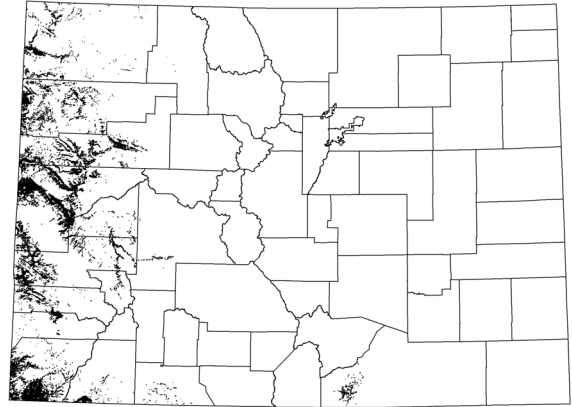


COLORADO PLATEAU MIXED BEDROCK CANYON AND TABLELAND



P. Lyon



extent exaggerated for display

CERCOCARPUS INTRICATUS SPARSELY VEGETATED ALLIANCE

Cercocarpus intricatus Slickrock Sparse Vegetation

JUNIPERUS OSTEOSPERMA WOODLAND ALLIANCE

Juniperus osteosperma / *Artemisia nova* / Rock Woodland

Juniperus osteosperma / *Cercocarpus intricatus* Woodland

PINUS EDULIS - (JUNIPERUS SPP.) WOODLAND ALLIANCE

Pinus edulis - *Juniperus osteosperma* / *Cercocarpus intricatus* Woodland

Overview: The distribution of this ecological system is centered on the Colorado Plateau, where it is comprised of barren and sparsely vegetated landscapes (generally <10% plant cover) of steep cliff faces, narrow canyons, and open tablelands of predominantly sedimentary rocks, such as sandstone, shale, and limestone. Some eroding shale layers similar to Inter-Mountain Basins Shale Badland may be interbedded between the harder rocks. The vegetation is characterized by very open tree canopy or scattered trees and shrubs with a sparse herbaceous layer. Common species includes *Pinus edulis*, *Pinus ponderosa*, *Juniperus* spp., *Cercocarpus intricatus*, and other short-shrub and herbaceous species, utilizing moisture from cracks and pockets where soil accumulates.

Characteristic species: For the most part, this system is sparsely vegetated. Small patches of scattered trees and shrubs may occur. These small vegetated patches are usually dominated by conifers, and may include *Abies concolor*, *Juniperus osteosperma*, *Picea pungens*, *Pinus flexilis*, *Pinus longaeva*, *Pinus ponderosa*, and *Pseudotsuga menziesii*. If a shrub layer exists it may include *Acer glabrum*, *Amelanchier utahensis*, *Arctostaphylos patula*, *Ceanothus martinii*, *Cercocarpus montanus*, *Cercocarpus intricatus*, *Juniperus communis*, *Mahonia repens*, *Purshia tridentata*, *Ribes cereum*, and *Gutierrezia sarothrae*. Grasses and forbs, if present, may include *Astragalus kentrophyta*, *Clematis columbiana*, *Leymus salinus*, *Achnatherum hymenoides*, and *Linum kingii*.

Environment: This system includes steep cliff faces, narrow canyons, and open tablelands of predominantly sedimentary rocks, such as sandstone, shale, and limestone. Often 90% of the exposed surface consists of barren rock. It also includes areas of fixed bedrock forming the vertical or near-vertical parts on the plateau faces. The rocks forming such areas are predominantly limestone-capped plateaus. These highly erodible areas are generally too steep to allow any significant soil development. These areas are unstable and rocks are frequently rolling down onto the talus slopes below (often forming Inter-Mountain Basins Shale Badland). Scattered plants maintain a precarious foothold in the crevices of the rocks. Knolls may form at the base of the cliffs.

This ecological system also includes sandstone and shale escarpments, such as the scenic cliffs of the East Tavaputs area (the Book Cliffs). The rocks forming this escarpment are mostly sandstone

and shale with some limestone and marlstone. The larger drainages such as East Fork Parachute Creek plunge several hundred feet at this escarpment, creating scenic and lush hanging gardens. Many of these escarpments are over 1,000 feet in height and provide excellent habitat for cliff-nesting birds such as peregrine falcons and golden eagles.

Dynamics: This ecological system has a naturally high rate of erosion. Freeze-thaw cycles are most pronounced on south-facing slopes. Soil development is limited. Infiltration rates are low and runoff high. Fires are infrequent and not an important ecological process.



S. Kettler

Rank:	A	B	C	D
① CONDITION				
Community structure	Dominated by native species.		Unnatural erosion, compaction, and altered species composition is usually noticeable.	
Natural processes (landslides, rockfalls, etc.)	Can occur on a natural time frame.		Present.	
Non-native species	Absent or < 1% cover.	May be present, but <3% cover.	Usually present, but not dominant except in small patches.	Present.
Anthropogenic disturbance	Fragmentation from roads or human development is non-existent or only on the edge of the occurrence. Breeding and roosting of cliff-nesting birds is not disrupted.	Fragmentation from roads or human development, if present, is limited to a small area of less than 0.5% of the occurrence.	Fragmentation from roads or human development (e.g., oil and gas) are frequent enough to cause an increase in non-native plants.	Greater than 30% of occurrence.
② SIZE				
Acres	>2,000	1,000-2,000	100-1,000	< 100
③ LANDSCAPE CONTEXT				
Connectivity	Highly connected.	Moderately connected.	Moderately fragmented.	Highly fragmented.
Surrounding land	Largely intact natural vegetation, with species interactions and natural processes occurring across communities.	Moderately intact natural vegetation, with species interactions and natural processes occurring across many communities; landscape includes partially disturbed natural or semi-natural communities, some of it not high quality due to overgrazing or recent logging.	Largely a combination of cultural and natural vegetation, with barriers between species interactions and natural processes across natural communities; occurrence is surrounded by a mix of intensive agriculture and adjacent forest lots (total area no smaller than ten times the minimum "C"-rated size).	Entirely, or almost entirely, surrounded by agricultural or urban land use; occurrence is at best buffered on one side by natural communities.