NEEDLES AREA
# Field Investigation Report

Needles Area, Utah

<table>
<thead>
<tr>
<th>CONTENTS</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary Section</td>
<td>1</td>
</tr>
<tr>
<td>Report Section</td>
<td></td>
</tr>
<tr>
<td>Investigation Activities</td>
<td>4</td>
</tr>
<tr>
<td>Boundaries and Acreage</td>
<td>5</td>
</tr>
<tr>
<td>Present Land Owners and Use</td>
<td>6</td>
</tr>
<tr>
<td>Estimated Land Values</td>
<td>7</td>
</tr>
<tr>
<td>Possible Development</td>
<td>7</td>
</tr>
<tr>
<td>Geologic Resume of the Needles Salt Creek Area</td>
<td>9</td>
</tr>
<tr>
<td>Biology of the Needles Area</td>
<td></td>
</tr>
<tr>
<td>Introduction</td>
<td>11</td>
</tr>
<tr>
<td>Vegetation</td>
<td>12</td>
</tr>
<tr>
<td>Animals</td>
<td>15</td>
</tr>
<tr>
<td>Conclusions</td>
<td>16</td>
</tr>
<tr>
<td>Archeological Resume of the Needles - Salt Creek Area</td>
<td>17</td>
</tr>
</tbody>
</table>
FIELD INVESTIGATION REPORT

Proposed Needles National Recreation Area, Utah

September 1959
August 1960, revised

U. S. Department of the Interior
National Park Service
Region Three
SUMMARY SECTION

The Needles Country of southeastern Utah lies east and somewhat south of the junction of the Green and Colorado Rivers in San Juan County. It is an area of spectacular sandstone formations sculptured by the forces of weathering into bizarre pinnacles, fins, and arches. Parallel faulting (grabens) has been a controlling factor in the erosional pattern forming literally a maze of slit-like, sheer-walled canyons.

The area is scenically and geologically of national significance. It seems certain that citizens from all sections of the United States would be impressed by the scenic grandeur of the spectacular sandstone minarets, arches and other forms of rock sculpturing, including Druid, Angel and Castle Arches, and in the faulting, the uplifts and the graben valleys caused by the displacement of underlying saltbeds, and in the hues of the formations of red, rose, and pink contrasted with cream and buff tints. Other features extensively scattered throughout the area which would elicit visitation are the prehistoric Indian ruins and writings which remain much as they were when abandoned 900 years ago by the Anasazi or "Ancient Ones". Examples are Tower Ruin and the All-American-Man Cave.

The proposed area covers 75,200 acres and includes Salt Creek Canyon, Horse Canyon, Chesler and Virginia Parks, Chesler Canyon and Butler Wash. Generally, it is bound on the west and north by the withdrawal for the Glen Canyon Project and on the south and east by the township and section lines necessary to effectively control the drainages.
of Salt and Horse Canyons, and Butler Wash. On the north a quarter town-
ship is included to permit access to Lost and Salt Canyons and to more
effectively control the logical entrance to the plateau upon which the
main Needles formations are located. Domestic water and terrain suit-
able for a headquarters area also require the acquisition of land in
the northeast corner of the proposed tract. Since the area is only
partially surveyed the acreage is approximate. By assuming normal town-
ships and partial townships containing normal 640 acres per section, a
total of 75,200 is estimated within the proposed area. Within the
boundaries of this proposed area are 11 surveyed State sections. The
remainder is public domain.

Most of the proposed area is grazed by cattle (one grazier). The filing
of mining claims and oil and gas leasing are important
activities. Potable water is scarce. No active mining or oil and gas
drilling operations exist at the present time. Roads are limited to
low-grade unimproved jeep trails. Much of the mobility attained by
jeeps is in the various creek beds thereby limiting use to rain-free
periods.

Few, if any structural improvements have been made with the
exception of dirt tanks or catchment basins to store water for cattle
and scattered drift fences to control their movement.

There are many stories which might be told about this area. Any and all of the following deserve interpretation: The formation of
the arches, spires, sandstone bastions, and the canyons and cross-canyons
(grabens); the history of the area with mining, grazing, Butch Cassidy,
so-called Moqui civilization, and river-runners; and the story of the
plant and animal associations.

2
The area might well be retained largely in its wild state, accessible for jeep, foot, and horse trails. Stream bed trails should be allowed, as they are erased during the runoff season each year. Further trails should be justified as to need, mainly to disperse visitation. Roads for standard motor vehicles might provide access to a portion of the area. Desirable developments during the first five years would include some improvement of existing springs to facilitate the sanitary use of available water for visitors, the provision of public sanitation facilities, improvement of roads, a headquarters area development, personnel, vehicles, and miscellaneous supplies.
REPORT SECTION

Investigation Activities

The study of the Needles area was coordinated between the Region Three Office and the Superintendent of Arches and Natural Bridges National Monuments and occupied the period May 13-21, 1959. The study group consisted of the following: Assistant Regional Director, Harthon L. Bill; Regional Chief, Recreation Resource Planning Division, William L. Bowen; Regional Chief, National Park System Planning Branch, Leslie P. Arnberger; Park Landscape Architect, Urban E. Rogers; Recreation Planner Paul V. Wykert (all of the Region Three Office in Santa Fe); and Superintendent Bates Wilson and Supervisory Park Ranger Lloyd Pierson of Arches National Monument. There were other participants for varied portions of the trip. Monticello-based jeep tour operator Kent Froat utilized two of his vehicles and transported Salt Lake Tribune photographer Frank Jensen and Utah State Park and Recreation Commission Field Supervisor Albert Albertson during five days of the area investigation. Two days of the study were spent in company with three Bureau of Land Management representatives. They were State Land Officer Evan Rasmussen of Salt Lake City and Land Examiner Abijah Cook, and Range Manager Nick Cozakos of Monticello, Utah.

The trip through the Needles area was by Universal jeeps. Camps were established at six locations and many stops and side trips were made to inspect the multitude of interesting features including ruins, pictographs, arches, side canyons, and mesas. Many of the
features were reached by short hikes including Druid Arch, the confluence of the Green and Colorado Rivers, Angel Arch, Upper Salt Creek above the Jump (an abrupt erosive feature forming a waterfall and preventing vehicular access) including All-American-Man Cave and numerous cliff and surface ruins and writings, Cleft Arch and side canyons in Lavender Canyon drainage and numerous ruins in Beef Basin and Ruin Park.

**Boundaries and Acreage**

The south line of the suggested boundary of the proposed area departs from the Glen Canyon withdrawal on the township line between T. 31 and T. 32 S., and proceeds for eleven miles east along this line. Thus, one of two natural entry ways into the Needles Area will be controlled, this being the corridor between Pappys Pasture and Bobbys Hole which provides access to the area from the south. In order to include the middle portion of the West Fork of Salt Creek, two sections (1 and 12) are included in T. 32 S., R. 19 E. The northwest quarter of T. 32 S., R. 20 E., includes Musselman Arch, portions of both the west and east forks of Salt Creek, several arches and numerous pre-historic ruins. This area also contains above-ground water and sufficient level terrain for possible future development. The east line runs north on subdivision lines generally on or near the hydrostatic divide between Salt and Horse Canyons watershed and the Davis Canyon watershed. The proposed boundary then veers for over one mile to the west and then continues north three miles, thence three miles west and ties in to the Glen Canyon withdrawal again in the lower part of Squaw Flat. The quarter townships in T. 30 S., R. 20 E. and T. 30 S., R.19 E., include the junction of Salt Creek with the access road
from the east, thus providing protective control over the Horse and Salt Canyons above this junction. Cave and Squaw Springs are also included as well as the logical site for a headquarters development. The Elephant Hill natural barrier is largely controlled from the southeast quarter of T. 30 S., R. 19 E. This would provide a second control and contact point for visitors traveling into the main Needles area.

Thus, a total of approximately 75,200 acres is proposed which is 16 miles by 12 miles at the points of greatest size.

Present Land Owners and Use

The proposed addition is entirely in public ownership. Of the estimated 75,200 acres, 8,000 acres are State of Utah lands consisting of eleven school sections. Most of these school sections were surveyed in 1957 or later. The entire area is grazed under permit from the Bureau of Land Management. The permit allows 100 cows from June 1 through October 15 and 100 cows from November 15 through May 30 each year in Salt Creek and Horse Canyon. In the main Needles area, 50 and 75 cattle are permitted during the dry years. Normally, this area is used on snow and then by about 150 head of cattle. Chesler Park is used only on snow. Virginia Park is not accessible to cattle. Squaw flat has been supporting 200 cows between November 15 and May 31. Thus, the area is relatively important to the local cattle industry. The Sandstone formation area is used either on snow or during the movement of the herds between Beef Basin and Squaw Flat.
There is no present tax yield on the lands recommended for the Needles National Recreation Area. Under the present rate of use the Bureau of Land Management collects a fee of about one cent an acre annually.

**Estimated Land Values**

Land values of the Utah State land within the proposed area are unknown. An increase in value in the last decade has been apparent due to uranium prospecting and oil and gas leasing activity. Uranium prospecting was particularly active in the mid-fifties but the Needles Area evidently is not now considered as promising as other locations. Bureau of Land Management oil and gas plats indicate present leases cover an estimated 95 percent of the Federal lands within the proposed boundary.

**Possible Development**

Most of the area should remain in its present natural status. Foot and horseback travel should not be encouraged until suitable water development would create less severe conditions and allow safe travel into the area.

Some of the drainages are actually accessible to standard passenger cars. There is a certain sense of pioneering in using stream beds as roads that might well be retained. However, soft sand and quicksand make driving in the stream beds an extremely risky proposition except in the specially equipped vehicles (four wheel drive, oversize tires, etc.). It, therefore, appears that use of stream beds as roads should be limited to adequately equipped four-wheel drive vehicles.
Overnight developments other than small campgrounds should be excluded from the area and provided outside the boundaries by private capital.

Quite effective administration and management of a large part of the proposed area would be possible because of the limited access. The two-entry ways (Bobby's Hole and Elephant Hill) would permit, if properly controlled, a practically 100 percent contact of persons entering the area.

Frequent patrols would be necessary in conjunction with well-situated contact stations in order to protect the area and insure the safety of visitors. The preservation of the prehistoric structures and writings will require both protection and education through interpretation. Interpreting the area will need to be accomplished by roadside and trailside exhibits. Thereby, the geology, biology, archeology, and history of the area would be presented at appropriate locations throughout the area.
Oblique Aerial of Main Needles Area
Photo Copy of George Grant Photo, 1937
Virginia Park

Druid Arch in Elephant Canyon
Tower Ruin in Horse Canyon

Panorama of Needles formations as approached from the west
Angel Arch – In side canyon of Salt Creek
Note figures beneath arch

Dead Horse Point in background – From Chesler Park
Chesler Park and Needles Formation
LAND STATUS, BOUNDARY, & STUDY ROUTE
NEEDLES AREA, UTAH
AUGUST 1960

LEGEND
GLEN CANYON NATIONAL RECREATION AREA BOUNDARY
SUGGESTED BOUNDARY NEEDLES NATIONAL RECREATION AREA
STATE SECTIONS
ROUTE OF STUDY GROUP
JEEP
FOOT
STUDY GROUP CAMPS

to U.S. Highway No. 160

COUNTY ROAD GRAVELED TO DUGOUT RANCH

SCALE IN MILES
SALT LAKE MERIDIAN
GEOLOGIC RESUME OF THE NEEDLES SALT CREEK AREA *

(Prepared by Richard Q. Lewis, Sr., U.S. Geological Survey.)

The exposed sedimentary rocks in the Needles area are the Rico formation and the Cedar Mesa Sandstone member of the Cutler formation, both of Permian age. They overlie the Hermosa formation of Pennsylvanian age, which is exposed along the Colorado River in Cataract Canyon, immediately to the west of the area. The rocks once overlying the Cedar Mesa sandstone were completely stripped away during the Tertiary; and the main drainages - i.e., Butler Wash, Cross Canyon and Gypsum Canyon were cut into the Cedar Mesa sandstone.

During the Late Tertiary and early Quaternary the Colorado River cut a deep canyon to the west of the Needles removing a large part of the overburden from the Paradox member of the Hermosa formation. The release of pressure resulted in the uplift and extrusion of salt and gypsum along the river. The disequilibrium caused the salt and gypsum to flow from beneath the Needles area toward the river. The removal of material allowed extensive collapsing of the overlying rocks. The overlying rocks were faulted and displaced along pre-existing joints.

The faults form a series of closely spaced overlapping grabens, which are oriented to form a large arc along the east side of the Colorado River. The grabens are a complex structural system of merging and braided normal faults that Baker (1933, p. 73, Geology and oil possibilities of the Moab district, Grand and San Juan Counties, Utah) called "ribbon faulting". Displacement on individual faults generally ranges from a few feet to about 100 feet, and displacement is generally
greatest along faults closest to Cataract Canyon, where some faults have a displacement of as much as 300 feet. The down-dropped blocks in the grabens commonly form valleys and basins, partly filled with soil, alluvium, and small dunes. Travel through the area is restricted to routes along the interconnected valleys.

The faults are Quaternary in age, possibly recent; they have disrupted a well-developed drainage pattern on the Cedar Mesa sandstone. Segments of the pre-existing drainage can be observed on the blocks between the grabens. Only two drainages now cross the area, Cross Canyon to the south and Butler Canyon to the north. During seasonal storms and heavy runoff most of the water flows into the structural basins from hanging valleys on the scarps and into "sink holes" developed along buried faults under the valley fill.

Hearsay information from cowboys familiar with the area indicates that movement has occurred along some of the faults within the memory of some of the older residents of San Juan County.

Fault line sinks in the valley fill of many of the graben valleys look as if they may have been formed by the physical separation of the rocks along the fault rather than by solution or erosion. In some places these "sinks" resemble crevasses in glaciers with sheer walls as much as 30 feet high and 7 or 8 feet apart. In many places the "crevasses" are bridged by unconsolidated surficial deposits in a manner resembling snow bridges across glacial crevasses.
BIOLOGY OF THE NEEDLES AREA

Introduction

The Needles Area in physiography as well as climate is a desert and the biota is typical of that found in similar arid regions of the southwest.

Elevations in the area proper range from 5,000 to 6,500 feet resulting in a general uniformity of climate and biotic composition. However, if the surrounding region is considered, there is a tremendous diversity of plants and animals reflecting such climatic extremes as the sub-arctic slopes of the La Sal and Abajo Mountains to the semi-desert depths of precipitous canyons. Although beyond the Needles Area proper, these features are an important part of the surroundings. They contribute to the general impression one receives and exert a considerable influence upon the biology of the Needles country.

The climatic pattern is typical of the high desert country of much of the northern southwest - cold winters with some snow, hot summers with sporadic thunder showers in July and August. Records from the general area indicate an average annual precipitation of about 9 inches a year. Average annual temperature is about 50-55 degrees and may range from summer highs of 110 to lows of 15 to 20 degrees below zero. Such extreme variations in climate with the seasons and the years has produced specialized plants and animals adapted to harsh conditions of life.

As in all arid regions, water is the key to the composition and distribution of plant communities which in turn influence the animal population. There are no dependably permanent streams in the
Needles country and but few permanent sources of water at springs and natural catchment basins. In the spring some of the major drainages have water in their upper reaches which usually disappears into the stream bed leaving the lower portions as dry expanses of sand. Following summer storms the tributary canyons carry rushing streams to the large washes which are transformed to surging torrents draining to the Colorado. During such periods literally hundreds of waterfalls spout from the tops of spectacular cliffs.

Fenneman includes the Needles Area in the Canyon Lands Section of the Colorado Plateau Province. Biologically the area has been included in the Navahonian Biotic Province by Dice, The Biotic Provinces of North America. However, the biotic province concept is so broad as to be of little value in describing the ecology of a localized area such as the Needles. The life zone concept, while of value when applied to areas of great differences in elevation and latitude, is of little use in characterizing the biology of the Needles country since the entire area would fall within a single life zone - the Upper Sonoran.

**Vegetation**

The influence of topography, soil and moisture has produced four quite distinctive vegetational types as follows:

1. Pinion-Juniper Woodland
2. Northern Desert Shrub
3. Streamside and Floodplain Community
4. Marshy-Poolside Community
In general, the pinon-juniper woodland occupies the highest elevation, desert shrub the intermediate and the floodplain association the lowest. There are, of course, exceptions to this orderly arrangement resulting from such factors as soil conditions, exposure, grazing, etc.

The low rocky hills and areas of shallow soil frequently surrounding the so-called "parks" support a pinon-juniper woodland characteristic of the high, cool deserts of the southwest. Interspersed in this pygmy forest are such shrubs as barberry, rabbitbrush, mountain mahogany and serviceberry.

The desert shrub association is characterized principally by big sage (*Artemisia tridentata*), blackbrush (*Coleogyne ramosissima*) and various species of grass. Other prominent species include snakeweed, four-wing saltbrush, shadscale, narrow-leaf yucca, prickly pear, cactus and mormon tea. This association is commonly found on the valleys, slopes and low hills with deep sandy soils. It is particularly distinctive of the parks such as Chesler Park and Ruin Park. These parks are typically broad, flat, sandy areas surrounded by low rocky hills, as in the case of Ruin Park, or by spectacular sheer cliffs and pinnacles as at Chesler Park. Although ecological factors appear to be similar, some parks have big sage as the dominant plant species and others blackbrush.

The streamside vegetation is readily divided into two distinct types depending upon whether growing along the wide, sandy washes such as Salt Creek or in narrow cleft canyons. The major drainages commonly are bordered by a dense growth of tamarisk and willow with occasional
groves of cottonwood. Alkaline tolerant species such as greasewood are locally abundant. Most of the larger, broader canyons such as Lavender Canyon have bordering benches of alluvial fill frequently covered by dense thickets of scrub oak and masses of rabbitbrush and four-wing saltbrush.

The vegetation in the narrow canyons, such as the one leading to Druid Arch, is quite different - perhaps sufficiently so to qualify as a distinct community. No single species attains any degree of dominance. Rather there is a mixture of such species as singleleaf ash, squawbush, pinón pine, juniper, mountain mahogany, serviceberry, willow, fendler bush, hackberry, dogbane, and hop hornbeam. A few Douglas-fir are to be found at the base of shaded canyon walls where moisture and exposure conditions are suitable.

A fourth, and quite specialized plant community, is found in a few semi-marshy areas, around natural catchments and in the form of so-called hanging gardens along seeps on canyon walls. Somewhat marshy places are found at several locations along Salt Creek and its tributaries. Alkaline conditions appear to be indicated by a salt-like crust through which rushes, saltgrass, horsetails and sedges grow. Natural pools, some with permanent water, are found in the narrow canyons where they collect run-off following rains. One such pool, perhaps 50 feet in diameter and 15 feet deep, is located at the base of a waterfall in the canyon leading to Druid Arch. A dense growth of reeds and other plants adapted to hydric conditions surrounded the pool. Hanging gardens of maidenhair fern, columbine, monkey flower and algae are occasionally seen at seeps or springs.
Animals

The animal population of the Needles is not particularly spectacular, although several mule deer, a number of ground-dwelling rodents, numerous lizards and a representative sampling of bird life was seen. However, in such arid regions, mere numbers of animals cannot be regarded as an index of their importance. What is important are the interesting relationships of desert plant and animal associations - the manner in which living things have been able to adapt and survive.

Durrant includes the Needles country in the San Juan Subcenter of the Colorado Plateau Faunal Area. This faunal area consists generally of the lowland drainage of the Colorado River in Utah. The San Juan Subcenter is bordered on the west by the Colorado River, on the south by the San Juan and by the Utah-Colorado border on the east. Species limited in Utah to this area are the Zuni Prairie Dog (C. gunnisoni) and the Black-footed Ferret (Mustela nigripes). Endemic subspecies include a ground squirrel, a wood rat and a kangaroo rat. Durrant states that "...no area in Utah is more distinctive, as concerns mammals, than that east of the Colorado River".

Perhaps the most significant biological story of the Needles area would be the adaptation of living things to a harsh environment. Another significant story is the influence of topography, specifically the canyon of the Colorado River, on the distribution and speciation of many forms of animal life.
The mountain sheep is probably the most interesting of the larger mammals in the Needles. While no specimens were seen, they are known to be present in the rugged canyon country bordering the Colorado River. There was abundant sign of a large population of Rocky Mountain Mule Deer, particularly in Lavender Canyon.

Since no detailed observations were made of the animals, no attempt will be made to list the various species in the area. Such information, generally applicable to the Needles, is given in several of the references listed in the bibliography.

Conclusions

No definitive evaluation of the biological values of the Needles can be made without considerably more detailed studies. However, on the basis of observations during the area investigation, it can be safely said that the biotic features are of considerable interest and are representative of this arid portion of the Colorado River basin. The plants and animals of the Needles are certainly a major feature supplementing the prime scenic and geologic values.
The archaeology of this area is neither unique to the Southwest nor to the National Park Service, but it is unique in its setting, its remoteness, its unspoiled freshness, the feeling of discovery present, and the particular interplay of cultures that took place there. The various ruined villages are plentiful, some of fair size, most well preserved and with their virtues intact. There are also a great many campsites and pictograph panels scattered throughout the region. Coupled with the scenic grandeur the prehistoric works add the little touch of spice necessary to make the whole a travel gourmets delight.

Two branches of the Pueblo culture were extant here; the San Juan Anasazi of Southern Utah and the Fremont of East Central Utah. Apparently this was a zone of contact where much of the exchange and selection of cultural traits between these two groups took place. It was a place where the ideas flowing from the more complex Anasazi group to the less complex Fremont peoples were tempered and filtered. Hence it is an important area to the study of man as a locale where the scientists can seek unadulterated clues as to the whys of mans choices in the selection of ideas and material culture items and where the layman can get a better understanding of mankind and his traditions.

The San Juan Anasazi group is familiar to most people as the builders of the large cliff dwellings of the Mesa Verde and the huge multistoried apartment houses of the Chaco Canyon. The Fremont Branch,
though developed in the general Pueblo tradition, never reached the developmental heights of their cousins further south. They did maintain an individuality expressed by their elaborate figurines, stone balls, huge painted pictographs, leather moccasins, pottery types, and hunting-gathering orientation.

Little is known of the archaeology of the Needles Area other than through surface surveys and although the Anasazi region further south is relatively well known the Fremont culture remains an enigma. The survey of Hunt and Wilson (1952) in Horse Canyon and the information gathered on this investigation are the sum total of archaeological investigations in the Salt Creek drainage and the Needles proper.

Undoubtedly man has been living in the general area for a great length of time. Both the Folsom and Pinto-Gypsum cultures, early hunt and gathering peoples, have been identified in Southeastern Utah, although not as yet within the area under discussion.

The most prominent culture of the area was the two branches of the Pueblos previously mentioned; the prehistoric pottery making agriculturists. They seemingly occupied the area during the 12th century in a rather heavy but possibly seasonal concentration. The region seems to have been deserted by these people in the 13th century, possibly due to a general movement out of the San Juan country by the Pueblo groups further south.

Salt Creek Canyon, like most of the canyons heading in Salt Creek Mesa, has an intensive occupation in its upper reaches and sporadic prehistoric occupation throughout. Most of the ruins are the so-called
"Moki House" type, either single or multiple small round, sometimes square, masonry granaries averaging about seven feet in diameter. These are most frequently located in small caves or on narrow ledges at all elevations on the canyon walls. Occasionally these may be contiguous but this is rare in the cliff dwellings. Many of them are almost, if not entirely, inaccessible. Most are accompanied by painted and/or pecked pictographs.

Above the "Jump" in Salt Creek there is a widening out of the canyon and here one finds a concentration of cliff and open sites worthy of comparison with any area in the Southwest. The cliff dwellings are, for the most part, in the Fremont tradition, while the open sites are typical Developmental Pueblo. An example surveyed consisted of a crescent shaped row of contiguous rooms ten feet wide and forty feet long, on a low mound, oriented with the crescent opening to the southeast and a kiva depression in the center of the crescent.

Only one of the cliff dwellings that was visited gave any indication of having a kiva present. This was Tower Ruin in Horse Canyon, and what appears to be a cribbed log roofed "D" shaped kiva with a ventilator in the southeast wall is present. Another cliff dwelling that may be more in the Anasazi tradition is a forty room affair reportedly on a ledge in Salt Creek near the head of the canyon.

The survey conducted by Hunt and Wilson (1952) showed Horse Canyon, a major tributary of Salt Creek, to contain in its six to eight miles of length over 44 sites ranging from camp sites, caves, pictograph panels, and single granaries to eleven room villages. This appears to
be standard for Salt Creek Canyon, Davis, Lavender, Lost, and Squaw Canyons. Only the West Fork of Salt Creek seems to be devoid of significant human occupation.

One cliff ruin, discovered on the trip, in Horse Canyon is worthy of description. The site is located 500 feet above the canyon floor on a narrow eight foot wide ledge almost at the top of the sheer canyon wall. Access to the site is via a long tongue of slick rock, across a narrow sandstone ridge with sheer drops on both sides, and then up a short but dangerous incline to the ledge. The site consists of several square and round storage chambers in poor shape and four well defined painted figures. The figures have elaborate face masks in a geometric design and are of a type that is peculiar to the Needles area and seem to be related to similar types found in the Fremont Culture area.

Also of special interest was a hearth found buried deep in the side of an arroyo bank in Horse Canyon indicating, perhaps, the presence of earlier peoples.

In the vicinity of Squaw Spring there are chipping areas where there must have been large and frequently occupied camp sites. The same situation exists at Cave Spring and undoubtedly at any of the permanent water sources in the region. In addition at Cave Spring there are several large caves which show indication of extensive occupation. Some of these have been badly damaged recently. One has an interesting series of bedrock metates in it. A few pecked and painted glyphs are to be found also.
Within the Needles proper: Chesler Park, Virginia Park, Devils Lane, etc., there seem to be no masonry ruins and they have not been reported by the various devotees of the area. There are, however, several campsites and pictograph panels there. Two campsites were found in the center of Chesler Park, one in a sandy area, the other in a sheltered spot between two large monoliths. The former showed only chips and broken stone artifacts of chipped technique while the latter had stone work plus a twelve inch layer of ash showing some length of occupation.

There is one packed panel of pictures on the north side of Chesler Park but these were not visited. In Chesler Canyon there is a small cave with a series of painted pictures done for the most part in red. Hands with incised palms, a string of human figures with packs on their backs, upside down men (killed?), and mountain sheep make up the majority of the paintings. Another panel nearby, but not seen, reportedly has typical red painted triangular anthropomorphic figures of the Fremont type on it.

Two panels of painted pictographs in Devils Lane just north of Chesler Park are also quite striking. The one is under a small overhang formed by a block of stone dropping out of the cliff face. It consists of a series of red painted negative and positive hands, some with incised palms, and a few anthropomorphic figures. The painted material was readily available in a seam at the base of the cliff. The second panel is high on the face of the cliff not too far from the first.
All of the figures on it are in red paint from the same source and the figures consist of four foot high square shouldered triangular anthropomorphic figures of the Fremont type, ladders, dogs and/or mountain sheep.

It is known that there are other campsites in the general vicinity but human occupation could not have been too extensive in the Needles proper if the water situation in the past was as it is today.

Although the sites listed above have been designated as belonging to the period of the 12th century pottery making farmers there is a good possibility that many of them, particularly the campsites and "Moki Houses" were occupied in proto-historic and historic times. Historical accounts show that Southeastern Utah was occupied by at least three groups: Utes, Southern Paiutes, and Navajos and it is possible that any of these three may have spent time in the area; the possibility being in the same relative order as the above listing.

***

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