United States Department of the Interior
U.S. Fish and Wildlife Service
2321 West Royal Palm Road, Suite 103
Phoenix, Arizona 85021-4951
Telephone: (602) 640-2720 FAX: (602) 640-2730

In Reply Refer To:
AESO/SE
2-21-00-I-107

January 2, 2001

Memorandum

To: Chief Compliance Officer, Grand Canyon National Park, Grand Canyon, Arizona

From: Field Supervisor

Subject: 1995 General Management Plan - Comments on Proposed North Rim Projects (Packages 6, 28, 47, 48, 53 and 54)

This memorandum responds to your November 29, 2000, request for an inventory of threatened or endangered species, or those that are proposed to be listed as such under the Endangered Species Act of 1973, as amended (Act), which may potentially occur in your project area (Coconino County). The attached list may include candidate species as well. We hope the attached county list of species will be helpful. In future communications regarding this project, please refer to consultation number 2-21-00-I-107.

The attached list of the endangered, threatened, proposed, and candidate species includes all those potentially occurring anywhere in the county, or counties, where your project occurs. Please note that your project area may not necessarily include all or any of these species. The information provided includes general descriptions, habitat requirements, and other information for each species on the list. Also on the attached lists are the Code of Federal Regulations (CFR) citation for each list and is available at most public libraries. This information should assist you in determining which species may or may not occur within your project area. Site-specific surveys could also be helpful and may be needed to verify the presence or absence of a species or its habitat as required for the evaluation of proposed project-related impacts.

Endangered and threatened species are protected by Federal law and must be considered prior to project development. If the action agency determines that listed species or critical habitat may be adversely affected by a federally funded, permitted, or authorized activity, the action agency must request formal consultation with the Service. If the action agency determines that the planned action may jeopardize a proposed species or destroy or adversely modify proposed critical habitat, the action agency must enter into a section 7 conference with the Service. Candidate species are those which are being considered for addition to the list of threatened or endangered species. Candidate species are those for which there is sufficient information to support a proposal for listing. Although candidate species have no legal protection under the Act, we recommend that they be considered in the planning process in the event that they become listed or proposed for listing prior to project completion.

If any proposed action occurs in or near areas with trees and shrubs growing along watercourses, known as riparian habitat, the Service recommends the protection of these areas. Riparian areas are critical to biological community diversity and provide linear corridors important to migratory species. In addition, if the project will result in the deposition of dredged or fill materials into waterways or excavation in waterways, we recommend you contact the Army Corps of Engineers which regulates these activities under Section 404 of the Clean Water Act.

The State of Arizona protects some plant and animal species not protected by Federal law. We recommend you contact the Arizona Game and Fish Department and the Arizona Department of Agriculture for State-listed or sensitive species in your project area.

The Service appreciates your efforts to identify and avoid impacts to listed and sensitive species in your project area. If we may be of further assistance, please feel free to contact Tom Gatz.

Jacqueline Hanson
for David L. Harlow

Attachment

cc: John Kennedy, Habitat Branch, Arizona Game and Fish Department, Phoenix, AZ

LISTED, PROPOSED, AND CANDIDATE SPECIES FOR THE FOLLOWING COUNTY: **COCONINO**

10/25/2000

1) LISTED

TOTAL= 15

NAME: **BRADY PINCUSHION CACTUS** *PEDIOCACTUS BRADYI*

STATUS: ENDANGERED CRITICAL HAB No RECOVERY PLAN: Yes CFR: 44 FR 61784, 10-26-1979

DESCRIPTION: SMALL, SEMI-GLOBOSE CACTUS, 2.4 INCHES TALL AND 2 INCHES IN DIAMETER. SPINES ARE WHITE OR YELLOWISH-TAN. THE SPINE CLUSTERS 1-2 CENTRAL SPINES & 14-15 SPREADING RADIAL SPINES. FLOWER: STRAW YELLOW PRODUCED AT TOP OF THE STEM

ELEVATION RANGE: 3850-4500 FT.

COUNTIES: COCONINO

HABITAT: BENCHES & TERRACES IN NAVAJO DESERT NEAR MARBLE GORGE.

SUBSTRATE IS KAIBAB LIMESTONE CHIPS OVER MOENKOPI SHALE AND SANDSTONE SOIL. PLANT COMMUNITY DOMINATED BY SHADSCALE (ATRIPLEX CONFERTIFOLIA), SNAKEWEED (GUTEIERREZIA SAROTHRAE), MORMON TEA (EPHEDRA VIRIDIS), AND DESERT TRUMPET (ERIOGONUM INFLATUM). PROTECTED BY CITES AND ARIZONA NATIVE PLANT LAW.

NAME: **NAVAJO SEDGE** *CAREX SPECUICOLA*

STATUS: THREATENED CRITICAL HAB Yes RECOVERY PLAN: Yes CFR: 50 CFR 19373, 5-8-85

DESCRIPTION: PERENNIAL FORB WITH TRIANGULAR STEMS, ELONGATED RHIZOMES. FLOWER: WHITE JUNE AND JULY

ELEVATION RANGE: 5700-6000 FT.

COUNTIES: COCONINO, NAVAJO, APACHE

HABITAT: SILTY SOILS AT SHADY SEEPS AND SPRINGS

DESIGNATED CRITICAL HABITAT IS ON THE NAVAJO NATION NEAR INSCRIPTION HOUSE RUINS. FOUND AT SEEP SPRINGS ON VERTICAL CLIFFS OF PINK-RED NAVAJO SANDSTONE.

NAME: **SAN FRANCISCO PEAKS GROUNDSEL** *SENECIO FRANCISCANUS*

STATUS: THREATENED CRITICAL HAB Yes RECOVERY PLAN: Yes CFR: 48 FR 52743, 11-22-1983

DESCRIPTION: MEMBER OF SUNFLOWER FAMILY, DWARF ALPINE SPECIES 1.2-4 INCHES TALL. LEAVES DEEPLY LOBED. FLOWERS: 0.5 INCH DIAMETER 1-6 YELLOW-GOLD FLOWERS.

ELEVATION RANGE: 10900+ FT.

COUNTIES: COCONINO

HABITAT: ALPINE TUNDRA

DESIGNATED CRITICAL HABITAT IS SAN FRANCISCO PEAKS. FOUND ABOVE SPRUCE-FIR AND PINE FORESTS ON TALUS SLOPES.

NAME: **SENTRY MILK-VETCH** *ASTRAGALUS CREMNOPHYLAX VAR CREMNOPHYLA*

STATUS: ENDANGERED CRITICAL HAB No RECOVERY PLAN: No CFR: 55 FR 50184, 12-5-1990

DESCRIPTION: < 1 INCH HIGH FORMING A MAT 1-10 INCHES IN DIAMETER. FLOWERS: PALE PURPLE APRIL TO MAY

ELEVATION RANGE: >4000 FT.

COUNTIES: COCONINO

HABITAT: PINYON-JUNIPER-CLIFFROSE ON A WHITE LAYER OF LIMESTONE

GROWS ON KAIBAB LIMESTONE WITH LITTLE SOIL IN AN UNSHADED OPENING IN PINYON-JUNIPER. POSSIBLY MORE POPULATIONS TO BE FOUND ON SOUTH RIM OF GRAND CANYON AND EAST RIM OF MARBLE GORGE.

NAME: **SILER PINCUSHION CACTUS** *PEDIOCACTUS SILERI*

STATUS: THREATENED CRITICAL HAB No RECOVERY PLAN: Yes CFR: 44 FR 61786, 11-26-1979

DESCRIPTION: SMALL SOLITARY OR CLUSTERED CACTUS GLOBOSE SHAPED ABOUT 5 INCHES TALL AND 3-4 INCHES IIN DIAMETER. FLOWERS: YELLOW WITH MAROON VEINS

ELEVATION RANGE: 2800-5400 FT.

COUNTIES: MOHAVE COCONINO

HABITAT: DESERTSCRUB TRANSITIONAL AREAS OF NAVAJO, SAGEBRUSH AND MOHAVE DESERTS

GROWS ON GYPSIFEROUS CLAY AND SANDY SOILS OF MOENKOPI FORMATION.

NAME: **WELSHS MILKWEED** *ASCLEPIAS WELSHII*

STATUS: THREATENED CRITICAL HAB Yes RECOVERY PLAN: Yes CFR: 52 FR 41435, 10-28-1987

DESCRIPTION: MILKWEED FAMILY (ASCLEPIADACEAE), RHIZOMATOUS, HERBACEOUS PERENNIAL, 10-40 INCHES TALL WITH LARGE OVAL LEAVES. FLOWERS: CREAM COLORED, ROSE TINGED IN CENTER.

ELEVATION RANGE: VARIES FT.

COUNTIES: COCONINO

HABITAT: OPEN STABILIZED DESERTSCRUB DUNES AND LEE SIDE OF ACTIVE DUNES

DESIGNATED CRITICAL HABITAT IS IN UTAH.

LISTED, PROPOSED, AND CANDIDATE SPECIES FOR THE FOLLOWING COUNTY: **COCONINO**

10/25/2000

NAME: **KANAB AMBERSNAIL** *OXYLOMA HAYDENI KANABENSIS*

STATUS: ENDANGERED CRITICAL HAB No RECOVERY PLAN: Yes CFR: 57 FR 13657, 04-17-1992

DESCRIPTION: SMALL 14-19 MM (<0.7 INCH), LIGHT AMBER COLOR, SOMETIMES GRAYISH-AMBER MOTTLED; RIGHT HANDED SHELL

ELEVATION RANGE: 2,900 FT.

COUNTIES: COCONINO

HABITAT: TRAVERTINE SEEPS AND SPRINGS IN GRAND CANYON NATIONAL PARK

EXTREMELY GEOGRAPHICALLY ISOLATED. THREE HISTORIC POPULATIONS; TWO REMAINING; ONE ON PRIVATE PROPERTY IN UTAH AND ONE IN GRAND CANYON NATIONAL PARK; SPECIES AFFECTED BY OPERATIONS BY GLEN CANYON DAM. ASSOCIATED WITH WATERCRESS, MONKEY FLOWER, AND OTHER WETLAND VEGETATION.

NAME: **BLACK-FOOTED FERRET** *MUSTELA NIGRIPES*

STATUS: ENDANGERED CRITICAL HAB No RECOVERY PLAN: Yes CFR: 32 FR 4001, 03-11-67

DESCRIPTION: WEASEL-LIKE, YELLOW BUFF COLORATION WITH BLACK FEET, TAIL TIP, AND EYE MASK. IT HAS A BLUNT LIGHT COLORED NOSE AND IS 15-18 INCHES LONG AND TAIL LENGTH IS 5-6 INCHES.

ELEVATION RANGE: <10,500 FT.

COUNTIES: COCONINO, APACHE, NAVAJO

HABITAT: GRASSLAND PLAINS GENERALLY FOUND IN ASSOCIATION WITH PRAIRIE DOGS

UNSURVEYED PRARIE DOG TOWNS MAY BE OCCUPIED BY FERRETS OR MAY BE APPROPRIATE FOR FUTURE REINTRODUCTION EFFORTS. THE SERVICE DEVELOPED GUIDELINES FOR SURVEYING PRAIRIE DOG TOWNS WHICH ARE AVAILABLE UPON REQUEST. NO POPULATIONS OF THIS SPECIES CURRENTLY KNOWN TO EXIST IN ARIZONA.

NAME: **HUMPBACK CHUB** *GILA CYPHA*

STATUS: ENDANGERED CRITICAL HAB Yes RECOVERY PLAN: Yes CFR: 32 FR 4001, 03-11-1967;59 FR 13374, 03-21-1994

DESCRIPTION: LARGE (18 INCH) MINNOW FLATTENED HEAD LONG FLESHY SNOUT, LARGE FINS, AND A VERY LARGE HUMP BETWEEN THE HEAD AND THE DORSAL FIN

ELEVATION RANGE: <4000 FT.

COUNTIES: COCONINO, MOHAVE

HABITAT: LARGE WARM TURBID RIVERS ESPECIALLY CANYON AREAS WITH DEEP FAST WATER

CRITICAL HABITAT IN GRAND CANYON

LISTED, PROPOSED, AND CANDIDATE SPECIES FOR THE FOLLOWING COUNTY: **COCONINO**

10/25/2000

NAME: **LITTLE COLORADO SPINEDACE** *LEPIDOMEDA VITTATA*

STATUS: THREATENED CRITICAL HAB Yes RECOVERY PLAN: Yes CFR: 52 FR 35054

DESCRIPTION: SMALL (<4 INCHES LONG) SILVERY MINNOW WHICH IS DARKER ON THE BACK THAN THE BELLY

ELEVATION RANGE: 4000-8000 FT.

COUNTIES: COCONINO, APACHE, NAVAJO

HABITAT: MODERATE TO SMALL STREAMS IN POOLS AND RIFFLES WITH WATER FLOWING OVER GRAVEL AND SILT

CRITICAL HABITAT INCLUDES EIGHTEEN MILES OF EAST CLEAR CREEK, EIGHT MILES OF CHEVELON CREEK, AND FIVE MILES OF NUTRIOSO CREEK

NAME: **RAZORBACK SUCKER** *XYRAUCHEN TEXANUS*

STATUS: ENDANGERED CRITICAL HAB Yes RECOVERY PLAN: Yes CFR: 55 FR 21154, 05-22-1990; 59 FR 13374, 03-21-1994

DESCRIPTION: LARGE (UP TO 3 FEET AND UP TO 16 POUNDS) LONG, HIGH SHARP-EDGED KEEL-LIKE HUMP BEHIND THE HEAD. HEAD FLATTENED ON TOP. OLIVE-BROWN ABOVE TO YELLOWISH BELOW.

ELEVATION RANGE: <6000 FT.

COUNTIES: GREENLEE, MOHAVE, PINAL, YAVAPAI, YUMA, LA PAZ, MARICOPA (REFUGIA), GILA, COCONINO, GRAHAM

HABITAT: RIVERINE & LACUSTRINE AREAS, GENERALLY NOT IN FAST MOVING WATER AND MAY USE BACKWATERS

SPECIES IS ALSO FOUND IN HORSESHOE RESERVOIR (MARICOPA COUNTY).CRITICAL HABITAT INCLUDES THE 100-YEAR FLOODPLAIN OF THE RIVER THROUGH GRAND CANYON FROM CONFLUENCE WITH PARIA RIVER TO HOOVER DAM; HOOVER DAM TO DAVIS DAM; PARKER DAM TO IMPERIAL DAM. ALSO GILA RIVER FROM AZ/NM BORDER TO COOLIDGE DAM; AND SALT RIVER FROM HWY 60/SR 77 BRIDGE TO ROOSEVELT DAM; VERDE RIVER FROM FS BOUNDARY TO HORSESHOE LAKE.

NAME: **BALD EAGLE** *HALIAEETUS LEUCOCEPHALUS*

STATUS: THREATENED CRITICAL HAB No RECOVERY PLAN: Yes CFR: 60 FR 35999, 07-12-95

DESCRIPTION: LARGE, ADULTS HAVE WHITE HEAD AND TAIL. HEIGHT 28 - 38"; WINGSPAN 66 - 96". 1-4 YRS DARK WITH VARYING DEGREES OF MOTTLED BROWN PLUMAGE. FEET BARE OF FEATHERS.

ELEVATION RANGE: VARIES FT.

COUNTIES: YUMA, LA PAZ, MOHAVE, YAVAPAI, MARICOPA, PINAL, COCONINO, NAVAJO, APACHE, SANTA CRUZ, PIMA, GILA, GRAHAM, COCHISE

HABITAT: LARGE TREES OR CLIFFS NEAR WATER (RESERVOIRS, RIVERS AND STREAMS) WITH ABUNDANT PREY

SOME BIRDS ARE NESTING RESIDENTS WHILE A LARGER NUMBER WINTERS ALONG RIVERS AND RESERVOIRS. AN ESTIMATED 200 TO 300 BIRDS WINTER IN ARIZONA. ONCE ENDANGERED (32 FR 4001, 03-11-1967; 43 FR 6233, 02-14-78) BECAUSE OF REPRODUCTIVE FAILURES FROM PESTICIDE POISONING AND LOSS OF HABITAT, THIS SPECIES WAS DOWN LISTED TO THREATENED ON AUGUST 11, 1995. ILLEGAL SHOOTING, DISTURBANCE, LOSS OF HABITAT CONTINUES TO BE A PROBLEM. SPECIES HAS BEEN PROPOSED FOR DELISTING (64 FR 36454) BUT STILL RECEIVES FULL PROTECTION UNDER ESA.

LISTED, PROPOSED, AND CANDIDATE SPECIES FOR THE FOLLOWING COUNTY: **COCONINO**

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NAME: **CALIFORNIA CONDOR** *GYMNOPS CALIFORNIANUS*

STATUS: EXPERIMENTAL/NONESSENTIAL CRITICAL HAB No RECOVERY PLAN: Yes CFR: 32 FR 4001; 03-11-67

DESCRIPTION: VERY LARGE VULTURE (47 IN., WINGSPAN TO 9 1/2 FT, WEIGHT TO 22 LBS); ADULT PLUMAGE BLACKISH, IMMATURE MORE BROWNISH; ADULT WING LININGS WHITE, IMMATURE MOTTLED; HEAD & UPPER PARTS OF NECK BARE; YELLOW-ORANGE IN ADULTS, GRAYISH IN IMMATURE.

ELEVATION RANGE: VARIES FT.

COUNTIES: MOHAVE, COCONINO, NAVAJO, APACHE

HABITAT: HIGH DESERT CANYONLANDS AND PLATEAUS

LAST WILD CONDOR REPORTED IN ARIZONA IN 1924. RECOVERY PROGRAM HAS REINTRODUCED CONDORS TO NORTHERN ARIZONA, WITH THE FIRST RELEASE (6 BIRDS) IN DECEMBER 1996. RELEASE SITE LOCATED AT THE VERMILLION CLIFFS (COCONINO CO.), WITH AN EXPERIMENTAL/NONESSENTIAL AREA DESIGNATED FOR MOST OF NORTHERN ARIZONA AND SOUTHERN UTAH.

NAME: **MEXICAN SPOTTED OWL** *STRIX OCCIDENTALIS LUCIDA*

STATUS: THREATENED CRITICAL HAB Yes RECOVERY PLAN: Yes CFR: 56 FR 14678, 04-11-91

DESCRIPTION: MEDIUM SIZED WITH DARK EYES AND NO EAR TUFTS. BROWNISH AND HEAVILY SPOTTED WITH WHITE OR BEIGE.

ELEVATION RANGE: 4100-9000 FT.

COUNTIES: MOHAVE, COCONINO, NAVAJO, APACHE, YAVAPAI, GRAHAM, GREENLEE, COCHISE, SANTA CRUZ, PIMA, PINAL, GILA, MARICOPA

HABITAT: NESTS IN CANYONS AND DENSE FORESTS WITH MULTI-LAYERED FOLIAGE STRUCTURE

GENERALLY NESTS IN OLDER FORESTS OF MIXED CONIFER OR PONDERSA PINE/GAMBEL OAK TYPE, IN CANYONS, AND USE VARIETY OF HABITATS FOR FORAGING. SITES WITH COOL MICROCLIMATES APPEAR TO BE OF IMPORTANCE OR ARE PREFERED. CRITICAL HABITAT WAS REMOVED IN 1998 BUT RE-PROPOSED IN JULY2000 FOR APACHE, COCHISE, COCONINO, GILA, GRAHAM, GREENLEE, MARICOPA, MOHAVE, NAVAJO, PIMA, PINAL, SANTA CRUZ, AND YAVAPAI COUNTIES.

NAME: **SOUTHWESTERN WILLOW FLYCATCHER** *EMPIDONAX TRAILLII EXTIMUS*

STATUS: ENDANGERED CRITICAL HAB Yes RECOVERY PLAN: No CFR: 60 FR 10694, 02-27-95

DESCRIPTION: SMALL PASSERINE (ABOUT 6") GRAYISH-GREEN BACK AND WINGS, WHITISH THROAT, LIGHT OLIVE-GRAY BREAST AND PALE YELLOWISH BELLY. TWO WINGBARS VISIBLE. EYE-RING FAINT OR ABSENT.

ELEVATION RANGE: <8500 FT.

COUNTIES: YAVAPAI, GILA, MARICOPA, MOHAVE, COCONINO, NAVAJO, APACHE, PINAL, LA PAZ, GREENLEE, GRAHAM, YUMA, PIMA, COCHISE, SANTA CRUZ

HABITAT: COTTONWOOD/WILLOW & TAMARISK VEGETATION COMMUNITIES ALONG RIVERS & STREAMS

MIGRATORY RIPARIAN OBLIGATE SPECIES THAT OCCUPIES BREEDING HABITAT FROM LATE APRIL TO SEPTEMBER. DISTRIBUTION WITHIN ITS RANGE IS RESTRICTED TO RIPARIAN CORRIDORS. DIFFICULT TO DISTINGUISH FROM OTHER MEMBERS OF THE EMPIDONAX COMPLEX BY SIGHT ALONE. TRAINING SEMINAR REQUIRED FOR THOSE CONDUCTING FLYCATCHER SURVEYS. CRITICAL HABITAT ON PORTIONS OF THE 100-YEAR FLOODPLAIN ON SAN PEDRO AND VERDE RIVERS; WET BEAVER AND WEST CLEAR CREEKS, INCLUDING TAVASCI MARSH AND ISTER FLAT; THE COLORADO RIVER, THE LITTLE COLORADO RIVER, AND THE WEST, EAST, AND SOUTH FORKS OF THE LITTLE COLORADO RIVER, REFERENCE 60 CFR:62 FR 39129, 7/22/97.

LISTED, PROPOSED, AND CANDIDATE SPECIES FOR THE FOLLOWING COUNTY: COCONINO

10/25/2000

2) PROPOSED TOTAL= 1

NAME: **CHIRICAHUA LEOPARD FROG** *RANA CHIRICAHUENSIS*

STATUS: PROPOSED CRITICAL HAB No RECOVERY PLAN: No CFR: 65 FR 37343, 6-14-2000

DESCRIPTION: CREAM COLORED TUBERCULES (spots) ON A DARK BACKGROUND ON THE REAR OF THE THIGH, DORSOLATERAL FOLDS THAT ARE INTERRUPTED AND DEFLECTED MEDIALLY, AND A CALL GIVEN OUT OF WATER DISTINGUISH THIS SPOTTED FROG FROM OTHER LEOPRD

ELEVATION RANGE: 3300-8900 FT.

COUNTIES: SANTA CRUZ, APACHE, GILA, PIMA, COCHISE, GREENLEE, GRAHAM, YAVAPAI, COCONINO

HABITAT: STREAMS, RIVERS, BACKWATERS, PONDS, AND STOCK TANKS THAT ARE FREE FROM INTRODUCED FISH AND BULLFROGS

REQUIRE PERMANENT OR NEARLY PERMANENT WATER SOURCES. POPULATIONS NORTH OF THE GILA RIVER MAY BE CLOSELY-RELATED, BUT DISTINCT, UNDESCRIBED SPECIES.

LISTED, PROPOSED, AND CANDIDATE SPECIES FOR THE FOLLOWING COUNTY: COCONINO

10/25/2000

3) CANDIDATE TOTAL= 1

NAME: **FICKEISEN PINCUSHION CACTUS** *PEDIOCACTUS PEEBLESIANUS FICKEISENIAE*

STATUS: CANDIDATE CRITICAL HAB No RECOVERY PLAN: No CFR:

DESCRIPTION: VERY SMALL (3 INCHES TALL- 1.5 INCHES DIAMETER) UNBRANCHED CACTUS THAT RETREATS INTO GRAVELY SOILS AFTER FLOWERING AND FRUITING. TUBERCLES FORM A SPIRAL PATTERN AROUND PLANT. CENTRAL SPINE 3/8 INCH LONG FLOWERS CREAM/YELLOW

ELEVATION RANGE: 4000-5000 FT.

COUNTIES: COCONINO, MOHAVE

HABITAT: EXPOSED LAYERS OF KAIBAB LIMESTONE ON CANYON MARGINS OR HILLS OF NAVAJOAN DESERT

CONSERVATION AGREEMENT TOTAL= 2

NAME: **ARIZONA BUGBANE** *CIMICIFUGA ARIZONICA*

STATUS: CONSERVATION AGREEMENT CRITICAL HAB No RECOVERY PLAN: No CFR:

DESCRIPTION: PERENNIAL HERB IN THE BUTTERCUP FAMILY UP TO 6-7 FEET TALL. SMALL WHITE PETAL-LESS FLOWERS APPEAR IN JULY-AUGUST. FRUIT A FOLLICLE THAT SPLITS OPEN ON ONE SIDE AS IT DRIES.

ELEVATION RANGE: 5300-7000 FT.

COUNTIES: COCONINO, GILA

HABITAT: MOIST, LOAMY SOIL BETWEEN CONIFEROUS AND RIPARIAN ECOTONES.

RICH, FERTILE SOILS HIGH IN HUMUS CONTENT, DEEP SHADE, AND HIGH HUMIDITY APPEARS TO BE PRIMARY HABITAT REQUIREMENTS FOR THIS SPECIES. CONSERVATION AGREEMENT SIGNED IN JUNE 1999.

NAME: **KAIBAB PLAINS CACTUS** *PEDIOCACTUS PARADINEI*

STATUS: CONSERVATION AGREEMENT CRITICAL HAB No RECOVERY PLAN: No CFR:

DESCRIPTION: SMALL, GREEN, GLOBOSE CACTUS; USUALLY LESS THAN 40 MM TALL WITH HALD OF ITS STEM UNDERGROUND. PLANT DIAMETERS CAN REACH 60-80 MM. 4-6 SPINES PER AEREOLE; FLOWERS ARE 19-25 MM WITH CREAM TO PALE YELLOW PETALS AND PINK MIDRIB.

ELEVATION RANGE: >4,500 FT FT.

COUNTIES: COCONINO

HABITAT: PINYON-JUNIPER WOODLAND, AND SHRUB/GRASSLAND

SPECIES ALSO CALLED PARADINE PLAINS CACTUS. CONSERVATION AGREEMENT BETWEEN THE SERVICE, KAIBAB NATIONAL FOREST, AND BUREAU OF LAND MANAGEMENT FINALIZED IN OCTOBER 1996; SIGNED IN FEBURARY 1998