

MIDDLEMARCH RANCH
MANAGEMENT PLAN

ARIZONA STATE LAND DEPARTMENT

BUREAU OF LAND MANAGEMENT
SAFFORD DISTRICT

DOUGLAS RANGER DISTRICT-CORONADO NATIONAL FOREST

NATURAL RESOURCES CONSERVATION SERVICE
WILLCOX FIELD OFFICE

Prepared by: Marcello Martinez 3-23-98
Marcello Martinez Date
District Range Staff USFS

Prepared by: Walter Alexander (Signed) 10/16/97
Walter Alexander Date
Range Resource Area Manager AZSLD

Prepared by: Don Decker 3/25/97
Don Decker Date
Rangeland Management Specialist NRCS

Agreed to by: Ron & Marilyn Searle 3-25-97
Ron & Marilyn Searle Date
Grazing Permittee

Approved by: William A. Wilcox 10/7/97
William Wilcox Date
Acting District Ranger USFS

Approved by: Dennis Wells 7/14/97
Dennis Wells Date
Arizona State Land Commissioner

Approved by: Clay Timplin 10/14/97
for Bill Timplin Date
District Manager BLM

Approved by: Dave Matthews 3/27/97
Dave Matthews Date
District Conservationist NRCS

Approved by: Tedd Haas 4-1-97
Tedd Haas Date
Chairman Willcox-San Simon NRCD

Approved by: Joan E Scott 11-12-97
Joan Scott Date
Habitat Program Manager AZG&F

I. GENERAL DESCRIPTION

The Searle's Family Ranch is located on the east side of the Dragoon Mountains, beginning approximately 1/2 mile west of the town of Pearce, Arizona. Elevations range from just over 7,100 feet at China and Black Diamond Peaks to 4,380 feet at the far northeast corner of the ranch. The watersheds on the ranch run north and east into the Willcox Playa via Stronghold and Middlemarch Canyon drainages. The ranch encompasses approximately 14,007 acres, made up of approximately 5,364 acres of National Forest, 4,146 acres of State Lands, 4,110 acres of deeded land (both owned, uncontrolled and subdivided leased) and the balance is BLM, 373 acres. Vegetation on the State, deeded and BLM lands is predominantly Southern Arizona Semidesert Grassland. Life Zones on the Forest Lands consists of Riparian, Oak Woodland, Oak/Pinyon/Juniper Woodland, Grassland Savannahs and Shrub Communities (silktassel, mountain mohogany, catclaw, little leaf sumac and manzanita). The average annual precipitation ranges from 12 to 16 inches in the Southern Arizona Semi Desert Grassland, which is predominantly on the private, State and BLM portions, to 16 to 20+ inches in the Mexican Oak-Pine Woodland and Oak Savannah, which is on the Forest. The majority of the annual precipitation comes during the summer months in the form of localized thunderstorms with the next highest amount coming in the winter in broad fronts which are long lasting but of low intensity.

II. AGENCY COORDINATION

This is a coordinated ranch plan between the ranchers, Ron and Marilyn Searle, Willcox-San Simon Natural Resource Conservation District (NRCD), Arizona State Land Department, Natural Resources Conservation Service-Willcox Field Office (NRCS), Bureau of Land Management-Safford District and the Forest Service-Douglas Ranger District. Each of the agencies has different but related management philosophies and missions. The Forest Service has the Coronado National Forest Land Management Plan to guide it's management of livestock grazing in the Douglas Ranger District. The majority of the Forest acres are classified into Management Area 4, which emphasizes sustained harvest of livestock forage and fuelwood, while maintaining and improving wildlife habitat. A smaller portion of the Forest acreage is classified as Management Area 1, which emphasizes visual resources and semi-private dispersed recreation. Refer to the Coronado National Forest Land Management Plan for each Management Area standard and guidelines. The Arizona State Land Department's objective is to sustain the renewable resources while at the same time, maximize revenues. The objectives of the Willcox-San Simon NRCD are to cooperate with the land user and applicable government agencies to get all needed conservation work applied. The NRCS works with

the NRCD as technical advisor to it's cooperators in the application of sound conservation practices, both structural and managerial.

III. LIVESTOCK OPERATION & PERMITTED NUMBERS

The Searle's Ranch is currently owned and operated by Ron and Marilyn Searle who also act as it's managers. The Searle's Ranch runs a cow/calf mix breed operation of up to 187 head. On the National Forest Allotment, 170 cattle are permitted from November 16th to May 15th, (1020 Animal Months (AMs)). The lease on State Land (#05-569), is for 97.2 Animal Units (AUs) yearlong or 1,166.4 AUMs. The lease on BLM land is for 5 Animal Units (AUs) yearlong or 60 AUMs. The calves produced on the ranch are marketed yearly while some are retained as replacements for culled animals.

Historic records indicate that the Searles acquired the ranch in 1970 from Bob and Mary Barber. At this time the ranch included the Forest Service Noonan Allotment. AUM's on the Forest have varied from 180 to 1465 AUMs run primarily in the winter months. For a more detailed listing of the historic use pattern and past permittees on the Forest, see exhibit A.

IV. GRAZING PLAN

GOALS AND OBJECTIVES

The following goals and objectives were identified during past scoping meetings.

Goals:

- * Economically viable ranch operation.
- * 100% of precipitation effectively used by vegetation.
- * Improve ground cover, reduce or eliminate barren areas.
- * Incorporate grass residue into the soil.
- * Increase production of native forage species.
- * Increase species diversity and distribution, in particular, cool and warm season grasses.
- * Improve riparian areas through increased diversity and age classes of riparian species and increase flow periods through these sites.
- * Reduce excessive erosion where it occurs.
- * Enhance wildlife habitat, in particular for the following threatened and endangered species; peregrin falcon, Sanborn's long nosed bat and Chirachua leopard frog.

Objectives:

- * Implement more flexibility into the range management plan.
- * Maintain or decrease the present density of mesquite.
- * Fully utilize all portions of pastures.
- * Develop more waters for livestock and wildlife.
- * Improve range sites which are currently in Poor or Fair condition and maintain range sites which are currently

in Good condition.

The proposed grazing management plan will entail consolidating all of the Searle's Ranch deeded, State, BLM and National Forest permitted lands into one ranch herd operation. The permit on the National Forest would be modified to 204 animal units from November 15th through April 15th, and be rotated through pastures (see exhibit B). These dates would be flexible in order to allow for changes in dates, but not to exceed permitted AM's (1020). During this same period, the remaining ranch herd will be rotated through the private, State and BLM pastures. From May 16th through November 15th the entire herd will be combined and rotated through the private, State and BLM pastures. At times, separate herds will need to be created for the breeding of heifers and for cutting the bulls off of the herd. These separate herds will also be rotated among pastures. Because the State, private and BLM pastures will be receiving summer use every year, and because these pastures will never be without livestock at any time of the year, rotation through these pastures will be alternated so as not to graze the same pasture at the same time each year.

Actual time spent grazing in each pasture should be determined according to achieving proper use on the key forage species. Grazing time spent in each pasture will vary depending on herbage production for that given year. This grazing rotation will allow for at least two non Forest pastures to rest for the entire growing season each year.

This coordinated management plan for the entire ranch will be evaluated three years from it's inception to determine if the plan goals and objectives are being met. If the plan is considered unworkable, a new grazing plan will be created which is agreed to by all parties involved.

V. DISTRIBUTION PRACTICES

A. WATERS: Developed waters on the ranch will be used to distribute cattle where possible. These water developments will be maintained annually by the permittee before cattle go into pastures. All developed waters on the ranch will be maintained for wildlife access and escape ramps.

B. TRAILS: (NF) Permittee will be allowed to maintain historic stock trails for livestock distribution and herding. Maintenance of trails will consist of brushing (blazing) to a width of four feet and to the height of a man on horseback. Any large loose rocks should be removed from the trail.

C. SALT AND SUPPLEMENTAL FEED: Salt and supplemental feed will be used to encourage cattle distribution by placing salt and supplemental feed a minimum of 1/4 mile from water, where feasible. Placement of salt and supplemental feed at or close to meadows and main stock trails will be avoided. Salt and supplemental feed locations will be re-located each

year. Supplemental feed on State Lands will need to be pre-approved by the Range Resource Area Manager.

D. HERDING: Riding to distribute livestock may be necessary in order to reduce long term concentrations of stock, or reduce tendency of cattle to use preferred areas. It may be necessary to move stock around for more uniform utilization.

E. FENCING: Fences will be maintained by permittee/lessee in order to achieve proper utilization and keep the integrity of pastures and the allotments. Any fences constructed or re-constructed will be built to specifications required by that responsible land management agency.

VI. RANGE IMPROVEMENTS: the following range improvements (structural and non-structural) are needed in order to implement this management plan and concurrently improve the range and watershed condition on the Searle's Ranch. For those improvements proposed on National Forest land, the Forest Service will in most cases, provide the materials while the permittee will provide the labor and equipment. Construction of projects will depend on the availability of Range Betterment Funds. For those improvements proposed on State and deeded lands, Farm Services Agency (FSA) cost share monies may be made available through coordination between NRCS and/or the State.

A. FOREST SERVICE STRUCTURAL IMPROVEMENTS:

1. Approximately 1,600 feet of livestock pipeline and a trough will be installed from the Sorin well down past the cross fence into the Upper Middlemarch pasture. Estimated cost is \$4,500 and planned for FY' 1998.

2. A spring in the Black Diamond pasture will be developed. A spring box will be constructed with a pipeline to a trough. Estimated cost is \$2,000 and planned for FY' 1998.

B. FOREST SERVICE NON-STRUCTURAL IMPROVEMENTS:

1. Prescribed fire will be considered for both Stronghold and Upper Middlemarch pastures, to reduce woody vegetation and enhance range condition for wildlife and livestock. If and when prescribed fire is planned, a separate fire plan will have to be completed.

2. Vegetative manipulation through the use of a goat herd is currently being tested on a small scale. Objectives for this treatment are to; restore historical habitat characteristics, restore biodiversity, enhance watershed stability, reduce fire fuel build-up and slow down invader

species such as manzanita, juniper, mesquite and catclaw. If this form of treatment proves successful and economical, it would be implemented on a larger scale throughout the Forest allotment.

C. STATE LAND DEPARTMENT NON-STRUCTURAL IMPROVEMENTS:

1. Although no specific land treatments are currently planned, it is recognized that the following land treatments may be used in the future to accomplish the goal of this management plan; prescribed burning, prescribed natural fire, range seeding, mesquite grubbing, herbicide and various mechanical treatments.

D. DEEDED LAND STRUCTURAL IMPROVEMENTS

1. Construct erosion control structures to stop erosion on subdivided lands. The current grid system of subdivision roads have created erosion channels and have altered the beneficial shallow flooding of bottoms. A cooperative working plan will need to be developed with the County and possibly the development company for the placement, size and location of these structures. Estimated cost is unknown at this time. Earthen erosion control dikes of the size needed for this project could cost \$1,000 each. Amount of structures needed is unknown at this time. The cost of such structures could be partially offset by FSA cost share.

2. Improve the storage at the Pearce windmill by replacing the old, leaking cement storage with a new 10,000 gal. steel storage. Estimated cost is \$2,000 which could be partially offset by FSA cost share.

VII. MAINTENANCE OF IMPROVEMENTS:

National Forest range improvements are noted on Form 2200-5 of the term permit. Range improvement Maintenance responsibility is assigned to the permittee and the permittee is expected to have these improvements in functioning condition prior to bringing livestock onto the Forest. Any new range improvements developed will be assigned to the permittee. Maintenance of range improvements on State Trust lands will be done in accordance with State Land Department Policy Memo P80-1.

VIII. MONITORING & EVALUATION

A. FOREST SERVICE

Evaluation and/or monitoring will consist of the Forest Service conducting annual inspections to look at range conditions, to determine if objectives are being met and if problems exist in the management plan. The Forest Service will also count cattle on or off at their own discretion.

Permittee will be responsible for providing the Forest Service with actual use numbers for the previous year at the time of permit validation.

B. STATE LAND DEPARTMENT

A frequency transect has been established on State Land to monitor trend in the key area. More transects could be established in the future if a need is determined. This transect will be read in the fall by the State Land Department and/or the Natural Resources Conservation Service, along with the lessee or his representative and any other concerned interest; i.e. Arizona Game and Fish Department, Cooperative Extension Service, etc. Photo plots may be established in key areas, these will be retaken on an annual basis at the end of the growing season. Actual use records will be kept by the lessee by pasture on a yearly basis (3/15 through 3/14) and provided to the Range Resource Area Manager.

IX. ALTERNATIVES TO THE PROPOSAL

The above plan will be monitored for a three year period. If positive results are not evident at the end of this period, the following plan will be implemented unless modified and agreed upon by all pertinent parties.

A. FOREST SERVICE

Reduce the season of use but maintain winter use and the single herd rotation through the pastures. AUM's would remain the same.

B. STATE LAND DEPARTMENT

Single herd rotation will remain in place through the non-Forest pastures on the ranch. Actual herd movement through these pastures will be based upon a preset order of rotation which will repeat it's self every three years (see Exhibit C). Actual time spent in each pasture will be determined by achieving proper grazing use on key forage species.

X. ANNUAL OPERATING PLAN

An annual operating plan will be developed between the permittee, SLD, BLM and Forest Service, when the annual grazing permits are validated. The annual operating plan will be an extension of this Coordinated Ranch Plan and document livestock rotation for the season, range improvements needing maintenance, construction of projects proposed and other related activities that involve the non-deeded lands. At this time, the permittee/lessee will provide both rainfall records from the ranch and actual use data.

XI. APPENDIX

A. Ranch Map

History of Grazing UseMiddle March Allotment
Douglas Ranger District

Year (Grazing Season)	Total Aunis	Number Cattle	Season of Use	Permittee & Remarks
1984 - 85	900	150	11/15-5/15	Ron & Marilyn Searle Permit administered by Douglas Ranger District. Permit administered by Willcox R.D. - prior to 1975. Ranch purchased by Ron & Mari- lynn Searle - Permit for 150 Cattle from 11/16 to 5/15. Use in conjunction with Noonan Allot- ment. Bob & Mary Barber
1983 - 84	900	150	11/15-5/5	
1982 - 83	900	150	11/6-5/5	
1981 - 82	900	150	11/16-5/15	
1980 - 81	900	150	11/16-5/15	
1979 - 80	750	150	11/15-4/15	
1978 - 79	750	150	11/16-4/15	
1977 - 78	1250	250	11/15-4/15	
1976 - 77	1350	225	10/16-4/15	
1975 - 76	1250	250	11/16-4/15	
1974 - 75	1250	250	11/16-4/15	Term permit issued for 150 cat- tle from 11/16-5/15 and 12 temp rary from 1/66 to 12/66. Class I non-use - 19 head Term permit issued for 75 cattle yearlong. Purchased by Bob & Mary Barber - Preference 75 cattle yearlong Sarah Itzweire Permit issued for 75 cattle yearlong.
1973 - 74	1465	250	10/15-4/15	
1972 - 73	1067	240	11/10-4/12	
1971 - 72	1080	200	11/15-4/12	
1970 - 71	875	200	12/1-7/31	
1969 - 70	946	148	11/16-4/8	
1968 - 69	813	144	11/16-4/15	
1967 - 68	729	162	11/16-3/31	
1966 - 67	957	162	11/7-5/15	
1965 - 66	900	150	11/16-5/15	
1965	580	75	1/1-12/31	Class I non-use - 19 head Term permit issued for 75 cattle yearlong. Purchased by Bob & Mary Barber - Preference 75 cattle yearlong Sarah Itzweire Permit issued for 75 cattle yearlong.
		5 temp.		
1964	615	75	1/1-12/31	
		5 temp.		
1963	613	75	1/1-12/31	
		5 temp.		
1962	513	56	1/1-12/31	
1961	737	75	1/1-12/31	
		19 temp.		
1960	927	75	1/1-12/31	
		6 temp.		Purchased by Bob & Mary Barber - Preference 75 cattle yearlong Sarah Itzweire Permit issued for 75 cattle yearlong.
1959	870	75	1/1-12/31	
1958	1014	84	1/1-12/31	
1957	770	110	1/1-12/31	
1956	942	75	1/1-12/31	
		6 temp.		
		2 horses		

History of Grazing Use
Continued

Year (Grazing Season)	Totals Aums	Number Cattle	Season of Use	Permittee & Remarks
1955	900	75	1/1-12/31	Ferd Itzweire Estate
1954	1086	75	1/1-12/31	
		20 temp.		
		2 horses		
1953	1263	29 temp.	1/1-12/31	Preference on Stronghold restored.
		2 horses		
1952	900	75	1/1-12/31	
		2 horses		
1951	900	50	1/1-12/31	
		25 temp.		
1950	260	50	6/10-12/31	Ranch sold to Ferd Itzweire Transferred to Violet Kelle preference on Stronghold ca celled. Middlemarch prefer reduced from 93 to 50 becau of trespass.
1949	Total non-use			
1948	600	50	1/1-12/31	
1947	180	30	4/1-12/31	
1946	360	30	1/1-12/31	
1945				
1944	516	49	1/1-12/31	
1943 - 34				
1935				Permit issued for 133.
1934				Protection reduction of 6 h (132)
1933				Protection reduction of 12 (138)
1931 - 21				Preference 150 head (Strong & Middlemarch)
1920				Preference - 73 head
1919				10 head
1918				30 head
1916				10 head - new settler

AZ-RANGE-2
7-59U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
ARIZONA

SEARLE'S RANCH

= growing
season

ROTATION-DEFERRED GRAZING WORK SHEET

STATE-PRIVATE-BLM PASTURES

← PARTIAL HERD → ← TOTAL HERD → → PARTIAL HERD

PASTURE NO. OR NAME	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MON
Pearce	←	→											
Center			←	→									
Upper Mesquite					←	→							
Matney							←	→					
Hill									←	→			
Mesquite											←	→	

1st Year

Pearce								←	→				
Center										←	→		
Upper Mesquite	←	→											
Matney			←	→									
Hill					←	→							
Mesquite							←	→					

2nd Year

Pearce					←	→							
Center							←	→					
Upper Mesquite									←	→			
Matney											←	→	
Hill	←	→											
Mesquite			←	→									

3rd Year

4th Year

5th Year