## COORDINATED MANAGEMENT PLAN LUCKY HILLS RANCH

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### I. INTRODUCTION

#### A. General

The Lucky Hills ranch is located in central Cochise County, Arizona. The headquarters are on the east side of the San Pedro River in Section 3, Township 20 South, Range 22 East. The City of Tombstone, Arizona is approximately one half mile from the ranch headquarters and the ranch "wraps" around town.

## B. Plan Preparation

This plan has been prepared with cooperation and participation from Burton Devere, the Fred Rai Company, the Natural Resources Conservation Service, the Bureau of Land Management, the Arizona State Land Department, and the Arizona Game & Fish Department. The Natural Resources Conservation Service has assumed the lead responsibilities for this coordinated planning effort.

The plan identifies resource objectives, describes the manner in which the livestock grazing operation will be conducted to sustain the resources, identifies needed range improvements, provides the monitoring plan to measure the effectiveness of management actions, and details the procedures for the evaluation and modification of livestock grazing use. The resource data used to develop this plan is included in the appendices. The analysis is on file at the Douglas Field office.

#### C. Land Status

Fred Rai Company owns 680 acres of the private property and the state leases on the ranch. Fred Rai Company also holds the base property to the BLM lease. Burton and Dorothy Devere, in partnership with Fred Rai, operate the Lucky Hills Cattle Company and own 120 acres of private property. There are many patented mining claims, with various owners within the ranch boundaries. They do not affect the grazing management at this time. The ranch encompasses approximately 24,828 acres of Private, State Trust, and BLM lands. Land ownership is broken down as follows:

Private	800
State Trust # 05-1501	10,749
BLM Lease #5252	10,252
Patented Claims	1,320
Uncontrolled State Land	1,707

#### D. Authorized Use

Current authorized use on the ranch is a total of 181 Animal Units Yearlong, or 2172 Animal Unit Months broken down as follows:

Private	96 AUMs/YR	8 AU Yearlong
State Trust Land	998 AUMs/YR	83 AU Yearlong
BLM Lease	1080 AUMs/YR	90 AU Yearlong

#### E. Historical

Lucky Hills ranch was originally owned by John Escapule in the 1880s. It passed on to his son Earnest, who then sold the ranch to Harry Zinnesmeister in 1947. Several individuals owned the ranch during the 1950's and 60's. Harold and Betty Love bought the ranch in the early 1970's. Much of the private land was sold for housing developments adjacent to Tombstone. The Loves sold the ranch as it is today to Fred Rai Company in 1993.

The ranch is operated primarily as a cow-calf operation. Historic grazing use on the ranch has varied from yearlong to best pasture rotation. The area has been grazed heavily in the past due to its proximity to Tombstone.

#### F. Resources

The ranch lies in Major Land Sub Resource Area (MLRA) D41-3, the Chihuahuan Semidesert Grassland. Elevations range from 4000 to 5320 feet. Rainfall ranges from 12 to 16 inches per year, with convective summer thunderstorms producing about 60 percent of the yearly total.

Characteristic vegetation in the Sub-Resource Area includes Sideoats grama, black grama, hairy grama, plains lovegrass, Arizona cottontop, plains bristlegrass, soaptree yucca, mesquite, whitethorn, catclaw acacia, creosote, tarbush, snakeweed, burroweed, and ocotillo. On the ranch range sites include Sandy Loam Upland, Shallow Upland, Granitic Hills, Limestone Hills, Limy Upland, Sandy Bottom, Loamy Bottom, and Sandy Loam Deep.

Copies of the NRCS Range Site Descriptions for the ranch will be provided to the rancher by the Natural Resources Conservation Service, and to other agency personnel who request a copy. These site descriptions will be used to assess range condition on the ranch. The site descriptions describe the characteristics of each site, and the potential native plant communities that are found on the sites when the sites are in excellent range condition.

#### II. ISSUES

## A. Range Condition

Range condition on the ranch ranges from poor to excellent. Range condition is determined by comparing the existing plant communities with the potential plant communities as described by the NRCS range site guides. Poor condition is found primarily along the drainages. Fair condition is found on most of the hills. Good to Excellent condition is found on the range sites that normally have a high component of shrubs in the plant community and on the hills that haven't been grazed in some time. All Poor and Fair condition rangeland should be improved to Good or Excellent range condition.

#### B. Wildlife

Special status wildlife species known to exist in the area include the Sonoran Desert Tortoise, Sanborn's Longnosed Bat, and the Gray Hawk. In addition, there are several regulated species including Mule Deer, Cottontail Rabbits, Jackrabbits, Coyote, Javelina, Mourning Dove, and Gambel Quail.

Lesser long-nosed bats feed primarily on flower nectar and pollen of agaves. Due to the scattered nature of agave on the hill tops and slopes, it is not anticipated that any planned range improvements will have an impact on the habitat. However, care will be taken to avoid disturbing any Palmer agave during construction of range improvements in the hills.

The Gray Hawk habitat is limited to portions of pastures 11 and 12 along the San Pedro River. Planned range improvements will not affect this area save for the pipeline from Boquillas headquarters.

One special status plant species, Cochise Pincushion Cactus (Coryphantha robbinsorum), possibly occurs in the area. It may occur on the Limestone Hills at an elevation of 4200 feet. No documented populations exist on the ranch.

#### C. Erosion

Soil erosion on most of the upland sites is at acceptable levels. Areas in poor to low fair condition have lost enough vegetative cover to allow sheet and rill erosion to begin carrying away the valuable surface soils on some of these areas. The rate of range condition improvement will be dependent on topsoil remaining.

#### D. Water

Water distribution problems exist on the ranch, causing livestock grazing to be concentrated in some areas, with little if any use in other areas. New waters will be needed to implement a grazing rotation program effectively, and to improve distribution of grazing pressure. Water quality problems can be caused when livestock use surface water areas such as ponds. This can be reduced by using above ground water developments such as troughs whenever possible, or building lanes that allow animals access to water but prevent standing and bedding on most of the immediately adjacent area.

#### E. Off road Use

Off road vehicles, recreational shooting and vandalism is a serious problem around the Charleston Lead Mine at the western end of the ranch. Closing the road has been proposed and is being considered. An alternative would be to contact off road groups, such as "NOMADS" and encourage an "Adopt a Fence" program. Participation in the Arizona Game & Fish Department's "Land Owner Respect" program may be a possibility as well.

#### F. National Conservation Area

Part of the Lucky Hills Ranch is located within the San Pedro National Conservation Area. These lands are: T.20S, R.21E Section 13 (640 acres)

Section 14 (280 acres) Section 23 (169 acres) Section 24 (640 acres)

Total: 1729 Acres within the NCA

The Safford RMP required the development of a grazing management plan to insure the protection of the riparian values of the National Conservation Area. Although no riparian habitat occurs on the public lands in the Lucky Hills Ranch, the uplands are directly adjacent to the San Pedro River and the mange of these parcels can affect the watershed. This Coordinated Management Plan will guide the management of these adjacent uplands and will provide monitoring of the resources to determine the effectiveness of the livestock management.

Cattle getting into the river and being lost due to dense vegetation is a problem. A community roundup in the river once a year has been proposed.

#### G. Cultural Resources

Cultural Resources, both prehistoric and historic, exist on the ranch. The significance of these resources needs to be examined.

#### III. GOALS

Maintain a self sustaining economically feasible ranching operation.

Improve overall Range site condition to Good or Excellent.

Maintain habitats in a condition that supports the long-term survival of special status wildlife and economically important game species.

Monitor the effects of the management program to document changes in the condition of the resources, and make necessary changes if goals are not being achieved.

Manage Off road use through participation programs, etc. to decrease/eliminate vandalism.

Identify and protect significant cultural resources present on the ranch.

#### IV. OBJECTIVES

Limit average use of perennial grass species to 30-60 percent of the current growing season's production.

Install new fences and water developments, as shown on the plan map, to improve the distribution of livestock grazing and allow a Planned Grazing System to be carried out.

Control access and vandalism through "Adopt a Fence" and other similar programs. Road closures remain an option.

#### V. GRAZING MANAGEMENT

## A. Grazing Schedule

The cattle on the ranch will be run as one herd. Replacement heifers will be from the ranch's own cattle. Bulls will be put on in the spring and removed in early fall. Grazing will be in a best pasture rotation with the hills being used in the winter. Each pasture will be grazed approximately two months. No pasture will be grazed at the same time every year.

## B. Flexibility

Due to annual variability in forage production, resulting from yearly variability in the climate, it may be necessary to move livestock earlier or later than planned. The rancher will keep records of when livestock are actually moved, and provide actual use information to the participating agencies during annual monitoring and plan review meetings.

#### VI. MONITORING

Over the first three years of the plan implementation, monitoring sites will be located in each of the main pastures involved in the grazing rotation. At each of the upland monitoring locations, the following methods of monitoring will be used to determine whether range condition, trend, and utilization goals are being achieved.

- 1. Photos will be taken to provide visual support to the data collected
- Range site condition will be determined at the site upon establishment.
- Pace frequency data will be collected on summer rested pastures.
- Utilization data will be collected at monitoring sites.
- 5. Range site condition will be reevaluated if trend data shows significant changes.

Monitoring activities will be done every other year, normally in the fall, with all parties involved in the coordinated management plan. It is very important to the success of this management plan that the lessee/ranch manager be involved in the monitoring.

#### VII. PLANNED IMPROVEMENTS

The following improvements are planned for the ranch. They are listed in no order of priority or timetable:

A pipeline will be installed from the Boquillas headquarters within the NCA to pasture eleven to provide clean water.

A fence will be installed along the northeast boundary between the ranch and new subdivision to Middle March Road.

A fence will be installed along the Tombstone City aqueduct between the hills to form two "mountain" pastures.

A well will be drilled and a pipeline and trough installed below Ajax Hill to provide water for the mountain pastures and lower flats as well.

A fence will be installed south from Ajax Hill to the southern boundary of the ranch to divide the large flat into two pastures.

A fence will be installed from Emerald Gulch to Highway 80 to restrict cattle's movement from the City of Tombstone. This will allow a pasture in the Emerald Gulch area to be used that cannot be at this time.

A pipeline will be installed from Landin Park to the ranch and a trough installed in section 13, T20S, R22E

Dirt tanks that are silted in will be cleaned as necessary to maintain current watering areas.

# LUCKY HILLS RANCH COORDINATED MANAGEMENT PLAN SIGNATURE PAGE

Plan Approved By:	
But Rend.	Date: 1/15/97
Burton Devere, Lucky Hills Cattle Company	7-7-
Manfred Paile	Date: ///5/97
Fred Rai, President, Fred Rai Corporation	
William Sindsly	Date: \$/13/97
William Lindsey, Chairman, Hereford Natural Resources Conservation District	111
M. Jean Hassell, Arizona State Land Commissioner	Date:3/6/97
M. Jean Hassell, Arizona State Land Commissioner	
Jenel Que	Date: 2/4/97
Jesse J. Juen, Bureau of Land Management, Tucson District	
Geoffrey E. Parker, District Conservationist, Natural Resources Conservation Service	Date: 3.12-97
Plan Reviewed By:	
Joan Scott, Habitat Program Manager, Arizona Game and Fish Department	Date: 2/11/97