

Workshop III Effective Invasive Plants Management

Speakers:

Travis Bean, University of Arizona

Gordon Brown, National Invasive Species Council

John Randall, The Nature Conservancy, UC Davis

Barron Orr, University of Arizona

Synthesizers: Scott Florence, BLM Arizona Strip District

Bob Nowak, University of Nevada-Reno

Nora Devoe, BLM Nevada State Office

Components of Success: 3 Ps

- **People**
- **Persistence**
- **Pace**

People

Involve all the neighbors!

Diverse stakeholders:

- **Elected officials, public land managers, conservation organizations, scientists**
- **Insurance companies, real estate agents, businesses**
- **Homeowners**

People

Sustained public involvement is essential!

- **Capture media attention**
- **Convey urgency**
- **Capitalize on the “teachable moments”**

People

- **School/youth education programs**
- **Social networking (i.e., Facebook) for rapid dissemination and to engage youth**
- **Knowledge transfer agents (coop extension), bridge from tools to users, facilitate practical use of geospatial technology**
- **Volunteers**

Persistence

Success will almost always depend on doing something more than once

Use combinations of treatments

Sustain public engagement

Remain vigilant

Pace

Ideally have a vision, goals, objectives and a plan in place before fire or invasion goes exponential --but it's never too late

Take big bites and move quickly--because invasions can expand rapidly

Aggressive initial attack—weeds or fire

Pace

Be prepared: intervention window may be short

Have the information you need--where the infestations are, what does and doesn't work

Map distributions, track treatments, monitor results

Keep going!

Pace

Prioritize— do the strategic, the most important first

- **Identify and protect the uninvaded/best**
- **High value areas for restoration**
- **High value areas for rehabilitation, where you adapt to some level of invadedness**

Impediments: 3Bs

- **Bureaucracy**
- **Biases**
- **Biology**

Bureaucracy

**Budget, procurement, hiring processes
slow timely intervention**

Fight back!

Streamline

Get leadership on board

Plan ahead

Make friends in high and low places

Bureaucracy

Inflexibility in use of particular funds limits integration. Stovepiped programs and budgets must be overcome.

Need a fiduciary agent who can accept public and private funds, donations, grants.

Need more specific and applied research --fund NISC to do annual solicitations similar to JSFP

Bureaucracy

- **Lack of consistent data standards, detection and monitoring, need integrated databases.**
- **Facilitate information-sharing and coordinated action. Regional coordination.**
- **Not agency-specific software--universal for use by all to facilitate sharing and coordination.**

Biases

Education overcomes biases

Public acceptability can be expanded if people understand costs and benefits of treatments and the urgency of the situation.

Biases limit the ability to try new things, think in new ways.

The attributes you measure and information you collect depends upon your biases.

Biology

We need to identify a suite of good native competitors, make them available, and mass produce them.

We need something to break the frequent fire cycle

We need detailed knowledge of weeds' life histories to exploit vulnerabilities

Biology

Keep all the tools in the toolbox:

- **Fire use/fire prevention and suppression;**
- **Herbicides; biocontrol and biopesticides;**
- **Mechanical removal or manipulation;**
- **Planting, seeding, exotics as intermediate steps to native communities**
- **Quarantine/cleaning equipment, selective use of staging areas for fire suppression.**

Biology

Do No Harm!

**Do not use techniques that exacerbate the
problem**

Do not introduce harmful agents