

SAN LUIS NATIONAL WILDLIFE REFUGE COMPLEX

NARRATIVE REPORT

July 1 through June 30, 1974

REFUGE PERSONNEL

PERMANENT:

Leon A. Littlefield Refuge Manager
E. O. D. 7/22/73

Gene A. Sipe Assistant Refuge Manager

Clifford L. Himmel Assistant Refuge Manager
E. O. D. 9/16/73

Jo Ann Barger Clerk Typist
Resigned 4/11/74

James R. Mayle Maintenance Foreman

Melvin Ford Engineering Equipment Operator

Raymond R. Fuller Engineering Equipment Operator

Edgar M. Derrick Maintenance
Merced NWR

Michael L. Stevenson Maintenance
Merced NWR

TEMPORARY:

Katherine J. Basinger Clerk Typist
E. O. D. 4/24/74

Michael J. Basinger Laborer
E. O. D. 3/18/74

Eugene Dudley Laborer
E. O. D. 8/9/74
(Intermittent)

FISCAL YEAR 1974

(July 1, 1973 - June 30, 1974)

SAN LUIS - MERCED - KESTERSON N. W. R. COMPLEX

I. General

- A. Weather Conditions: Weather during the fiscal year was normal except during May when we experienced well below normal temperatures. Weather data collected by the Bureau of Reclamation at the San Luis Dam, located 12 miles west of Los Banos, indicated a near normal year for precipitation. A total of 8.47 inches of rain was recorded. Normal rainfall is 8.56 inches. The majority of rainfall in the area occurs in December, January and March.
- B. Habitat Conditions: Habitat conditions at all three refuges within the complex were comparable with past years. Water analysis at San Luis compared with past years. This is irrigation water and monthly analysis shows water quality as good for marsh purposes and meets the criteria of the Grasslands Water District.

A total of 13,962.76 acre feet of water was pumped from wells at the Merced Refuge during the fiscal year at a cost of \$47,726.26. A total of 903 acres of millet was produced on the complex; 728 at Merced and 175 at San Luis. An excellent crop of Alkali Bulrush was also produced at Merced.

No food crops are raised at Kesterson. Aquatic plant growth at San Luis was poor. This is due to a large population of carp in the marsh units that hamper aquatic growth. Our water distribution system makes control of these fish concentrations virtually impossible.

II. Wildlife

A. Migratory Birds:

1. Waterfowl: Swan use days at San Luis totaled 3,000 for the fiscal year. Merced and Kesterson Refuges did not have any swan use this year. Overall, use for the complex was about the same as last year, 3,000 in '74 vs. 3,300 in FY '73. Use day objectives for each area are 10,000 at San Luis, 1,900 at Merced and 23,000 at Kesterson.

Goose use at San Luis declined drastically this year to 123,750 use days from 813,750 in FY '73. Grazing was terminated in December of 1972 and as a result, vegetative growth in our area in our prime goose browse area grew so rank that the geese did not use it. Plans for FY '75 call for burning of this area in the fall of '74 and introduction of sheep grazing in the Spring of '75. We believe this will maintain the vegetation in good browse conditions for the geese and we will be able to restore our lost use. Use day objectives for San Luis are 2,500,000.

Goose use at Merced totaled 397,500 use days. This is an increase of 243,000 over fiscal year '73 when we recorded only 154,500 use days. The use at Merced has declined steadily for the past several years. We feel this decline is due to lack of adequate feed. In order to restore goose use and obtain our objective of 1,500,000 use days, a cooperative farming program was initiated. This program called for the permittee to farm 158 acres of former pasture and plant silage corn. The permittee's share will be two thirds, leaving the remainder as feed for geese. These fields, A & D fields, were plowed and a seed bed prepared for the permittee in November of 1973. The corn was planted in April of '74.

Goose use at Kesterson declined this year to 33,000 use days. This compares with 168,000 in fiscal year '73. This decline is primarily due to lack of census work during periods of peak use. The objective for Kesterson is 500,000 use days.

Peak population of ducks in November when 1,090,700 were counted at San Luis and Merced respectively. In spite of these impressive numbers, duck use declined for the fiscal year. San Luis recorded at total of 14,901,000, Merced 3,856,500 and Kesterson 564,000 use days for the year. The following table displays the use at all three refuges in comparison with fiscal year '73 and our objectives for ducks, geese and swans.

SAN LUIS

	<u>Ducks</u>	<u>Geese</u>	<u>Swans</u>
F. Y. '74	14,901,000	123,750	3,000
F. Y. '73	21,060,000	813,750	2,100
Objectives:	30,000,000	2,500,000	10,000

MERCED

	<u>Ducks</u>	<u>Geese</u>	<u>Swans</u>
F. Y. '74	3,856,500	397,500	0
F. Y. '73	4,763,910	154,500	600
Objectives:	4,000,000	1,500,000	1,900

KESTERSON

	<u>Ducks</u>	<u>Geese</u>	<u>Swans</u>
F. Y. '74	564,000	33,000	0
F. Y. '73	1,374,210	168,390	600
Objectives:	5,000,000	500,000	23,000

Duck use on all three refuges declined this past year. The decline at San Luis was a result of changing our public hunting area in December '73. This change opened the Loaf Lake unit to hunting while closing the East Big Lake unit. This change resulted in dispersing the upwards of one million birds that would congregate on Loaf Lake. The objective for this change was two fold, disperse the birds over and off the refuge to increase hunter opportunity and decrease the disease potential of having this large a concentration in a small area. This accounted in part for the decrease of seven million use days. The decline at Merced of 900,000 use days, we feel was due to a private club having land adjacent to the closed area. Hunter activity in this area kept birds pretty well stirred up and dispersed off the refuge. The decline at Kesterson is almost entirely due to lack of water during the October-November period when the peak use occurs.

Duck production for the complex totaled 525; 300 at San Luis, 175 at Kesterson and 50 at Merced.

Total coot use was 719,250, 476,500 and 379,500 for San Luis, Merced and Kesterson respectively. This is average use on the areas for this species and is comparable to previous years.

2. Marsh and Water Birds: Common resident species that occur in this area are Great Blue Heron, Common and Snowy Egrets, American Bitterns, Black-Crowned Night Herons, and Pied Billed Grebes. Populations were normal for all these species for the fiscal year.

Sandhill cranes and White Pelican, were common migrant species that frequented the refuges within the management complex. Sandhill crane use totaled 114,600 use days for San Luis and Merced. A peak population of 5,100 occurred on San Luis in February. The peak population at Merced occurred in October when 2,000 birds were tallied. No Sandhill crane use took place at Kesterson during the report period. Pelican use was normal for all three refuges during the year. No White Faced Ibis use was recorded on any refuge this year. Low numbers and a possible shift to the State managed Los Banos Area account for this lack of use.

3. Shorebirds, Gulls and Terns: Common species in this group occurring on any or all three refuges at various times of the year include American Avocet, Black-Necked Stilts, Long-Billed Dowitchers, Killdeer, Western and Least Sandpipers and Greater Yellowlegs. Total use for the fiscal year was 165,350 use days for the complex. The San Luis Refuge recorded the majority of use with 114,725 use days.
 4. Doves: Mourning Dove use was normal during the fiscal year with a total of 48,000 use days for the complex. Peak use occurred in August when 400 dove were tallied at San Luis.
- B. Upland Game Birds: San Luis Refuge maintains small populations of California Quail and Ring-Neck Pheasant. These populations were normal for the year. Total use was 52,000 use days for both species. Pheasants were again released on the area as a result of Field Trials, however, these birds quickly succumb to predators or move to adjacent agricultural lands. Very little production takes place.

The Merced Refuge population of Ring-Neck Pheasant had a normal year. Total use was 40,000 use days. The pheasant is the only bird in the category that occurs on Merced. No upland game birds are found on Kesterson.

- C. Big Game Animals: A Program to reintroduce Tule Elk to the San Joaquin Valley was initiated with the signing of a cooperative agreement with the California Fish and Game Department in February, 1974. This introduction on the San Luis Refuge is to take place in late 1974.

The San Luis Refuge was selected as the first reintroduction site. The 760 acre Teal Lake unit was selected for an elk enclosure. This unit provides the best habitat on San Luis, with good browse along two major drains, well defined upland and good marsh in Teal Lake itself. The elk herd will be managed for gradual increase to a carrying capacity of 40 head. After this capacity is reached, the State Fish and Game will relocate surplus animals at other locations in California.

- D. Fur Animals, Predators and Other Mammals: The endangered San Joaquin Kit Fox population at San Luis seems to be holding steady at five animals. One den site has been located in the Teal Lake area and at least one more is suspected to be on the area.

No other unusual sightings or occurrences were noted during the year.

- E. Hawks, Owls, Eagles and Kites: Data on this group of birds shows nothing unusual during the reporting period.
- F. Other Birds: No new species were observed on the complex this year.
- G. Fish: Species include Carp, Largemouth Bass, Black Crappie, Channel Catfish, Stripped Bass, Threadfin Shad and Gambusia Sp. All these fish are found at San Luis with Carp and Gambusia found at Merced. No fishery management or stocking programs are conducted on the Refuge Complex.
- H. Reptiles and Amphibians: Nothing to report.
- I. Disease: We had no disease outbreaks on the Refuge Complex during the fiscal year.

III. Refuge Development and Maintenance

Development and maintenance for the San Luis-Merced Complex revolved around preparation for the introduction of Tule Elk at San Luis and developments to increase waterfowl use primarily Geese at Merced.

Upon completion of the cooperative agreement between the Service and the California Department of Fish and Game in February, work began on preparation of an enclosure for Tule Elk. Bids were solicited for wire, fence posts and gravel for an all-weather right-of-way. Purchase orders were issued and construction plans were instituted. The right-of-way road around the Teal Lake Unit was completed by early June and at the close of the year we were awaiting delivery of the posts to begin actual construction of the fence.

Development at the Merced Refuge revolved around desires to return Goose use to a semblance of former years and approach our refuge objective. The alphabet units which had provided browse in the past had become too rank for adequate use and grazing was not alleviating our problem. Plans were developed early in the years to enter a cooperative farming program with our permittee in which sillage corn would be grown on a 66-33% share basis. Two of the

four alphabet fields, A and D fields, totaling 158 acres were selected for our first crop. A seed bed was prepared in November and turned over to the permittee in a ready to plant state. The corn was planted by the end of April and was looking good at the close of the report period.

Final significant development for the complex focused in the drilling and relocation of well number six. This well caved in in 1972 and it was determined that a new well was needed. A new well was drilled with an output of 2,000 gallons per minute. This is the best producing well on the refuge and is used for millet production and maintenance of the West Marsh Unit.

No major maintenance or development programs took place at the Kesterson Refuge.

IV. Resources Management

- A. Grazing: During the report period grazing was utilized on the Kesterson and Merced Refuges. Grazing at San Luis was terminated as of January 1, 1973, and will only be used in the future as a management tool for marsh vegetation control and goose browse control.

Grazing at the Merced Refuge was confined to the 160 acres in Fields B and C. A permit is issued on an annual basis for the period of March through October. An extension was issued through December 15, 1973, when it was noted that the grass was not cropped enough for good goose browse. Total AUM's utilized for the fiscal year at Merced was 1557.7. Price per AUM was \$4.00 for a total revenue for the period of \$6,230.80.

Two grazing permits were issued for the Kesterson Refuge. One for the grazing of cattle by Frank J. Freitas on 3,600 acres from October 29, 1973, through June 30, 1974. Mr. Freitas utilized a total of 3,149.2 AUM's at \$3.75 per AUM for a total of \$11,809.50 in receipts.

The other permit was issued to the National Park Service on a non-fee basis for grazing of 80 head of horses and mules from Yosemite National Park. The permit was for the period of October 29, 1973 through June 30, 1974. The Park Service utilized a total of 488 AUM's for the report period.

B. Fur Harvest: Nothing to report.

V. Field Investigation and Applied Research

No investigations or research programs were conducted during the report period on the refuge complex.

VI. Public Relations

Total visits to San Luis during the fiscal year totaled 15,869. Hunting and fishing account for the majority of this use. However, non-consumptive wildlife activities are increasing.

Total visits to Kesterson totaled 3,729. Hunting accounted for 84 per cent of this with wildlife observation making up the difference.

Total visits to Merced totaled 2,459. Again, hunting accounted for the majority of visits, however, non-consumptive use is on the upswing on this area as well.

Recreational use on all three refuges in the complex has remained fairly constant for the past few years. With increased interest in preservation of wildlife and the environment, non-consumptive use is expected to increase steadily over the next several years.

Waterfowl hunting on all three refuges was comparable with past years for the report period. At San Luis, 6,147 hunters harvested 11,868 waterfowl for a seasonal average of 2.1 birds per hunter. As in past years, Green-Winged Teal was the major species (55%) in the bag with Mallard (11%) coming in a distant second.

During the past two hunting seasons the Loaf Lake Unit on San Luis has held large concentrations of ducks. These concentrations, particularly on shoot days, resulted in complaints from local clubs of harboring birds. Concentrations in excess of 800,000 birds had been counted on this small unit. In an effort to appease the duck clubs, and alleviate the disease potential on the area, we changed the public hunting area in late December. The Loaf Lake Unit was opened to hunting and the West Big Lake Unit closed. The result was immediate, in that this concentration of birds was dispersed, thus reducing complaints of duck hunters and alleviating a dangerous disease potential.

Now birds concentrate on the San Luis Reservoir, West of Los Banos. This large, deep water reservoir offers protection to the birds and reduces disease potential as water is deep and the size of the water area alleviates the possible spread of organisms.

Kesterson had a total of 3,149 hunters and a harvest of 4,885 birds for a 1.55 average. Again, Green-Winged Teal was the major species (34% of harvest) with Pintail (16%) being the second most harvested species. Hunting at Kesterson was of lesser quality this year due to lack of adequate water early in the season. This was due to late flooding of the evaporation cells and arrival of overflow water from the surrounding duck clubs. The 1974-75 season should show a marked improvement as many cells contain water at the end of the fiscal year that were dry a year ago.

Merced had 1876 hunters and a total harvest of 2,177 waterfowl for a season average of 1.16 birds per hunter. The harvest was almost evenly divided between Green-Winged Teal (27%) and Mallard (26%) for major species in the bag. During the course of the 1973-74 season, the hunting program at Merced was observed and due to the poor hunter success and quality it was decided to propose a program to improve hunting quality and success. A "model" was developed where in fixed blind sites would be developed, decoys provided, hunter movement limited, and hunting reduced to two days a week, Wednesdays and Saturdays. Also hunting would only be until noon each shoot day. This "model" was presented to the California Fish and Game at the annual hunt meeting. The program was approved and we began preparations immediately. Pit-type blinds were selected and blind sites located. We plan to install 30 paired blind sites for a total of 60 blinds. Each blind site will be provided with Pintail, Mallard, and Green-Winged Teal decoys. We also plan to conduct a survey to measure hunter reaction to this program and also survey hunters at San Luis to determine desires for change or improvements to enhance the quality of hunting on our areas. As the fiscal year closed, work was progressing on schedule. We firmly believe that this program will prove to be a major improvement in hunting quality and success and return Merced to one of the better public hunting areas in California.

Refuge personnel attended and/or participated in a variety of meetings, tours, presentations and civic service organizational activities throughout the year. Official visitors to the refuge complex included a wide range of people from the Regional Office personnel to members of major conservation groups throughout California.

VII. Other Items

Leon A. Littlefield, transferred to San Luis from Kern National Wildlife Refuge as project leader for the complex. Clifford Himmel transferred from Camas National Wildlife Refuge to assume duties as Assistant Refuge Manager. Leon and Cliff are welcome additions to our staff and their added expertise has been a shot in the arm for refuge programs.

Jo Ann Barger resigned her position as clerk-typist to accept employment with a local attorney's office. Kathy Basinger was hired as a temporary appointment to fill this essential position.

A proposal to acquire the 2,000 acre Los Banos Duck Club was drawn up for presentation to the Refuge Acquisitions Committee. This club is located just east and south of the City and is an excellent natural marsh. It has a year round water supply and can be developed into an excellent nesting and wintering area. It is hoped that approval of acquisition will be forthcoming during the new fiscal year.

SIGNATURE PAGE

Submitted By: Leon A. Littlefield
Leon A. Littlefield, Refuge Manager

Prepared By: Joel S. Miller
Joel S. Miller, Assistant Refuge Manager

Approved By: _____

Date: April 8, 1975