

TOWARD A FLORA OF RED ROCK CANYON
A Preliminary Checklist
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Foreword

On August 21, 1968 the California legislature appropriated funds to purchase the property, which is now Red Rock Canyon State Park. Nearly fifty years of public support for the preservation of Red Rock Canyon had resulted in the protection of the increasingly significant flora of this Mojave Desert canyonland. Representative of California's "high desert" botanic region, Red Rock Canyon contains numerous uncommon plants of limited range which survive within a narrow zone of the northwestern Mojave where the desert landscape meets the drier portions of the southern and southeastern Sierra Nevada. Some of the unique plants found here are postulated to be relict species from wetter Ice Age environments.

After the state initiated plans to acquire Red Rock Canyon and some of the adjoining land for a state park in 1968, prominent Kern County botanist Ernest C. Twisselmann compiled information on the local flora. In March of 1970 he completed a typewritten botanical monograph, *Toward a Flora of Red Rock Canyon and the El Paso Range: The Mojave Desert, Kern County, California*. This initial plant list for the region was never formalized and apparently was of limited distribution. It was, nevertheless, an excellent starting point for understanding the local flora and remains a valuable reference.

This new list of Red Rock Canyon's plants is an attempt to revise Twisselmann's original document with current information on the flora of this spectacular canyon. The current listing is by no means complete and it is hoped that it's availability will stimulate the interest of other botanists and lead to a greater understanding of the dynamic flora of this desert badland. Submission of new information is encouraged and greatly desired.

Within this guide plants originally listed in Ernest Twisselmann's 1970 work are indicated with a (T) following the Latin species name. A bold face (T) reflects the present author's desire to relocate within the canyon a species which Twisselmann had indicated in his 1970 document. We have tried to revise scientific titles to reflect the nomenclature of *The Jepson Manual: Higher Plants of California* (edited by James C. Hickman, University of California Press, 1992). One species, *Yucca brevifolia* var. *herberti*, was intentionally not revised, reflecting our commitment to a varietal not recognized in *The Jepson Manual*. Occasional entries will state "sp." or "ssp." or will omit italics from part of the scientific name indicating that further work is needed on that listing.

The assembly of this flora represents the botanical resources thus far identified within the boundaries of Red Rock Canyon State Park. These properties include portions of both the Red Rock Canyon and Last Chance Canyon watersheds within the El Paso Mountains of eastern Kern County, California.

FILICINEAE

Pteridaceae

Cheilanthes viscida (T)

Visid Lace Fern

GYMNOSPERMAE

Ephedraceae

Ephedra nevadensis

Mormon Tea

ANGIOSPERMAE

DICOTYLEDONAE

Amaranthaceae

Amaranthus albus (T)

Tumbleweed

Tidestromia oblongifolia (T)

Honey Sweet

Apiaceae (Umbelliferae)

Lomatium mohavense

Mojave Wild Parsley

Asclepiadaceae

Asclepias erosa (T)

Milkweed

Asteraceae (Compositae)

Acamptopappus sphaerocephalus v. *hirtellus* (T)

Goldenhead

Ambrosia acanthicarpa

Annual Burweed

Ambrosia dumosa (T)

Bur-sage

Anisocoma acaulis (T)

Scale Bud

Artemisia spinescens (T)

Bud Sage

Baccharis salicifolia

Mule Fat (1 sighting)

Baccharis sergiloides

Squaw Waterweed

Bebbia juncea v. *aspera*

Sweetbush

Brickellia californica

California Brickelbush

Brickellia desertorum

Desert Brickelbush

Calycoseris parryi (T)

Yellow Tack Stem

Chaenactis carphoclinia var. *carphoclinia* (T)

Pebble Pincushion

Chaenactis fremontii (T)

Fremont's Pincushion

Chaenactis macrantha

Mojave Pincushion

Chamomilla suaveolens

Pineapple Weed

Chrysothamnus nauseosus mohavensis (T)

Rubber Rabbit Brush

Chrysothamnus teretifolius

Round-leaf Rabbitbrush

Chrysothamnus paniculatus

Wash Rabbit Brush/BlackStem

Cnicus benedictus (T)

Blessed Thistle

Conyza bonariensis

Buenos Aires Thistle

Coreopsis bigelovii (T)

Bigelow's Coreopsis

<i>Coreopsis californica</i> (T)	California Coreopsis
<i>Dicoria canescens</i> (T)	Bug Seed
<i>Encelia actoni</i> (T)	Acton Encelia
<i>Ericameria cooperi</i> var. <i>cooperi</i>	Cooper Goldenbush
<i>Ericameria linearifolia</i> (T)	Linear-leaved Goldenbush
<i>Eriophyllum ambiguum</i> var. <i>paleaceum</i>	Yellow Frocks
<i>Eriophyllum pringlei</i>	Pringle's Eriophyllum
<i>Eriophyllum wallacei</i>	Wallace's Woolly Daisy
<i>Filago depressa</i> (T)	Dwarf Filago
<i>Glyptopleura marginata</i>	Keysia
<i>Gnaphalium palustre</i>	Cudweed
<i>Gutierrezia microcephala</i> (T)	Desert Matchweed
<i>Hemizonia arida</i> (T)	Red Rock Tarweed
<i>Hemizonia kelloggii</i>	Kellogg's Tarweed -5rf
<i>Hymenoclea salsola</i> var. <i>salsola</i> (T)	Cheesebush
<i>Lactuca serriola</i>	Prickly Lettuce
<i>Lasthenia californica</i> (T)	Goldfields
<i>Layia glandulosa</i> (T)	White Layia
<i>Lepidospartum squamatum</i> (T)	Scale Broom
<i>Lessingia lemmonii</i> var.	Autumn Vingerweed
<i>Machaeranthera carnos</i> a (T)	Broom Aster
<i>Malacothrix coulteri</i> (T)	Snake's Head
<i>Malacothrix glabrata</i> (T)	Desert Dandelion
<i>Malacothrix sonchoides</i>	Yellow Saucers
<i>Monolopia lanceolata</i>	Lance-leaved Monolopia
<i>Monoptilon belioides</i>	Mojave Desert Star
<i>Monoptilon bellidiforme</i> (T)	Desert Star
<i>Nicolletia occidentalis</i> (T)	Hole-in-the-Sand
<i>Perityle emoryi</i> (T)	Rock Daisey
<i>Peucephyllum schottii</i>	Desert Fir
<i>Prenanthes</i> <i>exigua</i>	Annual Mitre
<i>Psathyrotes annua</i> (T)	Fan Leaf/Desert Velvet
<i>Rafinesquia neo-mexicana</i> (T)	Desert Chicory
<i>Sonchus asper</i>	Sow Thistle
<i>Stephanomeria exigua</i> (T)	Annual Mitra
<i>Stephanomeria parryi</i>	Parry Rock Pink
<i>Stephanomeria pauciflora</i> ssp? (T)	Desert Straw
<i>Stilochline psilocarphoides</i>	Peck Nest Straw
<i>Syntrichopappus fremontii</i> (T)	Fremont Xerasid
<i>Tetradymia axillaris</i> var.	Cottonthorn
<i>Tetradymia glabrata</i> (T)	Desert Horsebrush
<i>Tetradymia stenolepis</i>	Mojave Horsebrush
<i>Uropappus lindleyi</i>	Silver Puffs
<i>Xylorhiza tortifolia</i> var. <i>tortifolia</i> (T)	Mojave Aster

Boraginaceae

<i>Amsinckia menziesii</i> var. <i>intermedia</i> (T)	Fiddleneck
<i>Amsinckia tessellata</i> var. <i>tessellata</i> (T)	Checker Fiddleneck
<i>Cryptantha cicumscissa</i> (T)	Western Forget-me-not
<i>Cryptantha decipiens</i> (T)	Gravel Forget-me-not
<i>Cryptantha dumetorum</i> (T)	Twining Forget-me-not
<i>Cryptantha micrantha</i> (T)	Purple-rooted Forget-me-not
<i>Cryptantha mohavensis</i> (T)	Mojave Forget-me-not
<i>Cryptantha nevadensis</i> (T)	Nevada Forget-me-not
<i>Cryptantha oxygona</i> (T)	Sharp-nut Cryptantha
<i>Cryptantha pterocarya</i> (T)	Wing-nut Forget-me-not
<i>Cryptantha utahensis</i>	Scented Forget-me-not
<i>Heliotropium curassavicum</i> (T)	Alkali Heliotrope
<i>Pectocarya heterocarpa</i>	Chuckwalla Combseed
<i>Pectocarya linearis ferocula</i> (T)	Linear Combseed
<i>Pectocarya platycarpa</i>	Broad-margin Combseed
<i>Pectocarya recurvata</i> (T)	Curved Combseed
<i>Pectocarya setosa</i> (T)	Stiff-stem Comb-bur
<i>Plagiobothrys arizonicus</i> (T)	Arizona Popcorn Flower
<i>Plagiobothrys jonesii</i> (T)	Jones' Popcorn Flower
<i>Tiquilia nuttallii</i> (T)	Nuttall Coldenia

Brassicaceae (Cruciferae)

<i>Brassica nigra</i>	Black Mustard
<i>Capsella bursa-pastoris</i>	Shepherd's Purse
<i>Caulanthus cooperi</i> (T)	Cooper Caulanthus
<i>Caulanthus inflatus</i>	Desert Candle (2X)
<i>Descurainia pinnata</i> ssp. (T)	Yellow Tansy Mustard
<i>Descurainia sophia</i>	Flixweed
<i>Dithyrea californica</i> (T)	Spectacle Pod
<i>Erysimum capitatum capitatum</i> (T)	Wild Wallflower
<i>Guillenia lasiophylla</i> (T)	California Mustard
<i>Hirschfeldia incana</i> (T)	Mediterranean Mustard
<i>Lepidium dictyotum dictyotum</i>	Peppergrass
<i>Lepidium flavum</i> var. <i>flavum</i> (T)	Yellow Peppergrass
<i>Lepidium fremontii</i> (T)	Desert Alyssum
<i>Lepidium lasiocarpum</i> (T)	Modest Peppergrass
<i>Lepidium nitidum</i> (T)	Common Peppergrass
<i>Sisymbrium altissimus</i> (T)	Tumble Mustard
<i>Sisymbrium orientale</i>	Eastern Mustard

<i>Stanleya pinnata</i> var. <i>pinnata</i> (T)	Prince's Plume
<i>Streptanthella longirostris</i> (T)	Long-beak Twist Flower
<i>Tropidocarpum gracile</i>	Slender Keel-fruit
Cactaceae	
<i>Echinocactus polycephalus</i> var. <i>polycephalus</i> (T)	Cottontop Cactus
<i>Opuntia echinocarpa</i> var. <i>echinocarpa</i> (T)	Golden Cholla
<i>Opuntia basilaris</i> var. <i>basilaris</i> (T)	Beavertail Cactus
<i>Sclerocactus polyancistrus</i> (T)	Mojave Fishhook Cactus
Campanulaceae	
<i>Nemacladus gracilis</i> (T)	Slender Thread Stem
<i>Nemacladus rubescens</i> (T)	Stout Thread Plant
Capperaceae	
<i>Isomeris arborea</i> (T)	Bladder Pod
Caryophyllaceae	
<i>Loeflingia squarrosa</i> var. (T)	Loeflingia
<i>Sagina decumbens occidentalis</i>	Western Pearlwort
<i>Spergularia atrosperma</i> (T)	Spurry
<i>Spergularia marina</i>	Sand-Spurry
Chenopodiaceae	
<i>Atriplex canescens canescens</i>	Four-winged Saltbush
<i>Atriplex confertifolia</i> (T)	Shadscale
<i>Atriplex hymenelytra</i> (T)	Desert Holly
<i>Atriplex parryi</i>	Parry Saltbush
<i>Atriplex phyllostegia</i> (T)	Arrowscale
<i>Atriplex polycarpa</i> (T)	Allscale
<i>Atriplex rosea</i> (T)	Redscale
<i>Bassia hyssopifolia</i>	5-Hook Bassia
<i>Chenopodium leptophyllum</i>	Narrow-leaved Goosefoot
<i>Grayia spinosa</i> (T)	Spiny Hop-sage
<i>Krascheninnikovia lanata</i> (T)	Winter Fat
<i>Monolepis nuttalliana</i> (T)	Poverty Weed
<i>Salsola paulsenii</i> (T)	Barbed Russian Thistle
<i>Salsola tragus</i> (T)	Russian Thistle
Cuscutaceae	
<i>Cuscuta denticulata</i> (T)	Toothed Dodder

Euphorbiaceae

Chamaesyce albomarginata
Chamaesyce setiloba
Chamaesyce vallis-mortae (T)
Eremocarpus setigerus
Stillingia paucidentata (T)

Rattlesnake Spurge
Spurge
Death Valley Sandmat
Doveweed
Toothleaf

Fabaceae

Astragalus didymocarpus var. *dispermus* (T)
Astragalus lentiginosus var. *variabilis*(T)
Astragalus pachypus var. *pachypus* (T)
Lotus humistratus
Lotus salsuginosus var. *brevivexillus* (T)
Lupinus concinnus (T)
Lupinus excubitus var. *excubitus*
Lupinus microcarpus var. *horizontalis* (T)
Lupinus odoratus (T)
Lupinus shockleyi
Medicago sativa (T)
Prosopis glandulosa var. *torreyana* (T)
Psoralea argophylla var. *minutifolia*
Senna armata

Twin-fruit Locoweed
Varied Milk Vetch
Stout-footed Locoweed
Hairy Lotus
Panamint Lotus
Bajada Lupine
Bush Lupine
Sunset Lupine
Royal Desert Lupine
Desert Lupine
Alfalfa
Mesquite
Indigo Bush
Desert Senna

Geraniaceae

Erodium cicutarium (T)
Erodium texanum

Red-stemmed Filaree
Texas Filaree

Hydrophyllaceae

Emmenanthe penduliflora v. *penduliflora* (T)
Eucryphia chrysanthemifolia v. *bipinnatifida* (T)
Eucryphia micrantha (T)
Nama demissum var. *demissum* (T)
Nama depressum
Phacelia distans (T)
Phacelia fremontii
Phacelia nashiana
Phacelia pachyphylla (T)
Phacelia rotundifolia (T)
Phacelia tanacetifolia
Phacelia valis-mortae (T)

Whispering Bells
Spotted Eucryphia
Small Flower Eucryphia
Purple Mat
Narrow-leaved Nama
Fern Phacelia
Fremont Phacelia
Charlotte's Phacelia
Thick-leaved Phacelia
Roundleaf Phacelia
Lacy Phacelia
Death Valley Phacelia

<i>Phacelia</i> sp. (white fls.)	
<i>Pholistoma membranaceum</i>	White Fiesta Flower
Lamiaceae (Labiatae)	
<i>Salazaria mexicana</i> (T)	Bladder Sage
<i>Salvia carduacea</i>	Thistle Sage
<i>Salvia columbariae</i> (T)	Chia
<i>Salvia dorrii</i> var. <i>dorrii</i>	Gray Ball Sage
Lennoaceae	
<i>Pholisma arenarium</i> (T)	Scaly-stemmed Sand Plant
Loasaceae	
<i>Eucnide urens</i> (T)	Rock Nettle
<i>Mentzelia affinis</i>	Yellow Comet
<i>Mentzelia albicaulis</i> (T)	Little blazing Star
<i>Mentzelia eremophila</i> (T)	Stout Blazing Star
<i>Mentzelia involucrata</i> (T)	Satin Blazing Star
<i>Mentzelia tricuspis</i> (T)	Spiny-haired Blazing Star
<i>Petalonyx nitidus</i>	Shiny-leaf Sandpaper Bush
<i>Petalonyx thurberi thurberi</i>	Sandpaper Plant
Malvaceae	
<i>Eremalche exilis</i> (T)	White Mallow
<i>Eremalche rotundifolium</i>	Desert Five-Spot
<i>Sphaeralcea ambigua</i> var. <i>ambigua</i>	Apricot Mallow
Nyctaginaceae	
<i>Abronia pogonantha</i> (T)	Mojave Sand Verbena
<i>Mirabilis bigelovii</i> var. <i>retrorsa</i> (T)	Wishbone Bush
Onagraceae	
<i>Camissonia boothii desertorum</i> (T)	Bottle Washer
<i>Camissonia campestris campestris</i> (T)	Sun Cups
<i>Camissonia claviformis claviformis</i> (T)	Brown-eyed Primrose
<i>Camissonia kernensis gilmanii</i> (T)	Gilman Sun Cup
<i>Camissonia kernensis kernensis</i> (T)	Kern Sun Cup
<i>Camissonia palmeri</i> (T)	Palmer's Primrose
<i>Epilobium</i> sp.	Willow Herb
<i>Oenothera caespitosa</i> ssp.	Large White Evening Primrose

Oenothera deltoides deltoides (T)
Oenothera primiveris bufonis (T)

Desert Primrose
Large Yellow Primrose

Papaveraceae

Argemone munita
Eschscholzia californica
Eschscholzia minutiflora covillei
Eschscholzia minutiflora minutiflora (T)
Eschscholzia minutiflora twisslemannii
Platystemon californicus

Prickly Poppy
California Poppy (1 sighting)
Coville's Poppy
Small-flowered Poppy
Red Rock Poppy
Cream Cups

Plantaginaceae

Plantago ovata (T)

Woolly Plantain

Polemoniaceae

Eriastrum densifolium mohavense (T)
Eriastrum diffusum
Eriastrum eremicum
Gilia aliquanta aliquanta (T)
Gilia brecciarum neglecta (T)
Gilia cana speciosa (T)
Gilia filiformis (T)
Gilia hutchinsifolia (T)
Gilia latiflora davyi
Gilia latiflora latiflora (T)
Gilia latifolia (T)
Gilia leptomeria (T)
Gilia micromeria (T)
Gilia scopulorum
Gilia sinuata (T)
Gilia stellata (T)
Linanthus aureus (T)
Linanthus bigelovii (T)
Linanthus dichotomus (T)
Linanthus parryae (T)
Loeseliastrum matthewsi (T)
Loeseliastrum schottii (T)

Blue Mantle
Diffuse Stars
Desert Woolly Stars
Puffed Calyx Gilia
Argus Gilia
Red Rock Canyon Gilia
Thread-stemmed Gilia
Desert Pale Gilia
Tricolor Gilia
Broad Flowered Gilia
Broad-leaved Gilia
Sand Gilia
Dainty Gilia
Rock Gilia
Cinder Gilia
Star Gilia
Golden Gilia
Bigelow's Linanthus
Evening Snow
Parry Linanthus
Desert Calico
Little Sunbonnets

Polygonaceae

Centrostegia thurberi
Chorizanthe brevicornu var. brevicornu (T)

Thurber Spine Flower
Bristle Spine Flower

<i>Chorizanthe rigida</i>	Rigid Chorizanth
<i>Chorizanthe spinosa</i> (T)	Spiny Chorizanth
<i>Chorizanthe watsonii</i> (T)	Watson Chorizanth
<i>Eriogonum angulosum</i> (T)	Angle Stem Buckwheat
<i>Eriogonum brachyanthum</i> (T)	Yellow Buckwheat
<i>Eriogonum brachypodium</i> (T)	Tecopa Skeleton Weed
<i>Eriogonum deflexum</i> var.	Flat-crowned Eriogonum
<i>Eriogonum fasciculatum polifolium</i> (T)	Gray California Buckwheat
<i>Eriogonum gracillimum</i> (T)	Rose and White Buckwheat
<i>Eriogonum inflatum</i> var. <i>inflatum</i> (T)	Desert Trumpet
<i>Eriogonum maculatum</i> (T)	Spotted Buckwheat
<i>Eriogonum mohavense</i>	Mojave Buckwheat
<i>Eriogonum nidularium</i> (T)	Bird's Nest
<i>Eriogonum nudum westonii</i> (T)	Cinder Nude Buckwheat
<i>Eriogonum ovalifolium</i>	Oval-leaved Buckwheat
<i>Eriogonum plumatella</i> (T)	Flat Top
<i>Eriogonum pusillum</i> (T)	Yellow Turban
<i>Eriogonum reniforme</i> (T)	Velvet Buckwheat
<i>Eriogonum trichopes</i> (T)	Little Trumpet
<i>Eriogonum viridescens</i> (T)	Leafy-stemmed Buckwheat
<i>Mucronea perfoliata</i>	Perfoliated Spineflower
<i>Oxytheca perfoliata</i> (T)	Punctured Bract
<i>Rumex hymenosepalus</i> (T)	Wild Rhubarb

Portulacaceae

<i>Calandrinia ciliata</i> (T)	Red Maids
<i>Calyptridium monandrum</i> (T)	Sand-cress
<i>Claytonia parviflora</i> ssp.	Miner's Lettuce

Ranunculaceae

<i>Delphinium parishii parishii</i> (T)	Parish Larkspur
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Rosaceae

<i>Coleogyne ramosissima</i>	Blackbush
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Salicaceae

<i>Populus fremontii</i>	Fremont Cottonwood
<i>Salix laevigata</i>	Red Willow
<i>Salix lasiolepis</i>	Arroyo Willow

Scrophulariaceae

Castilleja angustifolia
Castilleja exserta venusta (T)
Mimulus bigelovii (T)
Mimulus guttatus (T)
Mimulus palmeri (T)
Mohavea breviflora (T)

Desert Paintbrush
Mojave Owl's-clover
Bigelow Monkey Flower
Common Monkey Flower
Palmer 's Monkey Flower
Lesser Mohavea

Solanaceae

Datura wrightii
Lycium andersonii
Lycium cooperi

Western Jimson Weed
Anderson Boxthorn
Peach Thorn

Tamaricaceae

Tamarix aphylla
Tamarix parviflora (T)
Tamarix ramosissima

Athel
Four-petal Tamarisk
Salt Cedar

Zygophyllaceae

Larrea tridentata (T)

Creosote Bush

MONOCOTYLEDONAE

Cyperaceae

Eleocharis parishii (T)
Scirpus americanus (T)
Scirpus maritimus (T)

Parish Marshweed
Three Square
Prairie Bulrush

Juncaceae

Juncus balticus (T)
Juncus bufonius var. *occidentalis* (T)

Baltic Grass
Toad Rush

Juncaginaceae

Triglochin concinna var. *debilis* (T)

Arrow Grass (Ricardo?)

Liliaceae

Allium fimbriatum var. *fimbriatum*
Allium fimbriatum var. *mohavense* (T)

Fringed Onion
Mojave Onion

<i>Allium lacunosum var. davisae</i>	Davis Onion
<i>Calochortus kennedyi kenedyi</i>	Desert Mariposa Lily
<i>Calochortus striatus</i>	Alkali Mariposa Lily
<i>Dichelostemma capitatum capitatum</i>	Blue Dicks
<i>Muilla coronata</i>	Crowned Onion
<i>Yucca brevifolia var. herbertii</i>	Joshua Tree
<i>Zigadenus brevibracteatus</i>	Desert Zygadene

Poaceae (Graminae)

<i>Achnatherum hymenoides (T)</i>	Indian Rice Grass
<i>Achnatherum speciosum (T)</i>	Desert Stipa
<i>Avena fatua (T)</i>	Wild Oats
<i>Bromus arizonicus (T)</i>	Arizona Brome
<i>Bromus diandrus</i>	Ripgut Brome
<i>Bromus madritensis rubens (T)</i>	Red Brome
<i>Bromus tectorum var. glabratus (T)</i>	Downy Brome
<i>Chloris virgata</i>	Silky Grass
<i>Deschampsia danthonioides (T)</i>	Hair Grass
<i>Distichlis spicata (T)</i>	Salt Grass
<i>Elymus elymoides brevifolius</i>	Squirrel-tail
<i>Hordeum depressum (T)</i>	Alkali Foxgrass
<i>Hordeum murinum glaucum (T)</i>	Foxtail
<i>Muhlenbergia asperifolia</i>	Scratch Grass
<i>Poa bigelovii (T)</i>	Bigelow Bluegrass
<i>Poa fendleriana longiligula (T)</i>	Mutton Grass
<i>Poa secunda secunda (T)</i>	Pine Blue Grass
<i>Polypogon monspeliensis (T)</i>	Beargrass
<i>Schismus arabicus (T)</i>	Arabian Sheep Grass
<i>Schismus barbatus</i>	Mediterranean Sheep Grass
<i>Sporobolus airoides (T)</i>	Dropseed
<i>Triticum aestivum (T)</i>	Wheat
<i>Vulpia octoflora var. octoflora</i>	Slender Grass
<i>Vulpia microstachys var. pauciflora</i>	Pacific Fescue Grass

Typhaceae

<i>Typha domingensis (T)</i>	Cat-tail
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