Wildflowers of Grand Staircase-Escalante

Marc Coles-Ritchie

BLM Ecologist and Science Coordinator at Grand Staircase-Escalante National Monument

Kanab Public Library Presentation April 2024



Objectives

Foster appreciation for wildflowers

Teach a bit

Inspire more learning

Share tools



Recognizing Indigenous People and Knowledge

- Tribes with connection to this land include Southern Paiute, Hopi, Zuni, Pueblo, Dine' (Navajo), Ute and others.
- Indigenous people lived off this land.
- Indigenous knowledge holders knew and know the plants to use for food, medicine, construction, ceremony and other important uses.





Flora of Grand Staircase-Escalante National Monument

- 1,003 species
- 26% of plants of Utah are in GSENM
- At least 43 endemic plants (grow nowhere else)













Tips

- Be patient; learning plants takes time
- Look for patterns
- Look closely
- Go on walks in nature
- Take photos (close and far)
- Use apps, books, internet, etc.
- Respect Indigenous knowledge
- Don't assume something is edible; be certain





Trees

Future presentation...



Cottonwood



Pinyon & Juniper (PJ)



Ponderosa pine



Old Trees





537 growth rings





623 growth rings





322 growth rings

Counting Tree Rings







726 years old

Shrubs

Future presentation...











Sagebrush species

Winterfat

Cactus, future presentation...













Scarlet hedgehog cactus (Echinocereus coccineus)

Whipple cholla (*Cylindropuntia whipplei*)

Pricklypear (Opuntia)

Grasses

future presentation...













Wildflowers, the stars of the show!

Now in bloom...
photos taken in recent days and weeks

more Cryptantha



James' cryptantha (Cryptantha cinerea)



Desert phlox (Phlox austromontana)





Snowball sand verbena (Abronia fragrans)





Desert trumpet (Eriogonum inflatum)



Twinpods (*Physaria*)





Sanddune wallflower (Erysimum capitatum)







Brenda's yellow cryptantha (*Cryptantha flava*)









Prince's plume (Stanleya pinnata)





Prince's plume (Stanleya pinnata)





Spring parsley (Cymopterus)



widewing springparsley (Cymopterus purpurascens)



Fendler's springparsley (Cymopterus acaulis var. fendleri)

Utah bird's-foot trefoil (Lotus utahensis)





Pea family (Fabaceae) Milkvetch (*Astragalus*) and related plants







Penstemon or beardtongue



Utah Penstemon (*Penstemon utahensis***)**



Fleshy beardtongue (*Penstemon carnosus*)



May not be flowering yet



Morning glory heliotrope (Heliotropium convolvulaceum)



Hoary Townsend daisy (Townsendia incana)





Alcove Columbine (Aquilegia micrantha)









Tufted evening primrose (Oenothera caespitosa)



Pale evening primrose (Oenothera pallida)

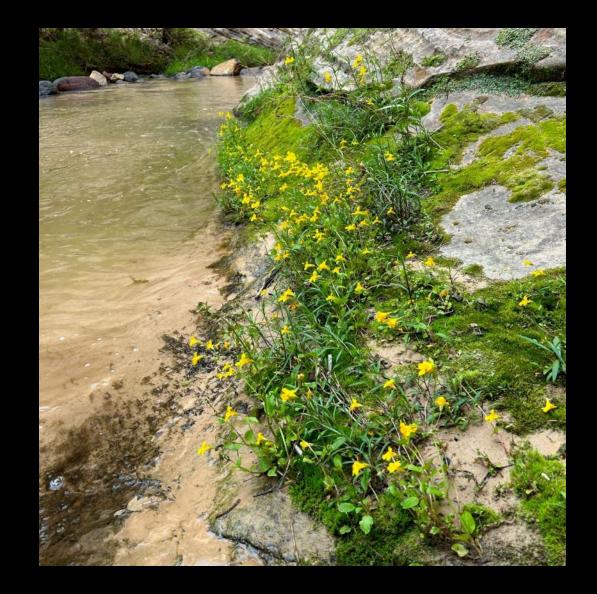


Longstem evening primrose (Oenothera longissima)





Stemless Four-nerved Daisy (Tetraneuris acaulis)





Yellow monkeyflower (Mimulus guttatus)

Milkweed (Asclepias)



Showy milkweed (Asclepias speciosa)



Big-seed milkweed (Asclepias macrosperma)

Winding mariposa lily (Calochortus flexuosus)

Sego lilies (Calochortus)





Golden mariposa lily (Calochortus aureus)

Nuttall's sego lily (Calochortus nuttallii)



Native: Cainville thistle (Cirsium calcareum)



Non-Native: Bull thistle (Cirsium vulgare)

Thistles (*Cirsium*): multiple species; some native; some noxious; don't kill any thistle please



Prairie spiderwort (*Tradescantia occidentalis*)







Stream orchid (Epipactis gigantea)



Sand dock (Rumex hymenosepalus)





Globemallow (Sphaeralcea)





Wyoming paintbrush (Castilleja linariifolia)

Rare Plants

Threatened and Endangered

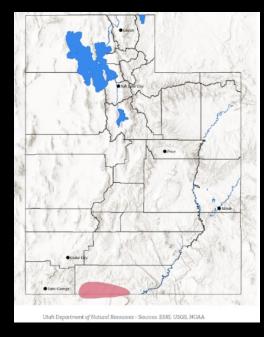
- Welsh's milkweed (Asclepias welshii); sand dunes
- Jones's cycladenia (*Cycladenia humilis* var. *jonesii*); steep barren slopes
- Kodachrome Bladderpod (*Physaria tumulosa*); Carmel formation
- Ute Ladies' Tresses (*Spiranthes diluvialis*); wetlands
- Siler Pincushion Cactus (*Pediocactus sileri*); barren gypsic soils
- Navajo sedge (Carex specuicola); springs

Welsh's milkweed (Asclepias welshii)





Distribution in southern Utah and northern Arizona



Known locations:

- Coral Pink Sand Dunes
- Road to Peekaboo

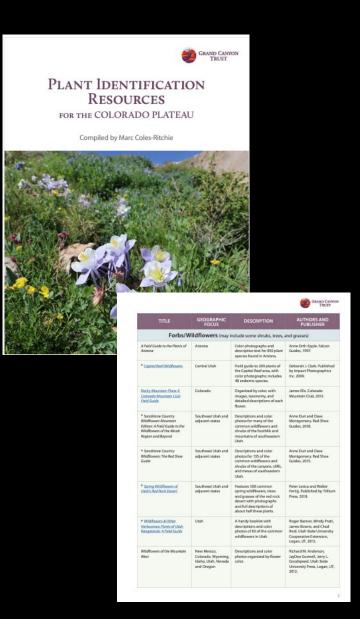
Flyer at Peekaboo Road next to buck-and-rail fence.





Plant Identification Tools

- iNaturalist post and others will identify (try live demo)
- List of books, apps and websites: <u>https://www.grandcanyontrust.or</u> g/plant-identification-resources
- Send me photos



Engagement with Grand Staircase Landscape

- GSENM Citizen Science website: <u>https://www.blm.gov/working-us-</u>
- GSENM Science & Research website: <u>https://www.blm.gov/programs/nation</u> <u>al-conservation-lands/utah/grand-staircase-escalante-national-monument/science-research-</u>



Upcoming Events

- Amazing Earthfest, plant events
 - Scotch thistle removal: May 9 morning (me)
 - Growing native plants (Orderville): May 9 at 12:30pm
 - Botany walk at Tilted Mesa: May 10 at 8am (me)
 - Growing Native plants (Kanab): May 10, at 10:30am
- My future talks on shrubs, trees, cactus, grasses, and perhaps landscaping with native plants



These plant photos are in Flickr album called "Plants of Grand Staircase-Escalante National Monument"

within Marc Coles-Ritchie Flickr collections

