

ALLOTMENT MANAGEMENT PLAN
COYOTE C&H ALLOTMENT
ESCALANTE RANGER DISTRICT
DIXIE NATIONAL FOREST

Prepared by Jan W. Sauid Date 4/4/75
Range Conservationist

Approval recommended by Charles B. Gonsinger Date 4/4/75
District Ranger

Approval recommended by _____ Date _____
Chief Branch of Range Mgt.

Approved by Frank Jensen Date **APR 9 1975**
act. Forest Supervisor

3/80 [unclear]

I. INFORMATION

A. History

The present Coyote C&H Allotment is the result of many additions and deletions of various allotments over the years. Originally, the allotment comprised only the area under the Aquarius Plateau. Over a period of years the permittees acquired permits on the Plateau and either retired the numbers and reduced use under the rim, or incorporated the use into their total numbers. Common use was the order on the Plateau and serious overuse was the result. The flat terrain and lack of natural barriers created difficulties in establishing specific allotment boundaries. This gave rise to considerable so-called drift rights. As long as sheep were grazed, some control was possible with herding. As cattle replaced sheep, fences were built to control them. Today the exterior boundary is either fenced or easily defined by a natural feature.

In the early years the country under the rim was primarily used by cattle from the Antimony area. The Plateau was used principally by sheep coming in from Escalante, John's Valley, and Wayne County. In addition, some cattle would drift onto the top from all sides. The allotment, as now described, is made up of at least the following old allotments:

Sink Holes	South Dry Lake S&G
Velvet Lake S&G	North Dry Lake S&G
Pollywog Lake S&G	Henderson S&G (North portion)
Cyclone S&G (West portion)	Coyote C&H
Coombs Lambing Right (In Pollywog area)	

Common use was eliminated about 1943. In 1955 a cattle permit was transferred from permittees on the Escalante side and waived back to the government. This eliminated the last of the recognized drift rights. As was the custom during the 40's, cattle replaced sheep on a five to one basis with a twenty percent reduction. The administrative reductions, plus several outright waivers to the government, resulted in approximately 60 percent less animal months from 1913 to 1974. A general rundown of past use is as follows:

<u>YEAR</u>	<u>NUMBERS</u>	<u>SEASON</u>	<u>ANIMAL MONTHS</u>
1913	1200 cattle	4/1 - 10/31	8400
	4600 sheep	6/1 - 10/11	16780
1923	1376 cattle	5/1 - 10/31	8250
	3972 sheep	6/1 - 9/30	12816
1933	1200 cattle	5/1 - 10/31	7200
	3165 sheep	6/1 - 9/30	10495
1943	1147 cattle	5/16 - 10/15	5750
	3750 sheep	6/1 - 9/30	9155
1953	1188 cattle	5/16 - 10/15	5696
1963	1228	6/1 - 9/30	4912
1974	1228	6/1 - 9/30	4912
1979	1228	6/16 - 10/15	4912

B. Current Permits

The permittees generally run cow-calf operations. While not on the Forest, private, state, and BLM lands are used. There are ten permittees with BLM permits totaling 875 cattle. The majority of the BLM use is permitted in the spring before cattle go onto the Forest. The spring use has been coordinated with the BLM so that these cattle can go directly onto the Forest on June 16. The BLM Allotments are smaller, scattered areas with individual permittees or smaller groups of permittees. The following is the list of permits:

	<u>NUMBER</u>	<u>SEASON</u>	<u>AUMs</u>
Samuel & Twila Duncan	25	6/16 - 10/15	100
5M Ranch	100	ditto	400
Hal & Athalia Jensen	203	"	812
Elden Gleave <i>(Lorris)</i>	61	"	244
Eugene King <i>J Van Lyman</i>	157	"	628
Kenneth King	184	"	736
Thomas & Ireta King <i>J Van 9</i>	128	"	512
Arlene Savage <i>Clair</i>	42	"	168
Gerald E. Allen <i>Scott & Sons Gleave</i>	85	"	340
Gary E. Allen <i>Randy Gleave</i>	84	"	336
Van Wiley	159	"	636
Total	<u>1228</u>		<u>4912</u>

C. Range Environmental Analysis

The range environmental analysis was completed in 1966. A summary of the range condition by that analysis follows:

<u>Classification</u>		<u>Acres</u>
Primary	Suitable	39323
Secondary	Suitable	2629
Closed	Suitable (admin. site)	40
Used	Unsuitable	2635
Not used	Unsuitable	5737
Nonrange		<u>25111</u>
	Total allotment acres =	<u>75475</u>

<u>Condition of Primary Range</u>	<u>Acres</u>	<u>Percent</u>
Excellent	365	1
Good	5107	13
Fair	22032	56
Poor	<u>11819</u>	<u>30</u>
Totals	<u>39323</u>	<u>100</u>

Trend over the allotment is generally static or downward. Range trend studies are planned to be reread in 1979 and will provide better data. Areas with a continued downward trend are those which have been grazed early each year under past management. Upper areas, which have been used later each year, are believed to be generally static in trend. Vigor over most of the allotment is very low.

D. Estimated Grazing Capacity

It has been known for years that the Allotment was overstocked and a better management system needed.

On October 18, 1978, the grazing season was changed from 6/1-9/30 to 6/16-10/15. In 1979 the deferred-rotation grazing system was implemented. These are significant factors and will go a long way in solving problems on the allotment. However, the season may still have to be shortened on the last end.

To firm up the grazing capacity the cattle will be rotated from one unit to the next as proper use is reached. When the last unit grazed that year has reached proper use the cattle will be removed from the allotment. The Forest Service will determine what the proper capacity is each year over the next six years. When the new grazing permits are issued in 1986 they will be for the proper capacity based on the six years of data.

E. Past Management

The allotment was divided into two almost equal parts. Each part was used as a separate allotment. 584 head of cattle were put over the Big Point on June 1. They were kept below the Lost Spring fence until July 1 when they were distributed over an area from the Big Swale to the head of Coyote Hollow. An attempt was made to keep the animals in the Big Swale and around Dry Lake. The cattle seemed content to stay in the high country until around September 1. They were then moved back into the Big Point area until the end of the grazing season.

73 head of cattle were put into Antimony Creek. They used the bottom and the benches around Antimony Lake until July 1. At this time they were moved with the cattle from Big Point into Coyote Hollow.

571 cattle were spread from the south boundary at Pacer Lake to the south rim of Antimony Creek from June 1 to July 1. An attempt was made to keep these animals distributed over this area. It did not prove successful because the cattle congregated around Pacer, Otter Lake and at the head of Poison Creek. On July 1, the cattle were moved onto the Aquarius Plateau and spread from Clayton to the Sink Holes. The cattle grazed there until mid-September when they were moved back to the Pacer-Otter Lake area for the remainder of the season.

This system, coupled with reduced numbers and a shorter season, has resulted in some improvements to the higher elevation range over the years. It leaves much to be desired when considering the lower elevation range, because they graze this country early in the season and again in the fall.

The major problems were: a- The cattle hit the low country both early and late. This allows no chance for most plants to reach maturity. b- The terrain around Pacer Lake makes it difficult to gather cattle. Consequently, many animals spend all summer in the area. c- The meadows and parks of the low range have no chance to gain vigor, much less produce seed, and are continually deteriorating.

F. Existing Improvements

Over the years many fences and impoundments have been constructed to aid in distributing the cattle. Some of these have not proved serviceable and others have outlived their usefulness. Following is a list of those improvements which are serviceable and will be used under the proposed system.

NAME	TYPE	SIZE	LOCATION	YEAR CONSTRUCTED	CONDITION
Parker Mountain Fence	4 barbed wire wood posts	6.5 miles	On FS boundary Big Point Rim to Dis. Bdry	1952-53	Fair
Pollywog Lake Fence	4 barbed wire wood posts	1.0 mile	FS boundary to Pollywog Lake	1951	Fair
Pollywog Lake Lake Philo	4 barbed wire steel posts	8.0 miles	Pollywog Lake-Lake Philo	1958-59	Good
Lake Philo-Cyclone Lake	Steel posts Net wire	4.5 miles	Lake Philo-Cyclone Lake	1956-57	Good

NAME	TYPE	SIZE	LOCATION	YEAR CONSTRUCTED	CONDITION
Hidden Fence	4 barbed wire steel posts	0.6	Rim above North Creek	1963	Fair
Griffin Top Fence	4 barbed wire steel posts	2.0 miles	Div. between Griffin Top & Coyote Allot.	1964	Poor
Otter Lake Trail Gap	Log	1.0 mile	Along rim where Otter Lake trail goes over	1935	Fair
Rim to Boundary Fence	4 barbed wire steel posts	4.0 miles	Div. bet. Coyote & Horse Cr. Allot.	1966 1942	1.5 mi. Good 2.5 mi. Poor
North Creek Fence	4 barbed wire steel posts	1.5 miles	FS Boundary, North Creek	1963	Good
North Creek Fence	4 barbed wire steel posts	2.0 miles	FS Boundary, North Creek	1959	Good
Poison Creek Fence	4 barbed wire steel posts	7.0 miles	FS Boundary, Antimony Cr. to Center Creek	1947	Good
Big Point Fence	4 barbed wire steel posts	2.5 miles	Big Point Rim, west & then south	1963	Good
Lost Springs Fence	4 barbed wire steel post	2.0 miles	Pocket-Dry Hollow to V. King Ranch	1965	Fair
Pockets-Dry Hollow Fence	4 barbed wire steel post	2.0 miles	Pocket-Dry Hollow to V. King Ranch	1966-67	Good
Coyote Grass Lake Division	4 wire steel post	1.0 mile		1967	Good
Head of Coyote Gap	4 wire steel post	0.5 mile		1967	Good
Sink Hole Gap	3 wire steel post	0.25 mile		1968	Good
Deer Park Fence	3 wire steel posts	0.5 miles		1972	Good
Death Hollow #1 and #2	pond		Death Hollow	1949	Good
Lost Springs	pond		Mouth of Lost Springs	1952	Fair
Big Swale #1 & #2	bentonited #1 pond		Big Swale	1949	Good
Coyote Hollow #1 & #2	pond		Coyote Hollow	1949	Good
Coyote Hollow No. 3	bentonited pond		Coyote Hollow	1960	Good
Coyote Hollow No. 4	pond		Coyote Hollow	1965	Good
Indian Springs No. 1	pond bentonited		Indian Springs	1960	Good
Indian Springs No. 2	pond bentonited		Indian Springs	1965	Good
Indian Springs	pond bentonited		Indian Springs	1966	Good
Poison Creek	pond bentonited		Head of Poison Creek	1949	Good
Mud Lake Reservoir	pond bentonited		2 miles north of Mud Lake	1952	Fair

NAME	TYPE	SIZE	LOCATION	YEAR CONSTRUCTED	CONDITION
Pocket No. 1 & No. 2	pond bentonited		Pockets Draw	1952	Fair
Pockets Spring	pond bentonited		Pockets	1966	Fair
Wildcat	pond bentonited		Wildcat Draw	1966	Fair
Pacer Rim	pond bentonited		Rim above Pacer Lake	1966	
Velvet Lake	pond bentonited		1 mile SE of Velvet Lake	1966	Fair
Brownies Hollow	pond bentonited		Just SO. of Head of Brownies Hollow	1966	Fair
Sheep Corral Hollow	pond bentonited		Sheep Corral Hollow	1966	Fair
Big Point Spring	2 metal troughs		Under Big Point	1952	Poor
Dry Lake No. 3	Excavation		Dry Lake	1971	Good
Pockets Reservoir	Excavation		Pockets	1971	Good
Little Springs	Excavation		West Cyclone Lake	1968	Good
Pacer Lake Rim fence	steel post 3 wire	.5 mile	Rim between Pacer Lake & Clayton	1976	Good
Big Point Fence	steel post 3 wire	.5 mile	Rim above Big Point spring	1978	Good
Big Point & Billy Spring	1 pond		Sec. 10 T.31S., R.1W	1976	Good
Sink Holes pond	1 pond		Sec. 17 T.33S., R.1E	1976	Good
Antelope Spring pipeline	5 tanks 7 miles pipeline		Pollywog Lake Unit	1978	Good
Dry Lake pond	1 pond		Coyote-Clayton Unit	1976	Good
Upper Coyote Hollow pond	1 pond		Coyote-Clayton Unit	1976	Good

II. GOALS

The goals of the proposed 3-pasture deferred-rotation grazing system will be to improve the health of the range and soils. It is desired that deteriorated range and soil conditions be improved by proper stocking and improved management. Plant vigor and density should increase and provide soil protection.

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It will also be a goal to minimize the economic impact on permittees effected by this plan. In the long run it is expected that improved livestock management and stabilized operations will result. Any needed reductions would be made over a period of years to minimize the impact. Wildlife and watershed resources should benefit from improved range conditions. Deer and antelope are the two most pursued wildlife species. Both species should benefit from the proposed plan. Water quality improvement should correspond with improved vegetative ground cover.

III. ANALYSIS

A. Relationship of Permits to Permittee's Operations

Every permittee on this allotment is engaged in a cow-calf operation. When the cattle are not on the Forest, many different systems are used. Depending on the permittee, they can have their cattle on state leases, in feed lots, on private pastures, or on BLM leases. The Forest permit is used to round out their business. Without the Forest permits the operations would be greatly reduced and many probably would not survive.

The permittees have formed an association and work with the Forest Service in that manner.

B. Management Alternatives

There were two management alternatives considered. These were as follows:

1. A two unit rotation grazing system using the Pollywog and Pacer Lake combined as one unit and Coyote-Clayton as the second unit. Under this system the Pollywog-Pacer Lake unit would have to be used first each year due to the difference in range readiness and elevation. Coyote-Clayton would have to be used second (last) each year. The difference between this system and current management would be that units would not be reused in the same year.

This alternative was not chosen due to the negative impacts that repeated early use of the lower areas would have.

2. A modified three pasture deferred-rotation grazing system. The units would consist of two lower units (Pacer Lake and Pollywog) and one higher unit (Coyote-Clayton). Each lower unit would be used first one year and last the next year. The high unit would be used second every year. This alternative was selected for the following reasons:
 1. The grazing system best resolves the problems associated with changes in elevations and range readiness dates over the allotment. The higher in elevation, Coyote-Clayton unit will not be used before it is ready.
 2. The most serious problem of using the lower units first and again last every year is resolved by the system. Under this alternative the lower two units are deferred until after the growing season is over every other year. This will allow plants to complete their growing cycle in alternative years. It is expected that plant vigor and production will improve.
 3. All range improvements needed to implement this grazing system are in place.
 4. Other resource needs including those of wildlife and watershed are best met by this system of grazing.

IV. ACTION

A. Management Program

The planned program calls for a modified deferred-rotation grazing system with the allotment divided into three pastures. The grazing schedule will be as follows:

<u>Year</u>	<u>Pacer Lake</u>	<u>Pollywog Lake</u>	<u>Coyote-Clayton</u>
1979	C (9/6-10/15)	A (6/16-7/20)	B (7/21-9/5)
1980	A (6/16-7/20)	C (9/6-10/15)	B (7/21-9/5)

(Repeat cycle)

A = graze first - 6/16 until proper use is reached.

B = Graze second - until proper use is reached.

C = Graze third - until proper use is reached or 10/15 - cattle will then be removed from allotment.

Cattle will need to be kept scattered as best possible by riding throughout the season. Cattle will be moved from unit to unit as soon as proper use is reached (50% of the weight of key grasses including stipa, poa, agropyron, carex, festuca, sitanion, and bromus). When the final unit reaches proper use cattle will be removed from the allotment. Proper use will be determined on primary range areas. Any use made of secondary or transitory range as a result of riding and salting for distribution will be a bonus. The amount of effort and success of riding will be a factor in the total length of the grazing season. Past utilization and range condition trend indicates that proper use and the removal of cattle from the allotment will be before the end of the permittee's grazing season on some years.

B. Development Program

In order to implement the grazing system the following improvements were installed in 1977 and 1978:

<u>Name</u>	<u>Type</u>	<u>Location</u>	<u>Size</u>	<u>Priority</u>
Pacer Lake Rim fence	3 wire	Along rim between Pacer Lake & Clayton	.5 mile	
Big Point fence	3 wire	Along rim just above Big Point Spring	.5 mile	
Big Point & Billy Spring	2 water ponds	Sec. 10, T.31S., R.1W		
Sink Holes	pond	Sec. 17, T.33S., R.1E		
Below Pollywog	pond	Sec. 7, T.31S., R.1E		
Big Swale	pond	Sec. 17, T.32S., R.1E		
Antelope Springs	7 miles pipeline & 7 troughs	From Antelope Big Point and the cow camp	7 miles	

The following improvements are planned:

Mud Lake pipeline	pipeline & troughs	Mud Lake Spring	2 miles pipeline 3 troughs	#1
Mud Lake spray project	spray	Mud Lake area	Approximately 500 acres	#2

C. Correlation With Other Uses

There are many needs for correlation on this allotment because it covers such a large and diverse area. It is expected that new problems will arise in the coming years. If the problems are of any great magnitude, the activity associated with them may have to be covered by a separate EAR. The correlation need with just grazing will be covered as follows:

1. Recreation

There are no improved campgrounds on this allotment. A major use of the area for recreation is camping along lower Antimony Creek and around Pacer, Otter and other lakes during the fishing season. There are limited facilities in the Antimony Creek area consisting of tables, fireplaces, and pit toilets. Picknicking by the local people and overnight camping by fishermen not wishing to stay at the Otter Creek reservoir make for considerable use. A conflict may arise when the cattle are placed in the area in the spring. If the cattle should start concentrating along Antimony Creek near the camping area, a fence would be needed to keep them out. This should not be a problem in the fall as recreation drops to practically nothing after September 1. The suitable range excluded by this action would be small and have no effect on the total grazing. If recreation use in the Pacer, Robs, and Otter Lake area should increase, a need for some fencing may arise. At present, the roads to these areas are so rough only light pressure exists. This is not expected to change in the near future.

The heaviest recreation use of the allotment is during the deer hunt. Large numbers of people can be found all over the area. There is little conflict between hunters and cattle because the cattle are removed approximately one month prior to the hunt. Only an occasional stray cow would remain to cause any problems.

2. Watershed

Generally, the allotment is in fair to good watershed condition. Serious flooding did occur out of the Antimony Creek drainage in the 1920's and 1930's. No serious flooding has occurred for the last 15 to 25 years. This period has experienced several high water occurrences. The creek seldom carries much sediment even during the high water period. All of the live creeks and many of the springs are put into irrigation systems right at the Forest boundary. Most overland flow that occurs comes from the pinyon-juniper and sagebrush benches in the lower elevation of the allotment. The proposed revegetation projects, plus an expected increase in litter from the planned grazing system, should improve the watershed in these areas.

3. Wildlife

The allotment is almost entirely within the South Boulder Deer Herd unit. The lower elevations serve as important early winter and early spring range. The attempts to improve this part of the range for wildlife, as well as watershed, are largely why the proposed system has been selected. This deer herd unit has reached a very low population for undetermined reasons. It is impossible to predict what future numbers might be, but any program on the allotment will have to consider the needs of the deer herd as a first priority.

There are sage grouse in the Pollywog Lake-Death Hollow areas. Any revegetation projects in this area should allow for the sage grouse use. Antelope are also found in this area. Herds of up to 40 head have been observed.

Utah Prairie Dogs can be found in the Pollywog Lake area. This endangered species fluctuates in numbers and it is possible he could expand its range over parts of the allotment. All practices undertaken where he is active, or has recently been active, will be done so as not to disturb any colonies. As the range improves, there should be improved habitat for these animals.

4. Timber

There are considerable quantities of commercial and loggable timber on this allotment. This timber consists mainly of spruce and alpine fir. In the past, several sales around Clayton and Upper Coyote Hollow have been logged. These sales were under the clearcut method. Natural regeneration has not occurred but the areas have been planted. To date these plantings have had only limited success. Regeneration on future sales may be a problem but it will be much less as only selective cutting is planned. Some means to protect the sale area may be required after logging to insure regeneration. The planned grazing system should have no additional impact on the timber function.

V. ADMINISTRATIVE ACTION NEEDED TO IMPLEMENT THE PLAN

There are no external problems apparent which need to be completed to implement the plan.

VI. FOLLOW UP

Photo points will be used to determine trend on this allotment. Photo points in existence are as follows:

<u>NAME</u>	<u>TYPE</u>	<u>ESTABLISHED</u>
South Dry Lake	Photo Point	6/26/43
Upper Coyote Hollow	" "	7/23/52
Lower Coyote Hollow	" "	8/3/54
Pacer Lake	" "	6/24/43
Sink Hole Draw	" "	6/19/43
East of Clayton	" "	7/23/72

These photo points are to be rerun on a five year interval. In addition Form R4-2200-15, "Unit Examination Record," will be completed each year. These sources will be used to aid in determining if the system is working.