The **mission** of the Grand Canyon Trust is to protect and restore the Colorado Plateau — its spectacular landscapes, flowing rivers, clean air, **diversity of plants** and animals, and areas of beauty and solitude.
Utah Forests Program
Grand Canyon Trust: Science-based Advocacy

• Field assessments/monitoring/restoration (e.g., biocrusts)

• Collaborations
  – Four Forests Restoration Initiative (Ponderosa pine restoration)
  – Utah Forests Restoration Working Group (Aspen restoration; riparian forests restoration)
  – Monroe Mountain Working Group (Aspen restoration)
  – La Sals Sustainability Collaboration (Livestock grazing)
  – The Gatherings (CO Plateau Native American tribes)

• Development of alternatives in NEPA plans and projects
Four Native Plant Partnerships

ARIZONA
1. Greenstrip research
2. Common gardens

UTAH
3. Native/exotic grasses
4. Johnson Lakes Canyon
North Rim Lands – 850,000 acres

Kane and Two Mile Ranches Applied Research Plan: Arizona Game and Fish Department, BLM, USFS, USGS, GCT, NAU, and the University of Arizona
1. Greenstrip Research

- Native species with high competitive ability and low flammability
- Seed coating technologies for absorbing water
- Livestock grazing of cheatgrass
- Great Basin site (Gund Research Ranch, NV and Colorado Plateau (North Rim Ranches, AZ)

- Principal Investigator: Lauren Porensky, ARS
2. Southwest Experimental Garden Array (SEGA)

- 10 common gardens on a steep gradient in Arizona
- 4 of the 10 on North Rim Lands
  - Bear Springs (mixed conifer)
  - Little Mountain (ponderosa pine)
  - White Pockets (pinyon-juniper)
  - Soap Creek (desert scrub; NOT BUILT YET)

http://www.sega.nau.edu/ Amy Whipple (NAU)
White Pockets (P-J)
3. White Mesa Cultural and Conservation Area: Native and Exotic Grasses

WMCCA: Plot Centroids - 2015

Sue Smith, USU graduate student
Research Questions

• What is the current composition and cover of native/exotic grass species?

• Are there differences in native/exotic grass species and composition within similar plant communities and soil types?

• What is the current composition and cover of rhizomatous smooth brome (*Bromus inermis*) and Kentucky bluegrass (*Poa pratensis*) and other exotic grass species?
4. Johnson Lakes Canyon – 840 acres
Monitoring of restoration; potential for research
Benefits of CPNPP to the work of Grand Canyon Trust

1. Science for accuracy in advocacy

2. Information and methods to improve what we assess and how we assess conditions

3. Information we bring to our collaborations

4. Information on which to base the alternatives we submit in NEPA processes
Thoughts/questions

• Are land managers undoing with one hand what they are doing with the other (CPNPP)?
  (example: *Astragalus holmgreniorum*)

• Are key outcomes being ignored?
  (example: Grazing of restored pollinator habitat)

• Is global warming being taken into account?
  (example: pinyon-juniper removal)

• Are uncommon native plants and specialized pollinators being conserved?
  (example: generalist pollinators, honey bees)
Questions? Thoughts?