### CHIMINEA CANYON NATURAL AREA

# Purpose

To maintain in natural state an area bearing representative samples of the vegetation characteristic of the southern Arizona desert. In addition to a large number of splendid specimens of giant cactus, the area contains a great variety of other cacti, woody shrubs and herbs. An area of this kind should prove particularly valuable for botanical study by classes at the University of Arizona.

### Description:

## Location of Area

- (a) T. 15 S., R. 17 E., G. & S.R.M. Approximately what will be the SE/4, of Section 4, when surveyed.
  - (b) Located in Chiminea Canyon, approximately 1 mile north of the Rincon Ranger Station on the Rincon District. The area is at present unsurveyed, only a fractional survey of T. 15 S., R. 17 E. having been made and approved. (Map attached.)
  - (c) Acreage, 160 acres more or less. All public. No entries of record, under any of the public land laws.

### Acreage by Dominant Cover Types

The entire acreage is distinctive of the desert type of cover, common to southern Arizona. The vegetation includes abundant sahuaros, palo verde, hackberry, mesquites, mimosas, Franseria, Encelia, Jatropha, Baccharis linearis. The more important plants represented in the area follow:

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Aristida spp. Andropogon spp.

Bouteloua curtinpendula

eriopoda

rothrockii .

filiformis

Poppaphorum sp.

Hiliria belangeri

Heteropogon contortus

Triodia spp.

Valota saccharata

Ambrosia sp.

Lycium spp.

Sapindus sp.

Zinnia sp.

Animal and Bird Life

Hibiscus sp. Cereus giganteus Acacia spp. Baccharis spp. Anisacanthus sp. Calliandra sp. Celtis spp.

Cercidium sp.

Franseria sp.

Encelia farinosa

Hymenoclea monogyra

Isocoma sp.

Prosopis glandulosa

Eriogonum wrightii

Psilostrophe sp.

Birds noted or heard within the area are:

Baird Wren (Thryomanes bewicki bairdi)

Gambel Quail (Lophortyx gambeli)

Gila Woodpecker (Centurus uropygialis)

Gilded Flicker (Colaptes probably chrysoides)

Thrasher (Toxostoma)

Cactus Wren (Heleodytes brunneicapillus couesi)

### Mammals common to the area are:

Jack Rabbits (Lepus)

Cottontails (Sylvilagus auduboni arizonae)

Pocket Mice (Perognathus)

Merriam kangaroo rat (Dipodomys merriami)

Mexican Mule Deer (Odoceileus hemonius canus)

Yaqui peccary (Tayassu Angulatum Sonoriense)

This animal life is typical of the desert fauna of which this area is representative.

# Physical and Climatic Conditions Prevailing on Area

- (a) Elevation about 3500 feet.
- Topography: Chiminea Canyon is the dominant topographical feature. (b) This canyon has its source in the Rincon Mountains to the north, and trends in a southerly direction. The area adjacent to the canyon is more or less broken by ridges and rolling hills with occasional level

# (Chiminea Canyon Natural Area

- benches or mesas. The area is not difficult to traverse by reason of any outstanding topographical features.
- (c) <u>Soils:</u> Shallow and rocky with an abundance of rock outcrops. The canyon itself is filled with large boulders. A gravelly loam appears to be the soil type.
- (d) Precipitation: The precipitation throughout this area is typical of the desert regions. The mean annual precipitation at Vail, Arizona, about 13 miles distant, for a period of 25 years was 10.73 inches. Light rains occur from December to March and from mid-July to mid-September.
- (e) Temperature ranges from a maximum average of 106 degrees to a minimum of 12 to 18 degrees. Killing frosts rarely occur between April 15 and December 1.

#### Forest Value

Species previously described. The area is within a protection forest and the forest cover has practically no commercial value. The fire hazard is low and there is no record of any recent firest within the area.

# Agricultural Value

No agricultural values exist and the area has previously been classified and lacking in such values.

### Grazing Value

The area is included within the Rincon cattle and horse grazing allotment and has a low carrying capacity, typical of the desert type of range.

Probably 80 to 100 surface acres per head of stock would be an accurate estimate on a yearlong basis and hence the grazing value, per se, is not a very important factor. There is permanent water in restricted localities

Mineral Values

in Chiminea Canyon, however, and this question of water would probably cause some conflict with the grazing use of the area, if it is eventually fenced, but the value of the area for research far outweighs the grazing value.

This entire region has been worked over for minerals from the days of early settlement. There is no record of any claims but the area has been prospected and evidences of abandoned mine location monuments are found throughout the area. No apparent mineral values of importance are in evidence, however, and it is probable that if any such values ever existed they would have been discovered long since.

# Value of Area for Public Uses Other than Those Enumerated

There are absolutely no hydro-electric power values; no irrigation or reservoir values. Public use values are not high although the region is occasionally used for picnic parties and for hunting parties as a campsite, during the open season. However, there are other sites in the near vicinity which are and can be used for the same purposes.

### Transportation Facilities

Tucson, Arizona, is distant about 45 miles, of which 23 is over a state highway. From this highway, the area is distant about 13 miles by a very fair road. The area is distant 1 mile from the Rincon Ranger Station via an old road, evidently constructed in years past for mining purposes. Aside from a few scattered ranches to the south of the area, there is no extensive settlement nearer than Tucson, with its 40,000 population.

# Public Sentiment

No unfavorable sentiment would probably develop from the classification of this area as a research reserve. To the contrary, its nearness to Tucson, at which point are located the University of Arizona, the Carnegie Desert Laboratory and the Coronado Forest headquarters causes it to be especially well adapted to the purpose. The area was examined on December 13, 1929 by a party consisting of:

Dr. H.L. Shantz, President of the University of Arizona professors

C.T. Vorhies and W.G. McGinnies of the College of Agriculture

of the University

Dr. W.P.Taylor of the U.S. Biological Survey W.G. Koogler, Assistant Range Examiner. J.S. Pomeroy, Forest Ranger Fred Winn, Forest Supervisor

All were favorably impressed with the proposed classification.

# Plan of Management

Although it is improbable that the area will ever be in demand for recreation or any other kind of use except grazing, all activity which might disturb the natural condition should be prohibited. No public camp grounds or picnic grounds should be permitted. Removal of plants should be limited strictly to specimens for scientific purposes. Grazing need not be totally excluded, but should be carefully regulated to prevent overgrazing. As soon as possible a representative plot of about 40 acres should be fenced against all domestic livestock. Roads and trails as needed for fire protection are permissible, but they should aim merely to meet the needs of forest officers, without encouraging travel by the public.

Approved:				
/s/ T. E. Winn				
Forest Supervisor				
/s/ G. A. Pearson				
Director, Southwestern	Forest	& Range	Exp.	Station
1s/ Frank C. W. Foster				
Regional Forester				

Washington, D. C.,

February 26, 1931

By virtue of the authority vested in me by Reg. L-20 of the regulations of the Secretary of Agriculture relating to the occupancy, use, protection, and administration of the National Forests, I do hereby designate as the Chiminea Canyon Natural Area the lands described in a report dated January, 1931, by \_\_\_\_\_\_; said lands shall hereafter be administered as a Natural Area subject to the provisions of said regulation and the instructions thereunder.

Forester.