

RUBY LAKE NATIONAL WILDLIFE REFUGE

RUBY VALLEY, NEVADA

FY 75

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NARRATIVE REPORT

FY 75

UNITED STATES DEPARTMENT OF INTERIOR

U. S. FISH AND WILDLIFE SERVICE

RUBY VALLEY, NEVADA

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TABLE OF CONTENTS

I	GENERAL	1
II	WATERFOWL	1
III	REFUGE DEVELOPMENT & MAINTENANCE	9
IV	RESOURCE MANAGEMENT	13
V	PUBLIC RELATIONS	17
VI	OTHER ITEMS	21

I GENERAL

A. Weather

The high was 93° in July; the low was -15° in January.

No precipitation was recorded from the first of June until the second day of October. Dry hot winds added to make the drought conditions more severe. An early wet fall starting in October ended the drought.

In January, 23 inches of snow was recorded. Total snow and snow-pack in the Ruby Mountains was the highest in years. Snow even fell in mid-July. Total precipitation for the year was 11.88.

B. Habitat Conditions

Summer drought conditions resulted in water levels two feet below normal in the south sump at freezeup.

Water diverted from the East Sump preparatory to a planned burn on this unit was used to maintain the diked units at normal levels during the summer.

Low water levels were conducive to copious aquatic plant growth throughout the South Sump. And, although many of the shallow east ponds were dry by fall, waterfowl use of the refuge was quite high.

Above normal precipitation beginning in late fall and continuing throughout the winter and spring recharged all water units. Water areas off the refuge were replenished as well, resulting in reduced waterfowl use on the refuge. Franklin Lake marsh, located just north of the refuge and once part of the Ruby Marshes in wetter years, was completely dry last fall, and without waterfowl. This summer, in response to abundant water supplies, a remarkable growth of Sage Pondweed was produced. Waterfowl use was twice that of the refuge, which points out the important benefits of drought years to shallow marshes in which water is not regulated.

II WATERFOWL

A. Migratory Birds

1. Waterfowl

a. Swans

Three pairs of trumpeter swans initiated nesting but were unsuccessful in raising young. Two cygnets were observed wintering on the refuge. These may have been from a pair reported nesting on the Mary's River, 85 miles north of the refuge.

Peak trumpeter swan numbers were 30 on December 30, 11 less than the previous year.

One hundred twenty five whistling swans moved through during November.

b. Geese

Production of 200 Canada geese is comparable with recent years.

Peak populations of 325 occurred during the latter part of the winter as local geese moved back to the valley.

Total use days of 31,965 was 7,000 less than for the previous year.

Use of the refuge by this species has been steadily downward from the earlier highs of over 100,000 use days. Changes in land use on the refuge and throughout the Ruby Valley undoubtedly account for the decline.

c. Ducks

Duck production was 6,350, about 1,000 below the past five year average. Production of 2,000 canvasbacks was normal for recent years, but redhead production of 1,300 was down significantly from former years.

Use days of 1,619,628 is down by about 400,000 from the previous year. Excellent wetland habitat at Franklin Lake attracted many of the birds that would have used the refuge during spring.

d. Coots

Coot production of 3,670 was about twice that of last year but still below the past five year average. Year to year fluctuations of substantial magnitude in coot production and of all waterfowl for that matter, have been documented on the refuge throughout the years.



Habitat conditions on the 8,500 acre privately owned Franklin Lake marshes determines in large measure the ultimate nesting populations found on the refuge. In wet years, extensive beds of sago pondweed on Franklin Lake proved much more attractive to all but nesting redheads and canvasbacks than the deeper more stable marshes of the Ruby Lake. In addition, Franklin Lake does not have the constant disturbance from large numbers of boaters and fishermen as does the refuge.

2. Water, Marsh and Shorebirds

Greater sandhill cranes produced five young. Success is limited by the proximity of coyote dens to nesting cranes.



Approximately 40 black-crowned night herons were found dead at the Gallagher Fish Hatchery, which is located on the

refuge, during a two month period this spring. Specimens were sent to the Bear River Research Station for examination. The research station was not able to isolate a cause for the mortality. We finally decided that the birds were dying of exposure after being trapped under the protective screening over the raceways. Modification of the screening helped reduce mortality.

Black-crowned night herons along with great blue herons and snowy egrets are of no little concern to personnel of the fish hatchery as they constitute a significant threat to the fish in the hatchery rearing ponds. Protective screening, which is expensive, and exploders, which are not too effective, are the only means at this time for control of this problem. Killing permits are no longer issued to the hatchery, in compliance with recent policy.

Black-crowned night herons are also of interest to the state fisheries biologists as possible vectors for the transmission of whirling disease Myxosoma cerebralis which afflict the fish in certain hatchery ponds. Incidence of this disease at the hatchery precludes planting fish in interstate waters and in effect reduces the ultimate production of the hatchery.

White-faced ibis numbered 40 and produced an estimated five young.

B. Upland Game Birds

Fifty sage grouse were found on the northwest portions of the refuge on their traditional strutting grounds in March. Dispersal of the hens for nesting was mostly on refuge lands. Estimated production was 25.

Two coveys of chukars used the refuge during late fall and winter.

One covey of gray partridge were observed during the summer.

C. Big Game

Approximately 500 mule deer used the refuge during the winter. Deer numbers have declined considerably from the past when over 400 deer could be counted on the refuge in a morning's observation. Herd reduction is partly related to reduced and deteriorating winter range caused by overgrazing from cattle and wild horses.

The Nevada Department of Fish and Game has responded to the lowered deer population by reducing the nonresident permits for this herd by 400 and restricting the hunt to bucks only with a limited antlerless deer quota for residents only.

An unverified report of a mountain lion carcass on the west edge of the marsh was received by the Nevada Fish and Game Department. Probably the lion fell through the ice while hunting at one of the springheads last winter.

D. Fur Animals, Predator, and Other Mammals

The muskrat population was estimated to be 7,500. Reliable estimates are difficult to obtain, but general observation and past trapping performance indicated a relatively low muskrat population. Burrowing throughout the dike system was not a problem this year.

One beaver was observed in the collection ditch in June.

Coyotes were common during the winter and spring on the refuge. Three dens were located within a mile of the refuge headquarters. Two sandhill crane nests successfully hatched within 200 yards of these dens but the young birds disappeared within a month. Coyote predation is suspect.

Cottontail and jack rabbits are beginning to build up from their lows of the past two years which may take pressure off other prey species now being taken by mammalian and avian predators.

E. Raptors

One peregrine and two prairie falcons were observed on the refuge.

One osprey was observed fishing on the refuge in June. After it made a catch it took the fish to the mountains north of Overland Pass. No other sightings were made and it is doubtful that the bird was nesting in this area.

Two bald eagles, from the San Francisco Zoo, were brought to the eagle rehabilitation facility by the Peninsula Humane Society of San Francisco. The two eagles were held in the facility for two weeks then released on the refuge. Jane, the two year old female, welcomed her release and was last seen flying south along the Ruby Mountains. Silver, however, who was in captivity most of his 12 years, could not fully appreciate his new found freedom and could only muster short flights before plummeting into the sage covered mountainside.

Silver remained in the vicinity of the rehabilitation pen for the rest of the summer but by fall was finally beginning to fly and act like a mature bald eagle was supposed to. He began to forage on his own and even showed some real moments

of inspiration. Such as the time he badgered a pair of prairie falcons out of their freshly caught pintail.



With the coming of spring and the fishermen, Silver soon learned that he had a cinch meal by harrassing the people out of part of their catch. But this was to be his downfall.

Silver became used to the people and they to him. Hundreds of pictures were taken of him by visitors excited by the fact that they could get so close to a real bald eagle, our National Symbol.

On June 26 Kenneth Leo Husting, a former police officer, got close enough to Silver to put a bullet in his head.

Husting's explanation to the court was that while driving along the road looking for rabbits he spotted something white sticking above the bushes. He could not tell what it was so he shot it.

He was fined \$550.00 in state court for possession of a protected species and \$50.00 in federal court for discharging a firearm on the refuge.

F. Fish

Approximately 10,000 pounds of trout were stocked in refuge waters.



The trout fisheries cannot be maintained without stocking, so each year rainbow, brown, and brook trout from the Gallagher Hatchery are released in the marshes. As long as most of these fish are put in the diked units the impact of the increasing numbers of fishermen that come to the refuge to fish for these trout can be minimized as access is closely controlled on this area. However, we do not want to attract any more fishermen to the south sump, the heart of our canvasback nesting. Therefore we've requested the state plant most, if not all, of the trout in the diked units.

The south sump was two feet lower than normal going into the winter, which was moderately cold and long, but no fish kill occurred.

Water was circulated through the diked units during iceup and no kill was noted in this area.



2,800 bass were seined by the Nevada Fish and Game Department for transplant to other waters.

E. Reptiles



Great Basin rattlesnakes are common but pose little threat to refuge visitors, the two-legged type, that is.

III REFUGE DEVELOPMENT & MAINTENANCE

A. Maintenance

A new tile floor was put down in the refuge office. Three windows were replaced with two plate glass sealed units.



Before



After

A counter was put in the front office and a literature peg board put up. New drapes replace the old wooden venetian blinds. New office furniture was purchased.



All of the special regulatory signs on the diked units were replaced with standard recreation symbol signs from the National Sign Shop.

The small regulatory signs are of ABS plastic and appear quite suitable. The quality of workmanship is excellent.



For some of our miscellaneous sign needs we routed our own.

A number of rehabilitation needs were left undone once again this year for lack of funds.



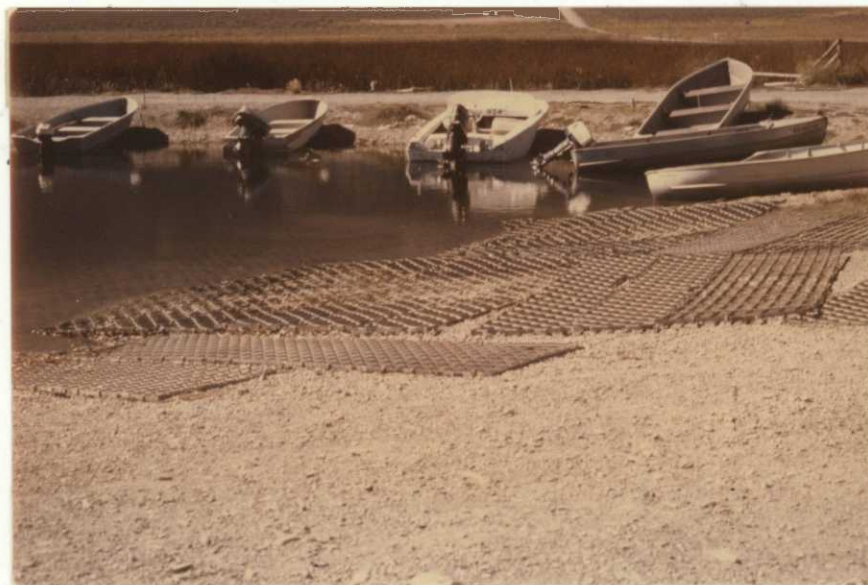
The last remanent of the old CCC Camp constructed in the late 30's serves as our only storage building.



The west refuge boundary fence is about as old as this 40 year old refuge.



Our 1951 dump truck won't run much longer.



Recreational facilities on the south sump should not be expanded, but they should be brought up to standard.



This 37,000 acre refuge is one of the best canvasback nesting areas in North America, public use is approaching 50,000 visitors a year. In 1965 it had it's first assistant manager. In 1974 the position was abolished.

B. Planned Burning



The 1,600 acre east sump was burned to open heavy bullrush stands. The unit was burned on October 22, winds were 5-8 mph, relative humidity was 30%. Approximately 30% of the

unit burned. A followup burn on November 11 removed about 15% of the remaining vegetation.

Recommendations for future burns are:

1. Burn in late September or early October.
2. Windspeed should be between 15-25 mph to carry fire through areas of light fuel.
3. Air temperature should be at least 70°.
4. Plow 10' fire break on east side of unit.

Water was put back on the unit in February and water levels were kept as high as possible throughout the summer.



Revegetation by the end of summer occurred on about 50% of the burned area. Response of waterfowl on this unit after the burn was excellent (600 canvasbacks were counted on the burned area in the spring).

C. Fires

A fire of about 25 acres occurred on an island in the south sump in July.



Subsequent investigation revealed it was started by a fisherman who was lost in the marsh and was attempting to signal help.

Another fire of about two acres was started by a party of boaters in the marsh who had become lost in November, a day prior to freezeup. They started the fire on one end of the island and followed it along as it burned throughout the night to keep warm.

IV RESOURCE MANAGEMENT

A. Grazing

Four grazing permits accounted for 5,076 AUM's on 13,381 acres. The grazing season was April 15 thru December 31.

The scheduled increase in grazing fees from \$2.00/AUM to \$2.50/AUM was not implemented in accordance with the Secretary's moratorium on proposed grazing fee increases. Grazing fees are slated to be increased to \$3.00/AUM this year.



The 200 acre North Cave Creek grazing unit was rested this year to evaluate the effects of grazing on wildlife. This unit was grazed by horses for eight months of the year for several years prior to this rest period. The field will be rested three years.

B. Haying



Wild grass hay was out and rake-bunched for fall cattle feed. Part of the hay was baled and used for spring

Part of the hay was baled and used for spring cattle feed in mid-April. The late cold spring necessitated complete use of the hay.

C. Fur Harvest

The estimated muskrat population was 7,500. The trapping quota was 3,000. Actual catch was 700. One of our long time trappers was able to get out only one week-end for a catch of 100 rats. The other was new to the area but was able to meet the quota for trapping unit #1.

VI PUBLIC RELATIONS

Public use was estimated to be 40,260 visits. Fishing accounted for 37,300 visits, waterskiing 1,600, and waterfowl hunting 335.



Fishing is divided about equally between the diked units and the 8,500 acre south sump. Public use is restricted to the dikes on the diked units and little conflict is evident with refuge waterfowl objectives.



Access to the south sump within the heart of the canvasback nesting habitat is open to unrestricted boating use. Present use by 30,000 fishermen on this area does show conflict with refuge waterfowl objectives. Serious conflict is also becoming evident among the various kinds of boating uses.



Intensive boating use by large powerboats causes constant noise pollution, and creates massive wakes that may flood overwater nests.



Increasing use on the 35 acre waterskiing area is causing serious conflict with small fishing boats passing through the area.



Small aluminum boats and canoes make up over half the boating use on the marsh but are being crowded into the more inaccessible areas by the large powerboats.



Speed limits were established in several critical areas of the marsh to protect the small boat fishermen.



An Environmental Assessment will be made of waterborne sports on the refuge.

VI OTHER ITEMS

A. Credits

Report prepared by R. V. Papke, typing by Katie L. Hotchkiss.

Submitted by: 

Date: 12-10-75

Approved by: _____

Date: _____