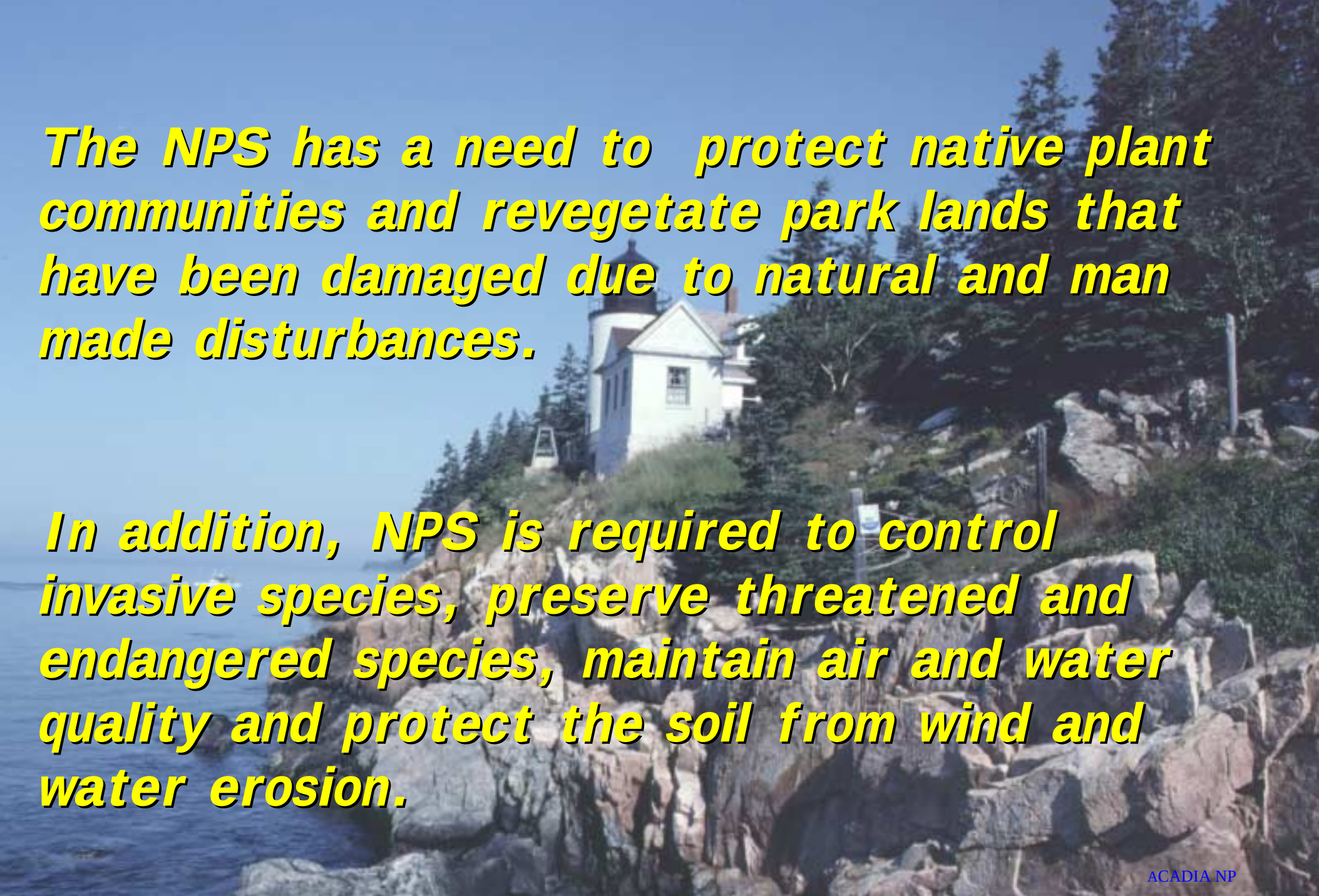
Native Plants for National Parks

A cooperative program between the National Park Service and the Natural Resources Conservation Service

Russ Haas

NRCS Plant Materials
Technical Advisor to NPS


The NPS has a need to protect native plant communities and revegetate park lands that have been damaged due to natural and man made disturbances.
In addition, NPS is required to control invasive species, preserve threatened and endangered species, maintain air and water quality and protect the soil from wind and water erosion.
ACADIA NP

PLEASE
DO NOT WALK HERE

Plants here were trampled by people. The National Park Service is restoring this area. Please help protect these native plants. Stay on the trail and walk on rocks whenever possible.


CATERPILLAR


PARKING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- *The NPS requires that, whenever possible, revegetation of park lands utilize germplasm from within park boundaries to maintain the genetic resources.*

- *In many parks, NPS does not have the personnel, expertise, or equipment needed to propagate quantities of the required seed and plants.*

- *NRCS has the personnel and expertise; is equipped to increase and process quantities of seed and propagate plants of sufficient quantities to meet the NPS needs within the required time frame.*

- *NRCS also can conduct evaluations on plant species to determine adaptation and cultural requirements for establishment.*

Specialized Seeding Equipment

Grass & Forb Harvesting

Grass Seed Stripper

Seed Processing Equipment


In 1989 the National Park Service and the Natural Resources Conservation Service (formerly SCS) developed and signed a five year cooperative agreement to share technical expertise and develop indigenous native plant materials for use in park revegetation programs.
YELLOWSTONE NP

- *Program originally developed to deal with revegetation projects under the Federal Lands Highway Program (FLHP)*

- *Program has expanded to include non-FLHP projects related to native plant revegetation and restoration*

Program Objectives

- Identify plant species needed
- Collect and process seed
- Provide high quality transplants and field production of grass, legume and forb seed
- Provide field technical assistance on site preparation, plant establishment, weed control, seed collection and processing.

How the Program Works

- Park Managers identify species needed
- Interagency agreement is developed with the most appropriate PMC.
- Seeds or plants are collected, planted and reproduced for 2-3 years
- PMC ensures genetic integrity
- Plants or seed returned to the park to plant
- PMC continues technical assistance

Requesting Assistance

To request assistance to establish a plant materials agreement, contact a Regional FLHP coordinator or the NPS Denver Service Center (DSC) Technical Advisors.

DSC Technical Advisors

NPS

Nancy Dunkle
Denver, Colorado
303-969-2568

NRCS

Russ Haas
Denver, Colorado
303-969-2172

Major Program Accomplishments

- ***Native Plant Development***
- ***Genetic Integrity***
- ***Cost Effective Reclamation***
- ***Technology Development and Transfer***

Native Plant Development

- ***Approximately 1,000 native species or ecotypes have been tested.***
- ***Propagation techniques have been developed for over 700 native species that were not commercially available.***
- ***Approximately 29,000 PLS pounds of native grass/forb seed and 740,000 native transplants have been produced.***

Cost Effective Reclamation

- *Assisted 31 Parks under 105 separate agreements to revegetate approximately 4,000 acres.*
- *Increased the success rate and reduced the need to revegetate a second time.*
- *Revegetation monitoring protocols*

Technology Transfer

- ***Developed computer software and a guide to assist with seeding rate specification and aid in standardization of specifications.***
- ***Published "Native Plant Propagation Techniques for National Parks". Summarizes seed collection and propagation for over 200 native plant species.***
- ***Developed and published a revegetation cost estimation guide.***

Technology Transfer

- **Issue Technical Notes**
- **Present technical results of program at professional meetings and workshops**
- **Revegetation monitoring protocols**
- **Native Plant Propagation Protocols to multi-agency internet website**

Technology Transfer

Propagation Protocols

- **NPS, NRCS, NFS**
- **Total entries- 1500**
- **Approximately 1300 species**
- **NPS- 500**
- **NRCS- 250**

- **nativeplantnetwork.org**

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Protocol Information

Native Plant Nursery
Glacier National Park
West Glacier, Montana 59936

(406) 888-7835

Glacier National Park
Native Plant Nursery
Montana

Family Scientific Name:	**Pinaceae**
Family Common Name:	**Pine family**
Scientific Name:	***Abies bifolia* A. Murray**
Common Synonym:	***Abies lasiocarpa* Nutt.**
Common Name:	**Subalpine fir**
Species Code:	**ABIBIF**
Ecotype:	**Subalpine fir forest, Lunch Creek, 2038 m elev.**
General Distribution:	***A. bifolia* occurs from 800m to treeline; from Alaska and the Yukon south to Oregon, east to central Idaho, Montana, and south to New Mexico and Arizona.**
Propagation Goal:	**Plants**
Propagation Method:	**Seed**
Product Type:	**Container (plug)**
Stock Type:	**172 ml conetainers**
Time To Grow:	**2 Years**


NATIVE PLANTS NETWORK
Add Your Protocols
Edit Existing Protocols
Help Off
Protocol Information
Family Names
Family Scientific Name:
We strongly encourage you double-check the use and spelling of all nomenclature.
Family Common Name:
Scientific Names
Genus:
We strongly encourage you double-check the use and spelling of all nomenclature.
Species:
Species Authority:
Variety:
Sub-species:
Cultivar:
Authority for Variety/Sub-species:
Common Synonym
Genus:
Species:

Program Outlook

- ***Program strong and continues to provide multiple benefits to both agencies.***
- ***Program expanding into wetland/riparian restoration, bioengineering, constructed wetlands and invasive species control.***
- ***More funding alternatives. Fee demo, line item construction etc.***
- ***Release and multiple use of NPS germplasm under consideration.***

GRAND CANYON NP

Current Program

- *45 Active Revegetation Projects*
- *27 Parks in six NPS Regions*
- *11 NRCS Plant Materials Centers*
  - *Propagating approx. 200 species*
  - *Processing seed of approx. 375 species*

For more information on the NPS/NRCS Interagency Plant Materials Program or to request revegetation assistance contact:

NPS

Nancy Dunkle
Denver, Colorado
303-969-2568

NRCS

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Great Smoky Mountains NP