Very Good
Easy to Use (organization)			X	
Documentation (for help)			X	
Amount of information available				X
Type of information available (D,P,I,C,M)		I	D	C, M
Type of invasive information available (Q,P,A,M,G)			Q,P,A,M,G	

Name: Exotic Forest Pest Information System for North America (ExFor)

Author/Citation: North American Forest Commission, Marla Downing
 Contact: Biological Scientist State & Private Forestry (WO),
 Forest Health Protection,
 Forest Health Technology Enterprise Team
 2150 Centre Ave., Bldg A.,
 Fort Collins, CO 80526-1891
 Phone: (970) 295-5843
 Fax: (970) 295-5815
 Email: mdowning@fs.fed.us

Website: <http://www.spfnic.fs.fed.us/exfor/index.cfm>

Brief Description: This website rates the risk of forest invasive species. You can search for pests by host type, geographic region, pest risk rating and summary reports. Included are pests of seeds, cones, seedlings, live trees and any harvested products of trees. They include insects, mites, nematodes, fungi and fungus-like organisms, bacteria, parasitic plants, and other disease-causing organisms. You can access a searchable database that provides fact sheets on pests that are a threat to North American forests. From this menu, you can view a variety of reports, add or update the pest information, or provide comments regarding an existing pest information sheet in the database.

Rating:

	Poor	Fair	Good	Very Good
Easy to Use (organization)			X	
Documentation (for help)			X	
Amount of information available				X
Type of information available (D,P,I,C,M)			D,P	
Type of invasive information available (Q,P,A,M,G)				P,M (of forests only)

Name: The Global Invasive Species Initiative

Author/Citation: The Nature Conservancy. Network support and space for the tncweeds.ucdavis.edu web site is graciously supplied by the Department of Vegetable Crops at The University of California, Davis.

Website: <http://tncweeds.ucdavis.edu/control.html>

Brief Description: This is where you will find core web site documents such as information about specific plants, animals, or pathogens; our famous "Weed Control Methods Handbook," tool reviews, etc

Rating:

	Poor	Fair	Good	Very Good
Easy to Use (organization)				X
Documentation (for help)			X	
Amount of information available				X
Type of information available (D,P,I,C,M)		I,M		C
Type of invasive information available (Q,P,A,M,G)		A,M		P

Name: Invasive Plant Atlas of New England (IPANE)

Author/Citation: Mehrhoff, L. J., J. A. Silander, Jr., S. A. Leicht, E. S. Mosher and N. M. Tabak. 2003. Department of Ecology & Evolutionary Biology, University of Connecticut, Storrs, CT, USA.

Website: <http://invasives.eeb.uconn.edu/ipane/>

Brief Description: This is a web-accessible database of invasive and potentially invasive plants in New England. The databases are intended to facilitate education and research leading to a greater understanding of invasive plant ecology and support informed conservation management. An important focus of the project is the early detection of, and rapid response to, new invasions.

Rating:

	Poor	Fair	Good	Very Good
Easy to Use (organization)				X
Documentation (for help)		X		
Amount of information available		X		
Type of information available (D,P,I,C,M)		D	C	
Type of invasive information available (Q,P,A,M,G)		G	P	

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Name: USGS Invasive Species Program

Author/Citation: U.S. Geological Survey, 12201 Sunrise Valley Drive. Biological Resources Discipline, Invasive Species Program, MS-301, Reston VA 20192.

Website: <http://biology.usgs.gov/invasive/>

Brief Description: This website contains information on USGS programs, databases, research, and publications. There are also links to national and international cooperators of invasive species. There are no specific management tools on this website but links to research projects that contain them.

Rating:

	Poor	Fair	Good	Very Good
Easy to Use (organization)				X
Documentation (for help) (DOESN'T APPLY)				
Amount of information available			X	
Type of information available (D,P,I,C,M) (Doesn't Apply)				
Type of invasive information available (Q,P,A,M,G)				G

Tools for Invasive Management

I have gathered several tools for invasive species management and put them into categories that are based on the information needs of Refuges. They are divided into the categories: early detection resources, prioritizing tools, and inventory and mapping tools. The tools are categorized in this order to be used as a process for managing invasive species. A combination of these tools may be what refuges need to manage for invasive species. Many of these tools can be integrated for Refuge use. Each tool has a description associated with it.

I. Early Detection Resources

Name: Invasive Alien Species: A Toolkit of Best Prevention and Management Practices

Citation/Author: Global Invasive Species Program

Wittenberg, R.; Cock, M.J.W. (2001) Invasive alien species. How to address one of the greatest threats to biodiversity: A toolkit of best prevention and management practices. CAB International, Wallingford, Oxon, UK

Website: <http://www.cabi-bioscience.ch/wwwgisp/index.html>

Abstract: A national strategy is required to assess the full scope of the threat of invasive non-native species and deal with it effectively. Also critical to success is a mechanism for international co-operation to stop invasions at their source and to foster the sharing of lessons learned in preventing and dealing with invasions. This toolkit is designed to aid in the elaboration and adoption of an effective national strategy, by pointing to experiences in various nations. The toolkit is written from the perspective of the sustainable use and conservation of biodiversity as embodied in article 8th of the Convention on Biological Diversity, but it addresses a problem that can only be solved through an alliance of environmental, health, industrial, agricultural, and other resource-based sectors of society. Invasive non-native species are a development issue. Users will **find suggestions on mobilizing and generating public support for a national commitment, assessing the current status and impact of invasive exotic species, building institutional support for an effective response to the problem, and putting the strategy on a firm institutional and legal basis.**

The toolkit also **provides advice, references, and contacts to aid in preventing invasions by harmful species and eradicating or managing those invaders that establish populations.** The extensive literature and experience in prevention, eradication, and long-term management can be bewildering and difficult to navigate. The toolkit allows an easy entrée into this diverse field.

It is anticipated that the toolkit will not always be directly applicable to all situations. All countries and areas have their constraints, some more severe than others. For example, the constraints facing the small island nations of the Pacific were starkly summarized at the Global Invasive Species Programme: Workshop on Management and Early Warning Systems, held in Kuala Lumpur, in March 1999 ([Case Study 1.2 "Particular Problems Related to Invasive Species in the South Pacific"](#)). The toolkit in its present form will need to go through a process of validation to ensure that the content is appropriate and relevant to users. In at least some cases, it will then need to be adapted for local situations, issues and problems.

Rating:

	Poor	Fair	Good	Very Good
Easy to Use (organization)				X
Documentation (for help)				X

Amount of information available

		X	
			G

Type of invasive information available (Q,P,A,M,G)

Name: Invasive Species Forecasting System (“smart surveys”)

Citation/Author: U.S. Department of the Interior, U.S. Geological Survey
Office of Communication
119 National Center
Reston, VA 20192

Contacts: Michele Banowetz - michele_banowetz@usgs.gov
Phone: 970-226-9301
Tom Stohlgren - tom_stohlgren@usgs.gov
Phone: 970-491-1980

Website: <http://bp.gsfc.nasa.gov/index.html>

Abstract: Products based on NASA Earth observations and a new **Internet-based decision tool** are providing information to help land and water managers combat tamarisk (saltcedar), an invasive plant species impacting precious water supplies in the western U.S.

This decision tool, called the Invasive Species Forecasting System (ISFS), is being used at the U.S. Geological Survey National Institute of Invasive Species Science in Fort Collins, Colo. The ISFS is the result of combining USGS science expertise with NASA expertise in Earth observations, software engineering, and high-performance computing expertise.

"The ISFS combines NASA satellite data with tens of thousands of field sampling measurements, which are then used to analyze past and present distributions of non-native plants and predict their future growth patterns," said Tom Stohlgren, National Institute director. **Land managers and others can use the ISFS to generate color-coded maps to help predict and manage the spread of troublesome invasive species.** "Integrating innovative Earth observation technology enables the USGS to significantly enhance its ability to support invasive species management," said Ed Sheffner, program manager for invasive species in the Applied Science Program at NASA Headquarters in Washington. "The enhancements in the ISFS result from the use of NASA observations, model output, and systems engineering."

One application of the ISFS, a **habitat suitability map for saltcedar** in the continental United States, is described in the journal *Frontiers in Ecology and the Environment*. The ISFS was successfully tested when the pink-flowered saltcedar bloomed last summer in Colorado. The U.S. Department of Agriculture recently identified saltcedar as one of the most harmful invasive species in the U.S. because the plant's long roots tap into underground aquifers. Its groundwater-absorbing qualities may

be adding to the severity of the drought in the western U.S. Saltcedar also increases the salt concentration of the soil and degrades habitats for native species along river systems.

The ISFS uses observations and products from NASA’s Terra, Aqua, and Earth Observing-1 satellites and the USGS-operated Landsat satellites, together with field data from government and non-government contributors. The satellites observe and measure sunlight reflected by plants and their environments. The satellites "lock in" on unique aspects of the reflected light to determine saltcedar’s current locations and habitats vulnerable to invasion.

During the plant’s blooming season, ISFS-generated maps predicting saltcedar locations matched observations of it in the field. These predictive maps are an important new tool for land managers involved with saltcedar-related control and restoration efforts.

"Satellite data coupled with computer modeling helps us understand where saltcedar is likely to be growing, even in remote locations that field researchers cannot easily reach," said John Schnase, principal investigator of the ISFS project at NASA’s Goddard Space Flight Center in Greenbelt, Md.

The ISFS uses invasive species occurrence and abundance data from the Global Organism Detection and Monitoring System developed by the USGS Fort Collins Science Center and Colorado State University. This monitoring system is an on-line database that allows people to report sightings of saltcedar or other invasive species to USGS scientists, who then confirm the observations and incorporate the new data into ISFS map products.

The USGS is using the ISFS to predict the distribution of other invasive species such as cheatgrass, Canadian star thistle, and certain aquatic species.

NASA and the USGS (through the Department of the Interior) are members of the National Invasive Species Council, an interdepartmental council with 13 cabinet-level member organizations. Formed by Executive Order in 1999, the NISC facilitates coordination and provides leadership for federal agencies working on invasive species issues.

Rating:

	Poor	Fair	Good	Very Good
Easy to Use (organization)		X		
Documentation (for help)		X		
Amount of information available		X		
Type of invasive information available (Q,P,A,M,G)		P		

II. Prioritizing Tools (Ranking species to control)

Name: Alien Plant Ranking System

Citation/Author: APRS Implementation Team. 2000. Alien plants ranking system version 5.1. Jamestown, ND: Northern Prairie Wildlife Research Center Online. (Version 30SEP2002).

Website: <http://www.npwrc.usgs.gov/resource/literatr/aprs>

Abstract: The Alien Plants Ranking System (APRS) is a computer-implemented system to help land managers make difficult decisions concerning invasive nonnative plants. The management of invasive plants is difficult, expensive, and requires a long-term commitment. Therefore, land managers must focus their limited resources, targeting the species that cause major impacts or threats to resources within their management, or the species that impede attainment of management goals. **APRS provides an analytical tool to separate the innocuous species from the invasive ones** (typically around 10% of the nonnative species). APRS not only helps identify those species that currently impact a site, but also those that have a high potential do so in the future. Finally, the **system addresses the feasibility of control of each species**, enabling the manager to weigh the costs of control against the level of impact.

This system has been developed and tested primarily in grassland and prairie parks in the central United States. Using the system in other ecoregions may require modification. If you have comments or suggestions regarding any aspect of this ranking system, please direct them to Dr. Ron Hiebert (ron.hiebert@nau.edu.)

SYSTEM DESCRIPTION

The system relies on a set of 23 questions (DataSheet) to be answered for each nonnative plant known to occur in (or near) the site of concern. The questions are organized into 3 sections. Section I, which addresses the current level of impacts to the site, must be based upon site surveys. Section II asks specific questions that give indications of the potential of the species to be invasive. For many alien plants, answers to these questions are available within the system (species FactSheets). If this information is unknown, and not available within the system, it should be obtained through library research. Section III poses questions that affect the feasibility (and costs) of control.

SYSTEM OUTPUT

Upon completion of the DataSheets for all nonnative species found on a site, the manager can print the following:

- Completed DataSheet for each species ([Sample](#))
- List of all entered species sorted by level of impact, or potential to be invasive, or feasibility of control
- Lists, such as species found to be innocuous, or species causing serious impact, or species not currently causing impacts but having high potential to invade and cause impacts, or some other grouping determined by the user
- Graphic depiction of data showing impact, potential to be invasive, and feasibility of control for the suite of species in the data file ([Sample](#))

Rating:

	Poor	Fair	Good	Very Good
Easy to Use (organization)			X	
Documentation (for help)			X	
Amount of information available			X	
Type of invasive information available (Q,P,A,M,G)				P

Name: Invasive Species Assessment Protocol

Citation/Author: Morse, L.E., J.M. Randall, N. Benton, R. Hiebert, and S. Lu. 2004. An Invasive Species Assessment Protocol: Evaluating Non-Native Plants for Their Impact on Biodiversity. Version 1. NatureServe, Arlington, Virginia.

Website: <http://www.natureserve.org/getData/plantData.jsp>

Abstract: 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. This protocol is designed to make the process of assessing and listing invasive plants objective and systematic, and to incorporate scientific documentation of the information used to determine each species’ rank. NatureServe’s methodology has previously included assessments of the conservation significance of native species; this protocol extends that scope to non-native species as well. The protocol is used to assess species (or infraspecific taxa, as appropriate) individually for a specified “region of interest” and to assign each species an Invasive Species Impact Rank (I-Rank) of High, Medium, Low, or Insignificant to categorize its negative impact on natural biodiversity within that region. The protocol includes 20 questions, each with four scaled responses (A-D, plus U = unknown). The 20 questions are grouped into four sections: Ecological Impact, Current Distribution and Abundance, Trend in Distribution and Abundance, and Management Difficulty. Each species is assessed by considering these questions, with the answers used to calculate a subrank for each of the four sections. An overall I-Rank is then calculated from the subranks. Text comments and citations to information sources should be provided as documentation for each answer selected, along with a concise text summary of the major considerations leading to the overall rank. While designed for use in a specified large, contiguous, biogeographically diverse region, the protocol can be adapted to specified noncontiguous regions (such as the 50 states of the United States), and may also be applied to assess the impact in the non-native range of a species that is also present elsewhere in a region as a native. NatureServe is now using this protocol to assess the biodiversity impact of the approximately 3,500 non-native vascular plant species

established outside cultivation in the United States. The protocol is offered here in generalized form for others who might wish to use it to conduct similar assessments and create lists of invasive plants for other nations, states, provinces, ecological regions, or comparable areas.

[NatureServe Explorer](#) now includes these impact ranks, or "I-ranks", for 452 invasive plant species (among the roughly 3,500 such plants recorded for the United States). Individual "I-ranks" (high, medium, low, or insignificant) are listed within the summary and comprehensive reports for each individual species.

- Download the publication: [An Invasive Species Assessment Protocol: Evaluating Non-Native Plants for Their Impact on Biodiversity](#), (PDF file, 1.03M)
- Download [Dataform and Scoresheet](#) in Excel (40K)

Rating:

	Poor	Fair	Good	Very Good
Easy to Use (organization)			X	
Documentation (for help)				X
Amount of information available		X		
Type of invasive information available (Q,P,A,M,G)				P

III. Inventory and Mapping Tools

Name: Refuge Lands GIS (RLGIS)

Contact: USFWS, Chuck Loesch, chuck_loesch@fws.gov.

Website: www.esri.com/library/newsletters/federal-gisconnections/fedgis-summer06.pdf#search=%22RLGIS%22

Abstract: The RLGIS data model was divided into **three topic-oriented geodatabases**. The first contains feature classes specific to real property, facilities, infrastructure, management unit, and monitoring inventory. The second consolidates upland and wetland vegetation and **invasive plants mapping**. These two geodatabases do not use a relational database structure. The third geodatabase **houses information related to resource management and uses the relational data structure available in a geodatabase and ranges from land management, disease, invasive species, and public use.**

FWS users can access these geodatabases to manage a wide range of spatial information needs such as vegetation and weed management, water management, wildfires and prescribed burns, hunting and trapping, fences, signs, and a host of others. RLGIS will be available to any interested Refuges Field Stations, and support and

delivery will be managed regionally. Users in the field will select the portion of the data model that relates to them and use it to collect and maintain data for their local areas.

Rating:

	Poor	Fair	Good	Very Good
Easy to Use (organization)				
Documentation (for help)				
Amount of information available				
Type of invasive information available (Q,P,A,M,G)				

I could not find a good reference website for this tool. It may be because I don't have access to USFWS intranet; therefore I did not rate the website.

Name: Guidelines for Coordinated Management of Noxious Weeds: Development of Weed Management Areas

Citation/Author: Adapted from the Guidelines For Coordinated Management Of Noxious Weeds In The Greater Yellowstone Area. USDI - Bureau of Land Management, Forest Service and National Park Service.

Website: www.weedcenter.org/weed_mgmt_areas/wma_overview.html

Abstract: These guidelines provide a unified effort in developing a weed management program, including public awareness; a prevention program; a common inventory, mapping, monitoring, and reporting procedure; and methods of integrated weed management. An overall management plan and specific action plans can be developed for logical units of land within specific Weed Management Areas (WMAs). Any management area with common characteristics can be divided into WMAs. These WMAs become the land unit for the development of a comprehensive Noxious Weed Management Plan. These areas replace jurisdictional boundaries in favor of natural boundaries that facilitate cooperation, coordination, and implementation of effective integrated weed management programs for noxious weeds. Local County Weed Districts are an important driving force in developing weed management programs for these areas.

Rating:

	Poor	Fair	Good	Very Good
Easy to Use (organization)			X	

Documentation (for help)
Amount of information available

		X	
	X		
		P	

Type of invasive information available (Q,P,A,M,G)

Name: Weed Information Management System (WIMS)

Citation/Author: The Nature Conservancy

Website: <http://tncweeds.ucdavis.edu/wims.html>

Abstract: TNC's Weed Information Management System (WIMS) is a **Microsoft Access-based relational database application** that is designed to assist natural resource managers in managing their weed data. **WIMS keeps track of three types of data records: weed occurrences (GPS point locations), assessments (size and status of the weed infestation to facilitate monitoring over time), and management treatments applied to those weed infestations.** Data can be easily exchanged between multiple users, exported in NAWMA (North American Weed Management Association) standards, and written to shapefiles for mapping in any standard GIS program. A variety of reports can also be easily generated. Additionally, WIMS can be used on a handheld unit (either MS Windows-based Pocket PC or Trimble) with a GPS unit to capture data in the field. When using WIMS on a handheld unit with an ArcPad interface, a site manager can use background imagery and other GIS layers for mapping weeds, then upload the new data into the Access database with a few mouse clicks!

What WIMS does is keep track of weed occurrences, assessments (monitoring over time), and any management treatments applied. Once data have been entered into the Access database (either manually or from a handheld unit), data can be:

- Easily exchanged between multiple users;
- Exported in NAWMA standards in an Excel spreadsheet;
- Written to GIS shapefiles to produce maps;
- Summarized in a variety of reports.

Rating:

Easy to Use (organization)
Documentation (for help)
Amount of information available

	Poor	Fair	Good	Very Good
				X
				X
			X	
				P

Type of invasive information available (Q,P,A,M,G)

Name: Southwest Exotic Plant Information Clearinghouse (SWEPIC)

Citation/Author: U.S. Department of the Interior, U.S. Geological Survey, Colorado Plateau Research Station, Flagstaff, AZ, USA

Website: <http://www.usgs.nau.edu/swepic/>

Abstract: The Southwest Exotic Plant Information Clearinghouse is a cooperative effort among the U.S. Geological Survey, the National Park Service and Northern Arizona University to **organize comprehensive information on exotic plant species in the southwest on one web location**. SWEPIC serves to help all people and organizations committed to protecting the ecological and economic values of southwest resources from degradation from harmful non-native weeds. The goal of SWEPIC is to provide reliable and **organized information on the distribution and ecology of these weeds** in the southwest, with an emphasis on forests, rangelands, and other natural areas. Please contact us if you have information or comments that should be included in SWEPIC ([SWEPIC Team](#)).

This website contains information links for: Weed Species, Weed Lists, Maps, SWEMP (The Southwest Exotic Plant Mapping Program), APRS (The Alien Plant Ranking System), AZ-WIP (Arizona Wildland Invasive Plants).

Rating:

	Poor	Fair	Good	Very Good
Easy to Use (organization)		X		
Documentation (for help)		X		
Amount of information available			X	
Type of invasive information available (Q,P,A,M,G)				P

Name: Delaware Invasive Species Tracking System

Contact: john_a_young@usgs.gov

Website: <http://www.lsc.usgs.gov/gis/dists/intro.asp>

Abstract: This is a prototype effort of the [USGS Leetown Science Center](#), the [Delaware Natural Heritage Program](#) and the Delaware Invasive Species Council (DISC). The goal of this project is to develop an online tool for mapping and cataloging locations of invasive species within the State of Delaware. The **tracking system will document the abundance, distribution, and current status of invasive plants and animals**

throughout the state, in order to increase public awareness, support policy and regulation development and guide management actions.

This system is based on three technologies:

- an online database (Access/SQL Server)
- an online mapping system (ArcIMS)
- active server-based web pages

The purpose of the system is twofold, first it is meant to be used as a database for members of the Delaware Invasive Species Council (DISC) to **keep track of new invasive species locations found during surveys**, and secondly it is meant as an **information source for the general public, decision makers, and scientists** interested in the status of invasive species in Delaware.

Rating:

	Poor	Fair	Good	Very Good
Easy to Use (organization)			X	
Documentation (for help)		X		
Amount of information available	X			
Type of invasive information available (Q,P,A,M,G)		P,A		

Name: Weed Management Plan Template

Contact: John Randall, jarandall@ucdavis.edu Barry Meyers-Rice bazza@ucdavis.edu

Website: <http://tncweeds.ucdavis.edu/products.html>

Abstract: This tool consists of three parts. The first part is an **introduction to the philosophy of adaptive management**. The second part is the **Weed Management Plan Template**. With all the boiler-plate language already in place, this template eases the process of making a weed plan. It will help you prioritize the weeds on your preserve. The final component is the **Excel workbook to keep track of your work and costs**.

- 1) Introduction: MS Word -or- Adobe Acrobat
- 2) Template: [MS Word](#) -or- [Adobe Acrobat](#)
- 3) Workbook: [MS Excel](#)

Rating:

	Poor	Fair	Good	Very Good
Easy to Use (organization)			X	
Documentation (for help)		X		
Amount of information available		X		
Type of invasive information available (Q,P,A,M,G)			P	