

# Workshop Outcomes

## GENERAL OUTCOMES

Through presentations, case studies, and interactions with instructors and peers, the workshop will enable participants to:

- Translate broad ecological information into goals and objectives for invasive species management.
- Understand the causes and consequences of invasions.
- Develop or refine components of an invasive species management framework including planning, methods for assessing and prioritizing populations, restoration, and management tools.
- Become familiar with the distributions and trends of invasive species.
- Improve skills in invasive species identification.
- Build local and regional partnerships with natural resource management entities and stakeholders.

## SESSION OUTCOMES

### Welcome Orientation

- Understand the context for the workshop.
- Introduce participants, instructors, and coordinators.

### Session 1: Ecological Context of Invasions

- Understand that invasive species management cannot be prescriptive: each situation may require a different approach and that approach and its possible outcomes may be determined by ecological changes catalyzed by the invasive species.
- Know concepts and principles integral to invasion biology and ecology.
- Understand how climate variability and change influence both native and non-native plant invasions and the challenges of management across complex landscapes.
- Understand the mechanisms by which plant invasions can lead to altered fire regimes, and the management steps that might be necessary to prevent or reverse the establishment of an invasive plant/fire cycle.

### Session 2: Southwest Regional Overview of Invasive Species Distributions, Trends, and Identification

- Know the distributions and trends of invasive plant, aquatic, and insect species.
- Become familiar with dispersal mechanisms of existing and potential invaders.
- Improve skills in species identification.

### Session 3: Early Detection, Assessing Population Distributions, and Prioritizing Management

- Know the components of an ecological framework for management.

- Become familiar with methods used for early detection and how to implement EDRR across jurisdictional boundaries.
- Determine how to select inventory/survey and monitoring methods, and understand how survey data can be used to increase understanding of species ecology and distribution across the landscape.
- Become familiar with multi-criteria decision analysis (MCDA) as a means of prioritizing invasive species management actions. Gain an appreciation of the benefits installation-wide, invasive species management prioritization can provide for planning, budgeting, and decision-making.

#### **Session 4: Invasive Plant Management**

- Understand the benefits, consequences, and limitations of management tools.
- Understand how to integrate management tools.
- Determine how to select the most appropriate management tool for a particular situation.
- Know how to determine if management objectives are being achieved by measuring the effectiveness of management actions.

#### **Session 5: Restoration—Ecology, Planning, and Implementation**

- Become familiar with an adaptive management planning framework for restoring weed-infested areas.
- Understand some of the causes of habitat degradation and clarify reasons for undertaking restoration efforts.
- Become adept at identifying biological and environmental considerations to assess the site and determine the best course of action.
- Experience and share the challenges, successes, and problems associated with restoring weed-infested areas.

#### **Session 6: Partnerships**

- Understand the benefits and limitations of cooperative invasive species management.
- Become familiar with potential partners in the Southwest, i.e., which agencies and organizations are involved in invasive species management, what they are doing, and how they are networked.
- Become familiar with how other installations implement partnerships.
- Know where to find resources, information, and contacts for invasive species partnerships.

#### **Session 7: Pulling It All Together**

- Through an activity in small groups, followed by instructor and peer feedback, workshop concepts, principles, and practices will be reinforced and applied to on-the-ground problems.