

U.S. DEPARTMENT OF AGRICULTURE

FOREST SERVICE

Tonto National Forest

Globe Ranger District

1950
2210

ENVIRONMENTAL ASSESSMENT

Placement Under Management

Brushiest Allotment

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BRUSHIEST ALLOTMENT

PURPOSE AND NEED FOR ACTION

The Brushiest Allotment is located in the northwestern edge of the Globe Ranger District, Tonto National Forest. Approximately 25% of the allotment is within the Superstition Wilderness and another 32% is within the Superstition Contiguous Rare II study area. With a large part of the allotment wilderness and Rare II study areas, the management emphasis is to manage livestock grazing while maintaining wilderness values, recreation opportunities, and protecting resources.

Currently, the Brushiest Allotment is grazed continuously yearlong by 98 cattle plus NI to 5/31. As a consequence, key areas receive most of the grazing pressure. Vegetative conditions in these areas are poor. There is a proposal to implement a rest-rotation management system on the allotment, which will provide proper management of the forage resource, and the opportunity to improve animal husbandry practices in conjunction with wilderness management needs.

ALTERNATIVES INCLUDING THE PROPOSEDEvaluation Criteria

1. Social impacts to recreational users.
2. Effects on future designations of Rare II area as wilderness.
3. Effects on vegetative condition in riparian and other key areas.
4. Effects on wildlife habitat improvement.
5. Effects on any T&E plant and cultural resources identified.
6. Provide benefits to the extent they are commensurate with costs.
7. Effects on livestock production.

Alternative A - Proposed

Graze 98 cattle yearlong plus NI to 5/31, under a three-pasture rest-rotation management system, with a 1-year rotation schedule. Included in the system are two additional pastures (Grapevine and Horse) that will be used each spring for holding yearlings during roundup, and before shipping to market.

The three-pasture rest-rotation schedule, including yearling pastures, is illustrated on the following page.

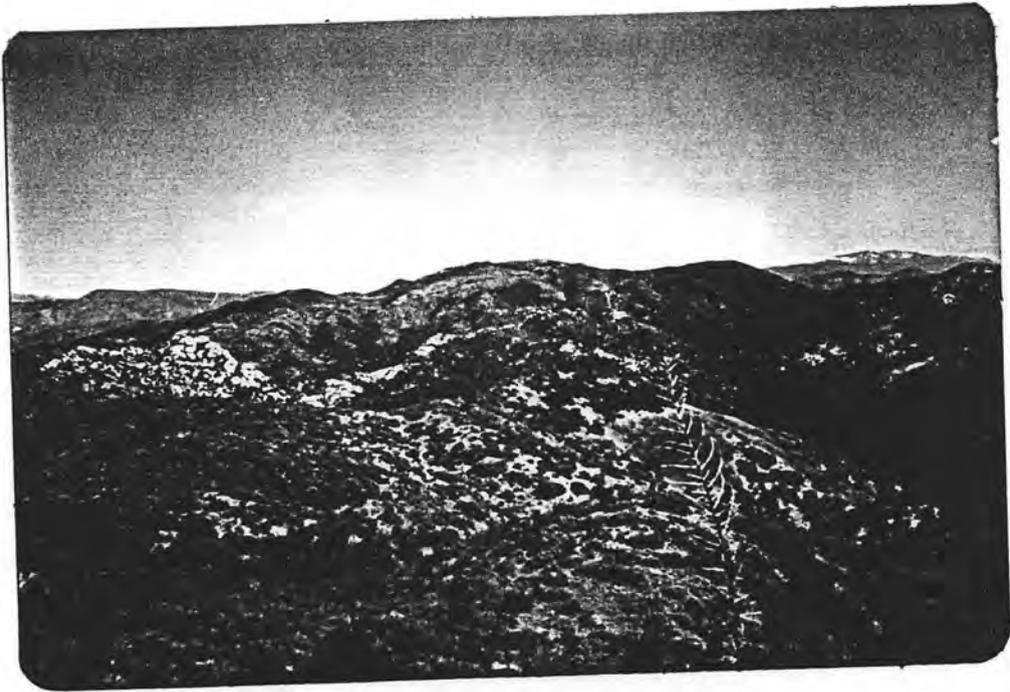
The June rotation date is planned for three reasons: (1) Yearlings are rounded up and shipped in mid May so the breeding herd can be moved in the same roundup; (2) cattle will use key areas near permanent waters in the summer, then be forced into light-use areas during the winter when water is available in most locations, and (3) most recreation use is in the early spring (April and May) and late fall during hunting seasons. The spring visitors will be able to enjoy the spring growth in two of the three pastures without livestock disturbance and, in the fall, the livestock will be scattered from key areas, reducing any conflicts.

The proposed alternative requires construction of approximately 2 3/4 miles of fence, two spring developments, and two stock trails. Their locations and descriptions are as follows (Appendix A):

Fence #1 will begin at Spencer Spring and traverse Sawtooth Ridge for approximately one-half mile to the bluffs near the creek bottom. Also included is a water lot around Spencer Spring, which will provide use of the water from the Rock Creek and Pinto Creek pastures.



General view of Haunted Canyon Pasture looking southwest
from cluster #4



General View of Rock Creek pasture from the west end of Saw-
tooth Ridge looking southeast - Government mountain middle
ground.



General views of West Fork of Pinto Creek pasture looking northeast from Iron Mountain.



Looking east.

Fence #2 will begin at Trap Spring in Spencer Creek and run southeasterly to Sawtooth Ridge. It will then follow the ridge for approximately three-quarters of a mile to the bluffs where it will terminate. Total length is approximately 1 1/8 miles.

Fence #3 will begin high on Sawtooth Ridge, and run northwesterly across the West Fork of Pinto Creek, below Oak Flat and on to the Pinto Creek/Brushiest allotment boundary. Length is approximately three-quarters of a mile including bluffs. Fences #1, 2, and 3, along with natural barriers, will form the divide between the Pinto Creek and Rock Creek units. (See photos on following page.)

Fence #4 is approximately three-eighths of a mile long, and will form a water lot around Government stock tank to provide use of the water from the three surrounding pastures: Rock Creek, Haunted Canyon, and Grapevine. All fence construction will comply to Forest Service standards (ref. FSM 2209.22).

Portions of fences #1 and 2 will be visible from Forest System Trail #275 and the water lot around Spencer Spring will cross the trail. No significant impact is expected from these fences. The trail is lightly used by visitors. There is an existing wire boundary fence at Spencer Spring, and Forest System Road #650 is approximately one-eighth of a mile from Spencer Spring.

The portion of fence #3, which crosses Forest System Trail #212, will be a buck and pole fence constructed of native materials (Arizona cypress), which will blend with the vegetation type of Arizona cypress (see photo below). The trail is a main access into the Superstition Wilderness. Walk through and swing gates will be constructed. All other fence will be constructed of barbed wire, wooden brace posts, and steel line posts.



Proposed location of buck and pole fence on trail #212.



Proposed location of fence #2 from trail #275
only visible portions shown. Dotted line represents
existing fence around Trap Spring.



Southern portion of proposed location for fence #3 and proposed trail to Yellow Jacket Spring. Fence will be just off ridgetop.



Northern portion of proposed location for fence #3 taken from Oak Flat. Fence will be just off ridgetop.

Fence #4 will be visible from trail #203. No significant impact is expected from this fence. There are two existing fences near Government stock tank, both of which cross the trail. The proposed fence will not interfere with the trail.

The locations and descriptions of the two proposed spring developments are:

1. Grapevine Spring, sec. 20, T. 1 N., R. 13 E. Once developed, a trough will be placed near the spring on an existing cat trail that leads to Government stock tank.

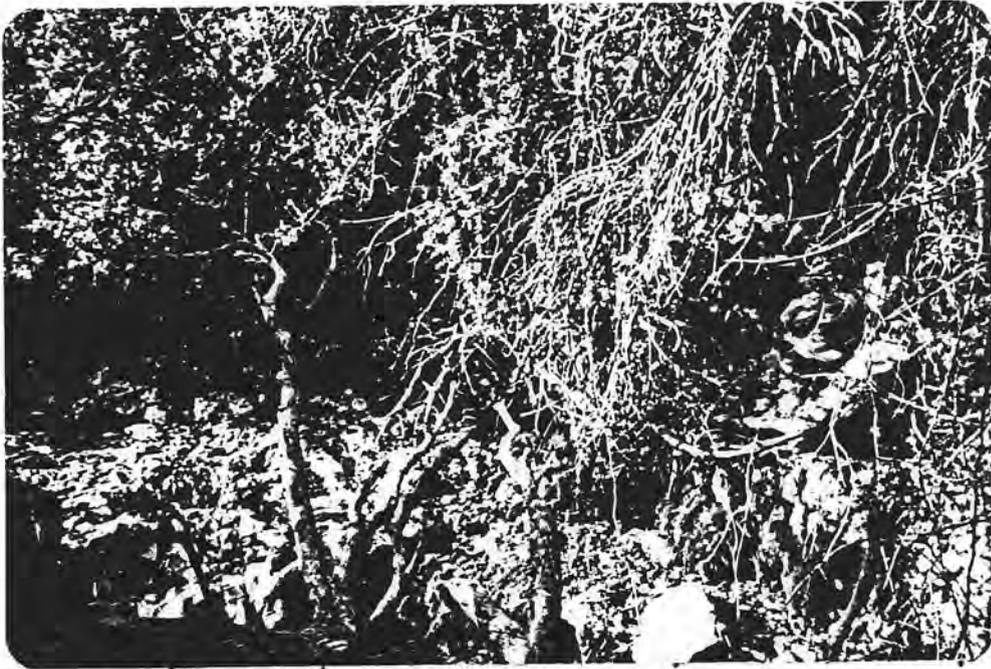
2. Sherry Spring, sec. 23, T. 1 N., R. 13 E. Once developed, a cement catchment will be constructed in the stream channel rather than installing a trough. The location of the spring prohibits placing a trough outside of the stream channel. A cement catchment will require less maintenance in the future, and will have less of a visual impact than a trough with a pipe leading to it (see photos on following page).

The two stock trails are proposed strictly for livestock use; a tread will not be cut. The first will begin approximately 300 yards downstream from Oak Flat and go southeast over the ridge to Yellow Jacket spring. The second will begin at Grapevine Spring, then go southeast up a ridge to the head of three small canyons. Total length of both trails is approximately 1½ miles.

Under the proposed alternative, or any alternative that will concentrate the cattle in a small area, maintenance of improvements is critical to provide access to all locations, enough water for all stock, and confine them in the restricted area.

The improvements that need heavy maintenance or reconstruction before initiation of a management plan are: (Appendix A)

1. Brushiest/Superior Allotment boundary fence, secs. 19 & 20, T. 1 N., R. 12 E., reconstruction.
2. Blue Spring, sec. 22, T. 1 N., R. 12 E., maintenance.
3. Javelina Spring, sec. 28, T. 1 N., R. 12 E., maintenance.
4. Upper Haunted Spring, sec. 26, T. 1 N., R. 12 E., maintenance.
5. Cement Spring, sec. 16, T. 1 N., R. 12 E., maintenance.
6. Spencer Spring, sec. 20, T. 1 N., R. 12 E., maintenance.
7. Lower Campaign Spring, sec. 34, T. 2 N., R. 12 E., maintenance.
8. Javelina Canyon Trail from Bull Basin to Haunted Canyon, secs. 25 & 26, T. 1 N., R. 12 E., secs. 29 & 30, T. 1 N., R. 13 E., maintenance.



Sherry Spring (need development)



Looking down canyon from Sherry Spring to illustrate the need for a cement catchment rather than installing a trough.

Alternative B

Graze 98 cattle yearlong plus NI to 5/31, under a rest-rotation management system, with a 6-month rotation schedule. Yearling (Grapevine and Horse) holding pastures are also included in this system.

The rotation schedule is illustrated on the following page.

The range improvement development (fences, springs, and trails), and maintenance necessary for this alternative, are identical to that of the proposed alternative.

Alternative C

Graze 98 cattle yearlong plus NI to 5/31, under a Santa Rita three-pasture grazing management system. The rotation schedule is an alternation of 4-month and 8-month moves (as illustrated on page 13). Yearling holding pastures are included in this system.

The range improvement development (fences, springs, and trails), and maintenance necessary for this alternative, are identical to that of the proposed alternative.

Alternative D

Continue current range management practices. Cattle graze the allotment continuously yearlong, with only sporadic rest of key areas due to some seasonal drift of the livestock, depending on the availability of water.

No improvements would be constructed under this alternative.

Many other alternatives which included more pastures and varied rotation schedules were analyzed, but considered to be unfeasible due to the rugged landscape. Feasible fence locations are limited to the dominating ridges of the allotment, and permanent water sources are too few to concentrate the total herd in a smaller area.

ECONOMIC COMPARISON OF ALTERNATIVESComparison ItemAlternatives

	Proposed	B	C	D
Costs	35,000	35,000	35,000	0
Cost Effectiveness (B/C)	.99	.98	.98	N/A
Sustained AUM's	400	400	400	0
Effects on Future Designation of Rare II to Wilderness	None	None	None	None

See Appendix B for cost effectiveness worksheets.

AFFECTED ENVIRONMENT

Location, Size, Ownership, and Status

The Brushiest Allotment is located all, or in part of, T. 1 N., R. 11 E.; T. 1 S., R. 12 E.; T. 1 S., R. 13 E.; T. 1 N., R. 12 E.; T. 1 N., R. 13 E.; T. 2 N., R. 12 E., Gila and Salt River Base. The allotment contains approximately 21,643 acres of which 136 acres are privately owned. Mrs. Ann Taylor, permittee of the Superior Allotment, owns 78 acres in Haunted Canyon, known as Tony Ranch; and 58 acres at the Miles Ranch are designated as commensurate property for the Brushiest Allotment by Page Land and Cattle Company. (Appendix A)

Page Land and Cattle Company has submitted a proposal to exchange 48 acres of the Miles Ranch, which is, in part, within the wilderness, for Forest Service land in the Coronado National Forest. The proposal, due to land locations, meets the criteria for continued processing even though there is a current moratorium on common land exchanges.

Permit

Page Land and Cattle Company holds the term grazing permit for 98 cattle yearlong (CYL) plus 100% Natural Increase (NI) 1/1 - 5/31. They have held the permit since December of 1982. Mr. Steve Brophy is the company president and representative. Mr. Bernard Ortega is the ranch manager.

History of Use and Current Status

Actual use on the Brushiest Allotment, prior to 1924, is difficult to obtain since the allotment was not fenced and several head of cattle were running in adjacent areas. However, the files do give some history and vague information of use during this period.

In 1877, cattle were brought into this area by Robert A. Irion. He made his headquarters at the Pinal Ranch, which is approximately 7.5 air miles south of Miles Ranch. He was the first person to run cattle in the area now known as the Brushiest Allotment, although it is unknown how many he and/or neighboring ranchers ran on the allotment.

In the early 1900's, Rae Clark homesteaded and in 1913 obtained a patent on the Miles Ranch. His cattle numbers ranged from 500 to 800 head yearlong until sometime prior to 1924 when a grazing preference of 511 cattle was established, with the notation, "until such time as the study of this range showed that a change should be made." In 1924 the permit was waived from Rae Clark to Ney Miles. At this time, the permit was issued with a 10% reduction, which set the preference to 460 CYL.

In 1926 the Brushiest Allotment was fenced to gain better control of the permitted livestock and trespass cattle from neighboring allotments.

In approximately 1926, there was serious consideration given to the possibility of changing the class of livestock on the allotment to goats. However, the 'ranger in charge' recommended the class of livestock remain the same.

In 1929 a reduction of 65 head was invoked lowering the stocking to 395 CYL. During this year, Ranger Painter worked on a management plan for the Brushiest Allotment. In this plan he recommended the breeding herd be reduced to 147 head. The range was stocked at 30 acres per cow yearlong while the surface area requirement was estimated at 82 acres per cow. Estimates were based on the evaluation of approximately 12,000 acres. This proposal was opposed by Ney Miles.

An attempt in 1931 to equate stocking with the estimated capacity resulted in the continuation of an unknown amount of nonuse, which had been initiated in 1928.

In 2 consecutive years, 1933 and 1934, 10% forage protection reductions were obtained. Then another 15% reduction left Mr. Miles' preference at 272 CYL.

Preference on the Brushiest remained at 272 CYL until 1947, when the permit was reduced to 256 CYL before waiving it from Mr. Miles to V. H. Kennedy.

On March 20, 1951, the Haunted Canyon Allotment was combined with the Brushiest Allotment. At this time, the Brushiest became almost twice its original size but due to a history of overuse and trespass on the Haunted Canyon Allotment, the preference remained the same.

Minor trespass occurred in 1952 and 1953, but no action was taken against the grazing preference.

In 1959 V. H. Kennedy sold his ranch property and livestock, with waiver of term permit to Mr. and Mrs. Louis D. Mauldin. The preference remained at 245 CYL.

In 1962 the Mauldins sold the ranch and livestock to Mr. Jack Helm, with a waiver of the term permit. After holding the permit for one year, Mr. Helm sold the operation to the Rocky Mountain Land and Development Company.

In 1964 Rocky Mountain Land and Development Company applied for 114 cattle from January 1 through May 31, and 94 cattle 6/1 - 12/31. On 6/1 the company failed to remove 20 head of cattle. It was then learned that Mr. V. H. Kennedy had brought foreclosure proceedings involving the headquarters of the Brushiest against Mauldin, et al, and the courts had appointed M. E. Tally to operate the allotment. Mr. Tally made application on the 20 head of cattle that were in excess.

On January 6, 1965, Mr. Tally applied for 100 cattle yearlong plus 31 NI to 5/31. In June of 1965, the court entered judgement in favor of Mr. Kennedy, and against Rocky Mountain Land and Development Company, regarding ownership of the ranch property.

While Rocky Mountain Land and Development Company was appealing the courts decision the Forest Service and representatives of Mr. Kennedy's gathered 170 head including cows, bulls, steers, heifers, and calves from the allotment. Apparently, due to the excess use of 39 head from 1/1 - 5/31/65, and 70 head from 6/1 - 9/7/65, the Forest Service impounded the livestock and billed Rocky Mountain Land and Development for the over use.

The livestock were later sold at a Sheriff's sale and purchased by Mr. V. H. Kennedy. In 1966 the base property of the Brushiest was sold at a Sheriff's sale to a partnership known as YY Ranch.

In 1968, after some confusion and delay regarding the legal technicalities of title to the Miles Ranch, it was finally decided the YY Ranch had acceptable proof of ownership. The Rocky Mountain Land and Development Company permit was then closed on 6/2/69, with a new permit being issued to the YY Ranch for 98 CYL + NI to 5/31, with an apparent yearling provision.

The YY Ranch made their first application for 355 yearlings from 11/1/69 to 5/31/70, but never put them on. Records indicate that no cattle were placed on the allotment while YY Ranch was a permittee.

On April 5, 1970, the YY Ranch permit was closed and waived to William E., Eula Belle, P. F., and Patricia Bohme for 98 CYL plus NI to 5/31. In 1971 an additional 1,440 acres from the Reeves Allotment was added to the Brushiest. This area was used very little by the Bohmes and the permit remained at 98 CYL plus NI to 5/31. The Bohmes held the permit until December 1982 when the Miles Ranch and cattle were sold to Page Land and Cattle Company, the present holder of the grazing permit.

Cattle Sales and Management

The practice of selling yearlings during the spring dates back to early history of grazing on the Tonto National Forest. The Brushiest is no exception; yearlings are sold each spring at the Gila County Cattlemen's Association cattle sale. The average calf crop over the past 10 years was 47%. This can be attributed to poor range conditions, lack of good animal husbandry, predation, and the reducing effect yearling carryover frequently has on the subsequent years calf crop. Page Land and Cattle Company hopes to increase the calf crop percentage and selling weights by initiating an allotment management plan which will improve range conditions and provide the opportunity for better animal husbandry.

Physiography

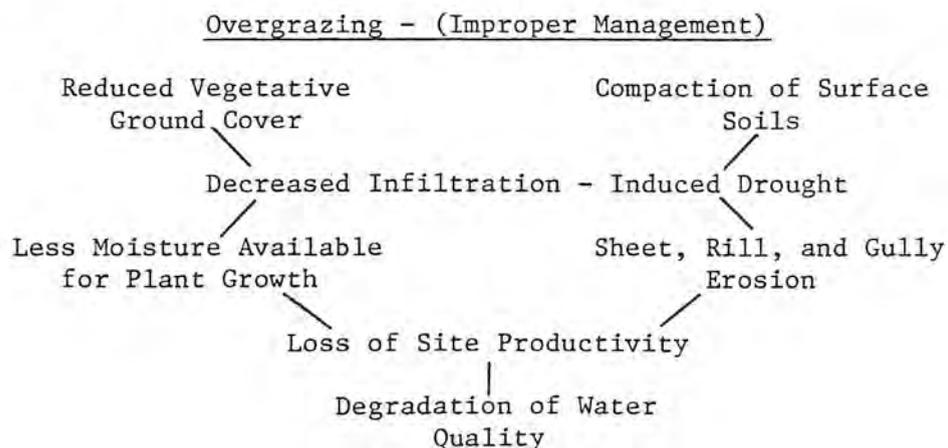
The entire allotment is within the Salt River watershed. There are six major drainages on the allotment; they are: Wood Canyon; Haunted Canyon; Rock Creek; Spencer Creek; West Fork of Pinto Creek; and Campaign Creek. All the canyons are characterized by steep slopes and narrow bottoms. They all run in a northeasterly direction. Five primary peaks lie on the fringes of the allotment; they are: Iron and Montana Mountains on the west; Fortuna Peak on the south; Grizzly Mountain on the east; and Pinto Peak on the north. Sawtooth Ridge is another prominent feature within the allotment. It runs for approximately 5 miles separating Rock and Spencer Creeks (see general view photographs on following page). Approximate elevations range from 3,450 feet at Miles Ranch to 6,050 feet at Iron Mountain. (Appendix A).

Soils

A soil survey which uses current nomenclature and criteria for classification, has not been conducted on the Brushiest allotment. Current geological survey maps show the major parent materials to be tuff, south of Sawtooth Ridge, and granite, with some Apache group, north of Sawtooth.

Water Quality

The watershed conditions on the Brushiest Allotment are unsatisfactory. Herbaceous plant density and litter accumulation on key areas are not sufficient to hold the soil as water moves across the ground surface. Soil compaction, due to livestock trampling, also causes more water to flow across the surface, rather than being absorbed into the substrate. This process can be illustrated in the following manner:



In order to increase water quality, reversal of this process is necessary.



General view of Sawtooth Ridge



Vegetation

Within the limits of soils, aspect, and steepness of slopes, vegetation on the allotment varies slightly. Of the total 21,643 acres, 21,532 acres is woodland and the remaining 111 acres is riparian. (See table A for a summary of types and conditions.)

TABLE A

BRUSHIEST ALLOTMENT - CAPABILITY, VEGETATIVE TYPE, AND CONDITION SUMMARY

TYPE	CAPABILITY	CONDITION	ACRES
Riparian -	Full capacity	Fair	23
		Poor	53
	No allowable capacity	Fair	35
	TOTAL		111
Woodland -	Full capacity	Fair	2,526
		Poor	10,934
	No allowable capacity	Fair	746
		Poor	7,326
	TOTAL		21,643
Capability Totals - Full Capacity		Fair	2,549
		Poor	<u>10,987</u>
		TOTAL	13,536
	No allowable capacity	Fair	781
		Poor	<u>7,326</u>
	TOTAL	8,107	
	GRAND TOTAL		21,643

Source: USFS Region 3, Data Base. Allotment Identification No. 016A.

The woodland consists of shrub live oak (Quercus turbinella), manzanita (Arctostaphylos spp.), mountain-mahogany (Cercocarpus spp.), Ceanothus (Ceanothus greggii), squawbrush (Rhus trilobata), and hollyleaf buckthorn (Rhamnus crocea), Arizona cypress (Cupressus arizonica), pinyon-juniper, etc. Within the woodland, there are small pockets of desert shrub and grassland which are not broken into different types.

Riparian areas are located throughout the allotment in the bottom of the six major canyons that divide the area. The type is dominated by mature sycamores (Platanus wrightii) with very little understory or regeneration. A few isolated pockets have a component of cottonwoods (Populus fremontii) and an understory

of grasses and herbaceous vegetation. (For general location of the types refer to Appendix C.)

Condition and Trend

Range condition and trend varies quite significantly on the allotment, as illustrated by Table B, which summarized conditions and trends in the woodland type. (See Appendix D for complete cluster data.)

Even though the stocking rate has declined, areas near water and easily accessible to livestock continue to receive heavy yearlong use. As a result range conditions in these key areas; clusters 1 and 3 deteriorate while the remainder of the allotment, clusters 2, 4, and 5 exhibit very little use and show an upward to static trend. (Table B)

TABLE B

SUMMARY OF PARKER 3-STEP

Cluster Data

Cluster	Vegetation Score and Condition Rating				Soil Score and Condition Rating			
	1959	1972	1982-83	Trend	1959	1972	1982-83	Trend
1	27 P		14 VP	↓	71 G		69 G	→
2	32 P		37 P	↑	52 F		56 F	↑
3	16 P	43 F	33 P	↓	46 F	51 F	32 P	↓
4	36 F	44 F	58 F	↑	57 F	42 F	60 F	↑
5	31 P		32 P	→	59 F		62 G	↑

Poor=P Fair=F Good=G

Note: All scores are based on methodology described in the Range Analysis Handbook revised 1981.

There are no established trend studies within the riparian type even though they are considered key areas and receive most of the grazing pressure. Range conditions of the riparian type vary from poor in areas of easy access, to fair in isolated pockets. Heavy use and poor conditions of this type were documented in 1964 by Wes Lathrop when he stated in a range inspection that, "conditions are good in most open areas other than creek bottoms."

Utilization

No complete production-utilization survey has been conducted on the Brushiest Allotment although it was noted while reading the transect clusters that utilization distribution is a problem. All riparian areas viewed has 75± 10% use on forage plants. Key forage plants on a few side slopes and ridge tops had been used to 70± 10% while much of the area had light (20%) to very

light (5%) use, depending on accessibility and available water.

A major objective, while developing a management plan for the allotment, is to reduce utilization and grazing pressure on riparian areas. These areas are highly valued by wilderness users, in terms of visual resources and camping areas, and for wildlife habitat.

Stocking of 98 cattle plus NI, is considered to equate with capacity if riparian and other key areas can be rested to provide for regeneration and increased production.

Threatened and Endangered Plants and Animals

No threatened and endangered plants have been observed on the allotment, although, there is a possibility of their existence. The following list of T&E plants is known to occur under environmental conditions similar to those of the Brushiest Allotment.

1. Hedgehog cactus (Echinocereus triglochidiatus var. arizonicus).
2. Lipfern (Cheilanthes pringlei).

No threatened and endangered animal sightings have been reported on the allotment, although environmental conditions capable of supporting the following list have been identified:

1. Gila monster (Heloderma suspectum). Believed to inhabit the allotment.
2. Peregrine falcon (Falco peregrinus).

The introduction of a management system will not affect the aforementioned plants or animals as they are not utilized or directly affected by live-stock use.

Wildlife

The allotment contains suitable habitat for a variety of mammals, birds, amphibians, reptiles, and fish. At present, the major limiting factor for these populations is the deteriorated condition of the riparian areas. Most wildlife species use this type for herbaceous food and water, which does not exist in other locations within the allotment.

A management system which allows for improvement of the riparian type, while maintaining or improving the surrounding vegetation, would be beneficial to wildlife.

Predation of livestock can be a problem. The previous permittee, Bill Bohme, has stated that bears take a few calves each year.

Some of the wildlife species present are:

1. Mammals - black bear, mountain lion, bobcat, badger, fox, coyote, raccoon, javelina, mule deer, white-tailed deer, squirrel, and rabbits.
2. Birds - mourning dove, Gambel's quail, blackbirds, cardinals, flycatchers, numerous hawks, owls, roadrunners, sparrows, warblers, and woodpeckers.
3. Amphibians and Reptiles - spadefoot toad, earless lizard, zebra-tailed lizard, side-blocked lizard, Gila monster, bull snake, plain black-headed snake, and western diamondback rattlesnake.
4. Fish - several pools on the West Fork of Pinto Creek contain long finned dace.

Recreation

Recreational opportunities on the allotment are of wilderness type with dispersed camping, hunting, hiking, horseback riding, etc. The Miles Ranch area is the most popular throwdown campsite on the allotment and includes a trailhead which accesses several locations within the Superstition Wilderness and Contiguous study area (see Appendix E for detailed trail maps). Tony Ranch, which is privately owned, is another popular campsite. The remainder of camping is in the riparian areas throughout the allotment.

At present, there are no plans to develop recreation facilities or expand the recreational trail system, although heavy maintenance is planned for an overgrown trail that leads from near Tony Ranch to the head of Bull Basin.

Visitor use peaks in the spring and during fall hunting seasons.

Cultural Resources

A cultural resources survey has not been conducted on the Brushiest Allotment.

A few archaeological sites were noticed during inspection rides. After review of data from neighboring allotments, it is assumed there are numerous sites within the Brushiest Allotment.

Visual Quality

The Brushiest Allotment contains a variety of visual resources. Opportunities exist for enhancement of the resource. A more complete assessment of the visual quality is attached (Appendix F).

Wilderness, Rare II Areas, and Wild and Scenic Rivers

The Brushiest Allotment includes approximately 5,560 acres of the Superstition Wilderness and 7,062 acres of the Superstition Contiguous Rare II Study area. No designation of Wild and Scenic Rivers exist on the allotment (Appendix A).

Mining and Claims

At present, there are no active mines on the allotment, although several claims are held. Individuals hold seven claims near Silver Spur cabin, while Inspiration Consolidated Copper Company holds several on the south and west fringes of the allotment. Of the seven near Silver Spur cabin, three are in the Wilderness, which will be invalid on December 31, 1983, and four are located in the Rare II study area. Inspiration Consolidated has completed, and is expected to continue, sporadic drilling and exploration on their claims.

ENVIRONMENTAL CONSEQUENCES

Proposed Alternative

Construction of fences will enable the confinement of the livestock in smaller areas, provide rest to neighboring areas, and more uniform use of the available forage. The proposed waters are needed to allow use of the pasture by the entire herd for the specified length of time, and help in the distribution of livestock. The proposed stock trails will provide easier access to waters and aid in the distribution of livestock.

The major impact, associated with the proposed improvements, is visual. Fences and trails can detract from the natural lines and texture of an area. To mitigate this impact, natural barriers will be used as much as possible; fences will be away from ridgetops; clearing, where necessary, will be held to a 6-foot corridor with irregular edges, and green steel posts that blend with the vegetation will be used as line posts. As referred to on page 6, the portion of the fence which crosses Forest System trail #212 and is visible from the point of crossing will be a buck and pole fence constructed of native materials cut near the site but out of the visual corridor of system trails.

Water Quality

With implementation of the proposed alternative, water quality is expected to improve through an increase in density of herbaceous vegetation and litter accumulation.

Soils

Minor impacts to the soil are anticipated with the use of the proposed stock trails. However; long-term benefits, as a result of the rotation system, are an expected reduction in soil loss through increased density of herbaceous vegetation and litter accumulation.

Vegetation

In the semidesert ecosystem, it is deemed essential to provide spring/summer rest, back-to-back, 2 out of 3 years, in order to allow for a positive vegetative response. The proposed system will provide yearlong rest, back-to-back 2 out of 3 years.

The benefits derived from 2 years of yearlong rest, other than the rest during critical phenological growth stages provided by spring/summer rest, are the greater opportunity for seedling establishment and accelerated litter accumulation.

The benefit of yearlong use in each unit is that the livestock will be forced out of key areas into light-use areas. The heavier use on mature browse species which received traditional light use will increase the nutrient value by inducing new sprouts, and help open up the stand to allow for increased production of herbaceous species (Neff, D. J. et al. 1979). With the successful implementation of the rotation system, long term productivity of the forage resource will be assured. Key areas especially riparian, will improve in condition through increased density of herbaceous vegetation and more uniform use of the forage resource.

With the planned use of Grapevine and Horse pastures each spring, cool season species could decline during years of below normal precipitation. However, during years of normal precipitation an abundant crop of annual grasses are produced which will relieve the perennial species from the brunt of the grazing pressure.

T & E Species

No negative impacts are expected from the proposed alternative. The T&E species, present or capable of inhabiting the allotment, are not utilized or directly affected by cattle. T&E clearance will be sought prior to construction of improvements.

Wildlife

Concomitant with the increase in herbaceous plant density and diversity, wildlife habitat values will be augmented.

Heavier use on mature browse species, combined with resting of such, will provide young, tender, and highly nutritious sprouts for deer.

Development of additional permanent water sources will promote wildlife values.

Cultural Resources

Cultural resource inspection will be conducted prior to construction of range improvements.

Visual Quality

Visual resources on the allotment can either be enhanced or detracted from by the introduction of a management system. Detrimental effects could result from improper placement and construction of trails and fences. Mitigating measures referred to on page 23 will be used, and landscape architectural clearance will be sought prior to construction of fences and trails. With the implementation and success of a viable management plan, herbaceous cover will increase; thus enhancing visual quality, particularly along the system trails within the riparian areas.

Recreation

The proposed alternative will have minimal adverse impacts on recreation use. With only one-third of the allotment used each year, the chance of a conflict between livestock disturbance and recreation users is reduced, compared to the current situation of continuous yearlong use. Within the pastures being used, the Forest system trails will receive heavier livestock use increasing the chance of deterioration and conflict.

Recreation opportunities and experiences will be enhanced through increased density and diversity of herbaceous vegetation, and the commensurate increase in wildlife values.

General

The social impact to recreational users associated with the proposed alternative is positive. With the concentration of cattle in one-third of the area the possibility of conflict between visitors and livestock is reduced.

This alternative will have no effect on the future designation of the Rare II study area as wilderness.

The expected response of the vegetative and wildlife resource is positive.

No impact on T&E species or cultural resources is expected from this alternative.

The benefits derived from this alternative are commensurate with costs.

Livestock production is expected to increase through an improvement in the forage resource and the increased opportunity for animal husbandry practices.

The permittee, Page Land and Cattle Company, prefer this alternative to all other alternatives.

Alternative B

Environmental impacts are similar to the proposed alternative except for the following:

Vegetative resource response is expected to be somewhat slower. Under this alternative the current years growth in key areas would be utilized 2 out of every 3 years, reducing the opportunity for seedling establishment and litter accumulation, whereas in the proposed, current year's growth is only utilized 1 out of every 3 years. With the use of current year's growth in the key areas of two pastures, the cattle will not be forced into lightly used areas, which would result in more uniform use of the forage resource and an increased nutritional value of mature browse species.

Alternative C

Environmental impacts associated with this alternative are identical to Alternative B, except for the possibility of more uniform use of the forage resource in the pasture grazed for 8 months.

Alternative D

The condition of riparian and other key areas will continue to degrade. Current range management practices do not allow plants in these areas adequate rest or deferments to regenerate or produce to their potential.

Wildlife will not benefit from the increased nutrient value of mature browse species, or increased density and diversity of herbaceous plants.

Irreversible or irretrievable commitments of resources are possible due to the steadily declining potential of the riparian and other key areas.

A summary of environmental consequences is listed below:

ENVIRONMENTAL CONSEQUENCES OF ALTERNATIVES

<u>Environmental Topic</u>	<u>Proposed</u>	<u>B</u>	<u>C</u>	<u>D</u>
<u>Social Impact to Recreation users</u>	Temporary	Temporary	Temporary	None
<u>Effect on Wilderness Designation</u>	None	None	None	None
<u>Effect on Vegetative Condition</u>	Highly Favorable	Favorable	Favorable	Negative
<u>Effect on Wildlife Habitat Improvement</u>	Significant	Moderate	Moderate	Negative
<u>Effect on T&E Species and Cultural Resources</u>	None	None	None	None
<u>Effects on Livestock Production (calf crop)</u>	Increase	Increase	Increase	None

List of Preparers

Dayle R. Flanigan, Globe District Range Conservationist.

Consultation With Others

Dutch Ortega, Brushiest Allotment, ranch manager.

Steve Brophy, president and representative of the Page Land and Cattle Company.

Henry Apfel, Jim Burton, and Jim Fiedler, Arizona Game and Fish Department.

Written comments from consultation follows.

Page Land & Cattle Co.

ESTABLISHED 1910

11 WEST JEFFERSON, ROOM 203 · (602) 254-5005

Phoenix, Arizona 85003

DISTRICT		Initial
MAY 20 1983		
ROUTE TO		
NO.		
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RANGE		
DISTRICT		
FILE		

STEPHEN M. BROPHY

May 19, 1983

Mr. Larry P. Widner
District Ranger
Globe Ranger District
Route 1, Box 33
Globe, Arizona 85501

Re: F.S. Analysis of the Brushiest Allotment

Dear Mr. Widner:

In response to the request of your staff for our comments regarding the above, we respectfully submit the following.

As permittee, we feel the proposed alternative (A) is feasible, and that it should benefit National Forest land within the Brushiest Allotment.

We ask that any subsequent management plan afford us flexibility to move cattle among pastures during any prolonged dry periods if adequate stock water is not available to cattle concentrated in a single pasture under a rotation system.

We also strongly suggest that new fencing, if approved, not be undertaken until the proposed waters are available.

As to general comments in the report re range condition: Table A (page 19) indicates that over 80% of the Allotment's acreage is in poor condition. We disagree. Range conditions on the Allotment can be improved, but it is presently in good condition.

Whatever the theoretical optimum against which the estimate in the table is made, we think its implications are most inaccurate, for several reasons.



Mr. Larry P. Widner
May 19, 1983

Page 2

First, the table presumes to an accuracy, to the nearest acre, which we don't believe is possible.

Second, the predominant vegetation on the Allotment is brouse, and has been since at least the time it was given the name Brushiest by the Forest Service. A significant portion of this brouse consists of species desirable for both livestock and wildlife.

Finally, the Allotment has been moderately stocked for nearly two decades; present permitted capacity is one-fifth that originally established during the 1920s; and, over that same period, the Allotment's acreage has increased by a factor of nearly 2 times.

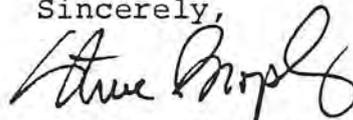
One other point. We recognize the importance of riparian areas to the Forest Service. However, we question the practicality of any system for the management of 21,000 acres, if it is driven principally by goals for the 0.5% of total acreage in riparian areas.

All uses of land on the Allotment, by people, wildlife, and cattle, center on water and trails located, by a fact of nature, in the creek bottoms. And all uses affect vegetation in riparian areas.

We do not question that the proposed alternative should improve the riparian areas. But it makes no sense to us to gauge progress of a management system principally by what happens on a truly miniscule proportion of the total acreage in question, if this is what the report suggests.

We acknowledge the effort and thought given the report and proposal by your staff, and appreciate their willingness to work with us. Thank you kindly for the opportunity to comment.

Sincerely,



Stephen M. Brophy

SMB:b

December 11, 1993

1922 E. Orion Street
Tempe, AZ 85283

Gary Holder
Range Program Manager
Tonto National Forest
P.O. Box 5348
Phoenix, AZ 85010

Dear Mr. Holder,

I have been following your agency's management of livestock grazing on the Brushiest grazing allotment, located in the Globe Ranger District, for more than three years.

Recently, I was reviewing the copy of the allotment's 1983 environmental assessment (EA) that you sent me in 1991. I noticed it was missing pages 3, 12 and 13. Pages 12 and 13 are particularly important because they contain the comparisons of the allotment management alternatives you analyzed.

Could you please send me copies of these three missing pages?
Thank you.

Sincerely,


Jeff Burgess
ph 306-3424 (pager)

*per call from Holder 12/16/93
missing pages were pasture
schedules - not narrative*