

Workshop Session A. Target Plant Species

Species that you grow

Species that you need

- Things that are easy

- Things that are hard to get

- Things that are hard to grow

- Things that are hard to use

- Things that work well

- Things that resprout after fire

- Things that establish quickly

Annuals vs. short-live perennials vs. long-lived perennials

Best Management Practices/Decisions

Cultural Practices

General Uses

- Fire Rehab

- Erosion Control

- Mining Reclamation

- Road Reclamation

- Weed Competition

- Forage

Special Uses

- Desert Tortoise

 - Forage vs. cover

- Mojave Ground Squirrel

- Butterfly Host Plants

- Pollinator Needs

- Riparian/Wetland

- Horticultural Value/Low Maintenance

- Indigenous Uses

- Rare Plants

- Other wildlife purposes

Seed Zones

Colonizers

Broadly Adapted Species

Climate change

Documentation

Workshop Session B. Facilities and Equipment

Lake Mead

3 ac. Nursery

Small seed storage facilities

Private Industry

Seed Bank

Mixing Services

Custom Collection

CCSN

10,000 sq. ft. greenhouse

3 ac+

Tissue culture protocols

Research and Propagation Protocols

UNLV Coop Extension

Research Facility

20 ac.

Planned greenhouse facilities

Disease/Pest Diagnostic facilities

Community Gardens

Arizona Universities?

Tribal partnerships?

Ahakav Tribal Preserve, AZ

Departments of Transportation

Difference among states

Need for strategic long-term planning

Focus on key species

Combine agency resources for “specialty” plants?

Joshua Tree National Park

3 greenhouses

Springs Preserve

Small greenhouse

Intend to expand

Forest Service Seed Lab
Research/germination/testing protocols

Fallon PMC
Possible role in cool season stuff

Common Garden
Long-term Central Facilities

NDF
Seed Bank
Storage Facility (Northern NV)
Greenhouses under construction

Victor Valley College
Neville Slade (contact)

San Diego State
Soil & Ecology Research Group
Tom Zink (contact)

Desert Restoration Task Force
David Bainbridge (contact)

Seed Certification
Need to Include State Regulatory Agencies

NV Division of Agriculture (Gary Cross)
Utah Crop Improvement Association (Wayne Anderson & Stan Young)
AZ Crop Improvement Association (Al Simons)
CA CIA
(on AOSCA website and Association of Official Seed Analysts)
Soc. Of Commercial Seed Technology
American Seed Trade Association

Workshop Session C. Research and Development

Lake Mead

- Small-scale seed “pelleting” experiment

Propagation

Cultivation

Use

Genetics

Information exchange

Technology Transfer

Species by Seed Zones

Sequencing

- What do we need to do (objectives)

- When we need to do it

 - Seed bank studies (pre-fire and fate post-fire)

 - Monitoring

- How to do it.

 - Soil amendments

 - Surface Treatments

Soil biota associations

Seed Collection windows and methods

Seed Viability/Storage Longevity

Matching Needs to Market – need for economic analysis

- Kyndda Curtis did one for NV Wildland Seed Producers

- UT did a similar study focused on native plant horticultural trade

Pollinator/other insect interactions

Unintended Consequences

- Need for other options to doing nothing

- Impacts of soil stabilizers, tackifiers, etc. on wildlife, esp. endangered species

- sterile hybrids (e.g., Regreen) for soil stabilization vs. use of tackifiers

- Reference conditions for assessing affects

- Historical Conditions

- Range of Historic Variability

- Native fire resistant species

Plant/soil/water relationships that are affected by shrubland->grassland conversion

Centralized database on restoration research, esp. from vehicle impacts

Weed Prevention (techniques and tools)

- Invasibility of native ecosystems

Effects of climate change

NRCS/UC Davis working on state and transition models for Mojave

Task Force to prioritize research needs

Possibility of geographic prioritization criteria/scheme/guidance for species selection (cf. weed prioritization strategies)

Image analysis to assist in setting restoration priorities (NASA Ames may be helpful)
Plant materials for research purposes

CESU networks for accessing researchers at lower overhead

AZ

Climate change

State-transition models

[www.arid](http://www.arid.com).....

Nevada Research

Carbon dioxide/soil studies at FACE facility

DRI Fire Workshop

International Fire Conference (San Diego) special desert fire workshop

CA

DRI soil hydrology work at Ft. Irwin

CalState Fullerton and Riverside looking at effects of fire on wildlife

UC Press book has chapter on desert fire effects

Desert Managers Group website has links page with “current” desert research and other information

Mojave Desert Ecosystem Project has GIS data/reports (Clarence Everly)

SNPLMA Science and Research Interagency Team can identify funds for research questions