

MONTI VISTA NATIONAL WILDLIFE REFUGE

NARRATIVE REPORT

MAY, JUNE, JULY, AUGUST

1959

PERSONNEL:

Charles R. Bryant, Refuge Manager

Don E. Redfearn, Assistant Refuge Manager

Robert W. Stegman, Foreman III

Wesley E. Parker, Foreman I

Edo. V. Fay Pope, Clerk-Typist

Richard V. Waters, Operator-General

Paul A. Plank, Maintenanceman

Elmer G. Olson, Maintenanceman

William O. McDermith, Maintenanceman

Thomas H. Walton, Student Assistant

CONTENTS

	PAGE
I. GENERAL	1-2-3
II. WILDLIFE	3-4-5-6
III. REFUGE DEVELOPMENT AND MAINTENANCE	6-7-8-9
IV. RESOURCE MANAGEMENT	9-10-11
V. FIELD INVESTIGATION OR APPLIED RESEARCH	11-12-13
VI. PUBLIC RELATIONS	14-15-16-17
VII. OTHER ITEMS	17
TABULATION OF PUBLIC USE	
NR FORMS	
REPORT ON PHOTOGRAPHIC EXPOSURES	
PHOTOGRAPHS	

I. GENERAL

A. Weather Conditions.

Weather conditions tabulated below were received from the Bureau of Reclamation station, located in Monte Vista, Colorado, approximately six miles North of the Refuge.

	<u>Snowfall</u>	<u>Precipitation</u>	<u>Max. Temp.</u>	<u>Min. Temp.</u>
May	-	0.84"	75°	7°
June	-	0.87	82	32
July	-	0.18	84	36
August	-	1.83	86	34
Total		3.72" Extremes	86°	7°

Weather conditions were normal for the period. The tabulation above shows that little precipitation was received during May, June and July but that during August a fair amount of rainfall was received. During May and a part of June light to strong winds were present almost every day but were not as severe as in past years.

Hail storms during August did a great deal of damage to grain, potatoes and alfalfa throughout the valley, but hail received on the refuge proper was very light and no damage resulted.

The last killing frost of the spring was received on June 30, and our first killing frost in the fall was received on August 28.

Weather conditions in the surrounding mountains are quite different than those in the valley as light rain storms were received almost every day through June and July on the upper ranges. These rains were heavy enough to produce very good forage on the Rio Grande Forest and it is reported that grazing conditions have been excellent this year.

B. Habitat Conditions.1. Water.

As we reported last period snowfall in the surrounding mountains was very light and we were expecting that water conditions would be very poor this year. This drouth continued and water conditions throughout the period have been at the lowest level since the refuge was established.

At the start of the period Spring Creek was running approximately 1.5 second feet of water at the Sheridan North

and Sheridan South take-outs. This flow dropped rapidly and was practically non-existent by the middle of June. We were able to run approximately 1 c.f.s. from the Meadow Ditch during May and June but most of this water was being received by return flow rather than Spring Creek proper.

Spruce Lake filling on Spring Creek which normally can be expected to produce from 10 to 20 c.f.s. during May and June never exceeded 4 c.f.s.

A drastic reduction in the flow of our small artesian wells and our larger artesian wells was noted during the first part of June when pumping by farmers south and east of the refuge was started. As the pumping continued those wells in Units 3H, 4G, 5H, 7G and 8G did not flow at all, with the same reduction noted in those wells on the north and east sides of the refuge.

The pool areas in Units 4G, 7G, 6H, 10G and 11G contained water in sufficient amounts for our early nesters but did not contain a sufficient supply for our late nesting birds.

The over-all amount of water received from the Monte Vista Canal this period will undoubtedly be the lowest amount we have received since the refuge was established. The first water was received on May 4, through the 6th, and then the Canal came in again on May 13, and continued to run from 30% to 80% of its appropriation through June 21. It was very hard to regulate the water in our various take-outs along the Canal this period as water available from the Canal was constantly changing from day to day due to the increase and decrease flow that was present on the Rio Grande River.

More pumping was undertaken by us this period than at any time since the area was established so that we could have sufficient water for our food crop plantings and maintain levels in some of our pool areas. To say the least, this has been an extremely dry year.

2. Food and Cover.

With the dry weather that has prevailed during the period it would be expected that vegetation would grow very little but vegetative cover throughout the refuge made very good growth and cover conditions were more than adequate for our nesting birds this year.

Aquatic and emergent vegetation made very good growth in those pool areas where we were able to maintain levels.

Roundstem bulrush has shown excellent growth in the pool area in Unit 11G and Unit 10G continues to show increased stands of roundstem throughout this unit. Sago pondweed and horned pondweed has produced excellent stands in the upper creek in Unit 2G, but loss of this plant occurred during the latter part of the period when the North Sheridan branch dried up.

Cover type maps of the area were continued by Mr. Thomas M. Helton, who is our Student Assistant this year. More information regarding this will be covered in Section V.

The only feeding by hand during the period has been that of providing our decoy flock of Canada Geese in Unit 2 with barley and alfalfa.

II. WILDLIFE

A. Migratory Birds.

The high population of migrants on the area during the latter part of April had moved out by the middle of May. The high nesting potential anticipated in April did not develop. These birds remained on the area during the first part of May but perhaps they anticipated the drought conditions experienced this summer and moved to higher country and more permanent waters. From observations made on high mountain lakes and reservoirs it would seem to us that this is where our potential ended up.

This year's breeding population ended up by being somewhat below that of last year's and our total production was approximately 75-80% of last year's high.

Hallard and Cadwall continue to be our chief nesters but we did not notice much decrease in our Shoveler, Teal and Pintail numbers.

Brood count numbers were approximately the same as for last year but conditions were such this year that the broods were much more concentrated and count numbers did not give a true picture of the trend, or of total production.

Our estimated total production for this year is 400 broods totaling about 2300 young.

Production from our Canada Goose decoy flock was also a disappointment this year. Twelve, or nearly half the total production of 27 were lost to Great Horned Owl before we could blink our eyes. Three more died after we moved the remaining birds to a small holding pen. This gave us twelve birds to add to the

ones obtained from Montana. We now have 38 young birds we are holding for release in three years.

One bright spot that has occurred has been the nesting attempt of two fliers. Presumably these are birds produced two years ago by our decoy flock. Four eggs were laid and brooded for sometime, but a check revealed that all eggs were infertile. The infertility is attributed to the youth of these precocious birds. We feel certain they will be successful next year if they survive the hunting season. We should also see more of the young produced two years ago nesting this coming spring.

Our Black-crowned Night Heron population has shown considerable increase and right now we are wondering if we aren't getting considerable predation to our young ducks from these birds. In areas where these birds predominate our brood size was some lower than the refuge average.

We had two families of Black-necked Stilt produced on the area this year and it marks a first for our records.

Snowy Egrets, Avocets, and American Bittern have shown an increase in numbers over last year. All other shorebird populations have remained relatively constant.

The breeding population of Mourning Dove appears to be less than a year ago but migration numbers appear to be about the same. Traps were set for banding dove but only 38 have been banded to date.

B. Upland Game Birds.

Sex ratio counts and crow counts have indicated a high Pheasant population and also a need to exert more hunting pressure. Crow count figures are higher than those for last year and the sex ratio is about 2.5 to 1. We feel this low ratio has caused some conflict during the breeding season and resulted in lower brood sizes. Even though a high breeding population was present the overall production has not exceeded last year's. Brood sizes averaged about 4 to 5 birds.

A reduction of cocks to about a 6 or 7 to 1 ratio will not, in our estimation, hurt the breeding population in any way.

C. Big Game Animals.

Although no big game animals have been observed on the refuge, adjacent land owners have had deer feeding in their fields and deer track have been seen on the refuge.

D. Fur Animals, Predators, Rodents, and other Mammals.

The wily and versatile Coyote gave us some trouble early in the period when duck broods were numerous. Of course the amount of predation to broods by this animal is unknown but we feel it was enough to cause concern. Predatory Animal and Rodent Control personnel took several animals from the refuge proper and several more from adjacent properties. During the irrigation season several of these fellows were heard every night, particularly in the vicinity of Units 9, 10, 11, 12 and 13.

The Muskrat population has not diminished but we did not experience too much trouble because of the dry conditions. In areas where emergent vegetation is spreading these animals have started construction of houses rather than bank dens.

Skunk, Badger, and Weasel are showing some increase and even though no appreciable damage is evident, limited control measures will be taken during the next period. Five Skunk and four Badger were trapped during this period by our Student Assistant, Tom Holten.

Cottontail and Jack Rabbit numbers remain high and it is hoped the longer hunting period on Cottontails this fall will bring the population down to a more reasonable figure and possibly reduce some of the disease losses due to over-population.

E. Hawks, Eagles, Owls, Crows, Ravens and Magpies.

Only one Golden Eagle spent the summer with us and only the Marsh Hawk was common through the period. Red-tailed Hawk, Rough-legged Hawk, Peregrine Falcon, and the Sparrow Hawk were occasional.

As was stated earlier the Great Horned Owl was present and in large enough numbers to be detrimental. Short-eared Owls were common on the area.

F. Other Birds.

None.

G. Fish.

Fishing at the Kids Fishing Pond got off to a banging start on July 4th. Two, three, and even four pounders were more the rule than the exception. One young angler hooked and landed a five-pound-four ounce Rainbow. This makes us feel rather silly when we think of how excited we got over a ten or twelve incher up on the river. It has been somewhat of a struggle keeping

refuge employees from donning knee pants and participating. Of course this trouble is in addition to watching Regional Office personnel when they drop by.

Carp are present in Spring Creek near the Empire Canal but so far we have not seen any in our larger pool areas.

H. Reptiles.

The dry conditions caused Rattlesnakes to move into the property along the Spring Creek area and even across the Gunbarrel Road. Five rattlers were killed along the gunbarrel, at Quarters No. 7 and at Quarters No. 5.

I. Diseases.

None observed.

III. REFUGE DEVELOPMENT AND MAINTENANCE

A. Physical Development.

Approximately 20,000 yards of gravel was stock piled in Unit 1G during the early part of the period for graveling of dikes and roadways in Units 3G, 3H, 4H and 7G.

Our D7 Cats. were used for the rest of the period for building dikes in Units 3G, 3H, 4H and 7G. Two miles of dike was completed and one mile of dike road was surfaced with gravel. One and three-fourths miles of dike was constructed in Unit 6G so that a new separation fence might be installed between this unit and Unit 6H, all except one-eighth mile of this fence was constructed during the period.

Interior fences which were no longer needed were removed from Unit 8G and 9G. Approximately 10 acres was fenced in Unit 2G for an additional enclosure for our young geese. Three pool areas were graded in this enclosure and a diversion structure was installed so that water might be separated in the different pools.

Nine 24" control gates were installed on pools under construction. One 36" pipe 20' long and one 48" pipe 60' long was installed in Units 3G and 4G to take care of irrigation water.

The heating problem with our dragline was solved during the latter part of August when a radiator of almost double capacity of the original radiator was installed. Power loss is still a problem with this machine but it can now be operated on full time operation.

All roadways within the exterior boundaries of the refuge were bladed during the period.

Approximately one-half mile of irrigation ditch was cleaned with the dragline in Unit 5H.

General maintenance to all buildings and equipment was carried on during the period.

B. Plantings.

1. Aquatics and Marsh Plants.

No marsh or aquatic plantings were made during the period as the desired plants quickly establish themselves when water is received in enough quantity to maintain satisfactory levels in our pools. This is in line with Mr. Griffith's suggestions during his visit to the area in 1954.

2. Trees and Shrubs.

No additional plantings were made during the period but those already present in Unit 2F, 3F and 4F made very good growth this year. These plantings were irrigated two times during the period and cultivated one time.

3. Upland Herbaceous Plants.

No plantings were made during the period.

4. Cultivated Crops.

A great deal of time this period has been devoted to farming operations. A total of 299 acres of land in Units 2F, 4F, 9F and 12F, which had been planted to Trebi Barley were irrigated three times during the period.

Farmland in Unit 2F was planted to a mixture of Canada Field Peas and Trebi Barley and very good results were obtained on this land. Production has been very good this year even though irrigation water was in very short supply.

During the latter part of the period these farmlands in Units 2F, 3F, 9F and 11F which were idle last year were disced twice with our heavy offset plow and Units 2F and 3F were plowed during the period.

Harvest of grain this year will be made from Units 2F and 4F and it is now planned that 10 acres of land in Unit 2H

which is now in alfalfa will be broken out and planted to grain which will be harvested during the coming year. This will give us approximately 31 acres for harvest each year and heavier applications of fertilizer will be used on these lands as they will be in continuous cultivation.

Spot spraying of weeds in Units 9F, and 11F were carried on during the period. More complete information will be given under Section V on this control work.

Alkali is still quite heavy on approximately 10 acres in Unit 2F and 20 acres in Unit 4F. One ton of gypsum per acre was applied to these units during the latter part of July and results of this application should become apparent during the coming year.

During the latter part of July 20-10-0 was applied to 67 acres in Unit 3F and 69 acres in Unit 2F. This application should show excellent results for the production of barley during the coming year.

Those lands in Unit 2F which are on a very steep slope are very hard to irrigate by the conventional flooding method and a great deal of water is wasted in trying to irrigate by this method. Therefore we should buy a volume gun sprinkler unit as soon as possible for the irrigation of these lands. Not only would we get better production but this method of irrigation would save water, labor and would cut down on soil erosion in this area. The gun could also be used in other localities to obtain a better stand of barley where caking of the soil results when surface irrigation is used.

No money was available this year for leveling operations on our other units but this should be of high priority when money becomes available.

C. Collections and Receipts.

1. Seed or other Propagules.

No collection of seed was made during the period.

2. Specimens.

No specimens were collected during the period.

D. Control of Vegetation.

Spraying operations which were carried on will be reported under Section V.

Plowing operations were used to some extent to control weeds on some of our farmland units, but generally this method of control cannot be exercised without doing a great deal of damage to young pheasants and waterfowl which are present on these lands.

On our marsh lands throughout the property the control of vegetation has been restricted to grazing and haying operations. At the present time only one use is permitted on any given unit but we firmly believe that both uses would be desirable in those units where haying is permitted as this use alone does not open up our vegetative cover to the extent which we feel should be maintained. An amendment to our Land Use Plan will be sent in during the coming year recommending that one or both uses be permitted within all of our haying units.

E. Planned Burning.

No large scale planned burning operation was carried on during the period nor would we recommend this type of operation for this area. It becomes necessary to burn out irrigation ditches and to remove tumble weeds and greasewood growth to some extent each year by burning but this is generally a small operation and is carried on primarily for the benefit of irrigation rather than control of vegetation.

F. Fires.

No fires have occurred on the refuge this period. The fire hazard has been quite high during the last two months of the period as vegetation is very rank throughout the refuge.

IV. RESOURCE MANAGEMENT

A. Grazing.

Grazing was started on the refuge again this year during August and at this time 7 permits are in effect and are listed below:

<u>Permit No.</u>	<u>Permitter</u>	<u>Period</u>	<u>Unit</u>	<u>Acres</u>	<u>AUMs</u>	<u>Amount</u>
25447	Arthur Cooley	8/1-11/30	100 & 110	920	400	\$ 400.00
25449	Wendell Phillips	8/1-11/30	40	240	120	180.00
25450	B.O.&Charles Austin	8/1-11/30	80	240	187	280.50
25451	Elvin E. Eaton	8/1-11/30	80	240	226	339.00
25452	August Kelling	8/1-11/30	30	93	28	42.00
25453	Leslie Getz	8/10-11/30	130	2300	1000	1500.00
25454	Richard S. Woods	8/15-11/30	90	154	99	148.50

The demand for grazing has been very light this year as was the case during the same period last year. We had expected that we would have a heavy demand for this type of use due to the low production of forage in the valley proper but apparently cattle-men are reducing their herds to some extent in this locality.

The lack of water in some of our grazing units such as 4G, 7G and 8G have caused some problems this year as artesian wells in these units are not flowing at this time. Therefore pump wells are having to be utilized for cattle water which causes the cattle to concentrate in one locality rather than spreading out and feeding throughout the unit concerned.

Our cost per AUM has been raised to \$1.50 this year and charges for calves and cows are based on this fee regardless of age, which is in accordance with the Regional Office policy.

B. Haying.

With the shortage of irrigation water which we have experienced this year production of hay on the refuge was lower than for the same period last year. Eleven haying permits have been in effect this year as follows:

Permit No.	Permittee	Period	Unit	Acres	Tonage	Amount
25438	Elvin E. Eaton	6/23-9/30	9H	255	75.35	\$452.10
25439	George Horning	6/23-9/30	6H	320	96.20	577.20
25440	B.O. & Charles Austin	6/23-9/30	2H4	29		
			5H	320	51.00	306.00
25441	Harry DeFreese	6/23-9/30	10H	140	33.63	201.78
25442	Leslie Getz	6/23-9/30	6H	480	268.50	1611.00
25443	Henry Shriver	6/24-9/9	3H	100		
			6H	160	110.50	663.00
25444	Lee Woods	6/25-9/30	9H	100	31.40	188.40
25445	Jim Lillpop	7/1-9/30	12H	75	35.50	213.00
25446	Anton Heersink	7/1-9/30	12H	30	18.80	112.80
25448	Bob DeFreese	7/18-9/30	6H	50	26.14	156.84
25455	Elvin E. Eaton(alfalfa)	8/2-9/3	2H	10	12.50	75.00

All permits with the exception of Permit No. 25445 issued to Jim Lillpop has been terminated at this time.

C. Fur.

No fur harvest was made during the period.

1954

D. Other Uses.

No other uses were permitted with the exception of the Bee-keeping Permit which expires on August 31.

V. FIELD INVESTIGATION OR APPLIED RESEARCH

A. Progress Report.

Cover type maps of the area which were started by Mr. Billy J. Van Tries, who was our Student Assistant last year, were completed by Mr. Thomas M. Holton, Student Assistant this summer. Additional work on the maps will have to be accomplished before they can be worked up in their final form. This work will be completed during the coming year and will be submitted to our Regional and Washington Offices at that time.

Weed control operations:

Date	Unit No.	Acres	Weeds Involved	Spray Used	Cost per Acre	Total Cost
6/24	9F	1	35% Canada Thistle (Cirsium arvense) 35% White Top (Erigeon strigosus) 20% Kochia Weed (Kochia scoparia) 10% Knapweed (Centaurea repens)	10# Aminio Thiazole to 30 gal. water.	25.00	25.00
6/29	9F	2	80% Canada Thistle (Cirsium arvense) 15% White Top (Erigeon strigosus) 5% Knapweed (Centaurea repens)	10# Aminio Thiazole to 30 gal. water.	25.00	50.00
7/3	9F	1	50% Knapweed (Centaurea repens) 20% White Top (Erigeon strigosus) 20% Canada Thistle (Cirsium arvense) 10% Kochia Weed (Kochia scoparia)	10# Aminio Thiazole to 30 gal. water.	25.00	12.50

Date	Unit No.	Acres	Weeds Involved	Spray Used	Cost per Acre	Total Cost
7/7	9F	2	60% Canada Thistle (Cirsium arvense) 30% White Top (Erigeron strigosus) 10% Knapweed (Centaurea repens)	10# Aminio Thiasole to 30 gal. water.	25.00	50.00
8/5	10G	1/10	Cattails (Typha latifolia)	2oz. Aminio Thiasole per 1 gal. water.	11.40	1.14
6/25	11F	2	75% White Top (Erigeron strigosus) 20% Kochia Weed (Kochia scoporia) 5% Canada Thistle (Cirsium arvense)	10# Aminio Thiasole to 30 gal. water.	25.00	50.00
7/20	11F	2	90% White Top (Erigeron strigosus) 5% Knapweed (Centaurea repens) 5% Canada Thistle (Cirsium arvense)	10# Aminio Thiasole to 30 gal. water.	25.00	50.00
7/20	11F	2	60% White Top (Erigeron strigosus) 35% Knapweed (Centaurea repens) 5% Kochia Weed (Kochia scoporia)	10# Aminio Thiasole to 30 gal. water.	25.00	50.00
7/21	11F	14	45% Knapweed (Centaurea repens) 45% White Top (Erigeron strigosus) 10% Kochia Weed (Kochia scoporia)	10# Aminio Thiasole to 30 gal. water.	25.00	350.00
7/22	11F	2	60% Knapweed (Centaurea repens) 30% White Top (Erigeron strigosus) 10% Kochia Weed (Kochia scoporia)	1 gal. Estron 99 2-4-D to 30 gal. water.	8.35	16.70

Results of spraying can be determined during the coming year and will be reported on at that time.

Fertilizer applications - Farm Lands:

<u>Date</u>	<u>Unit No.</u>	<u>Acres</u>	<u>Fertilizer Type</u>	<u>Rate of Application</u>
6/13	3F	67	20-10-0	150 lb. to acre
6/17	2F	69	20-10-0	150 lb. to acre
6/23	2F	9	Gypsum	2,000 lb. per acre
8/7	4F	8	Gypsum	2,000 lb. per acre

Results of fertilizer applications will be studied to determine if increased yields of grain crops result if we have a change in the soil texture of the units and on those areas where Gypsum was placed whether or not our alkali content in the surface soils was dropped.

Vegetation transects:

Twelve vegetative type transects were set up July 1 and 2, on the Monte Vista Refuge. The purpose was to determine plant succession on newly constructed dikes and disturbed ground and make an effort in the future to correlate the existing vegetation with nesting production trends. If it is found that nesting goes up with an abundance of annual weeds, it may be feasible to disturb the dike and ditch banks with an implement to produce more annuals. In other words, prevent climax through retrogression.

The transects were set with steel posts from a known point going toward a prominent land mark. They vary from 220 to 400 feet in length. A wire hoop was set on the tape every 10 feet and the vegetation present under the hoop recorded. Three headings were recognized: Vegetation, (species when possible), litter and bare ground. Vegetation was recorded as a hit, bare ground and litter as a miss. Thus by dividing the total hits into the total misses, vegetative density can be determined.

It may be found that these transects need be run only on alternate years or less. They should be run at the same time of the year however with this in mind; when they were set up in 1959, there was an abnormal shortage of water for late June and early July.

The above transect lines were set up in marsh areas in Units 3H, 4G, 6H, 7G and 11C. Additional transects will be added as our development program is expanded.

A. Recreational Uses.

The only planned recreational use that we have on the refuge is the Kids Fishing Pond. The use of this area continues to be high. Approximately 600 kids used to pond on the Fourth of July, Buck Finn Day, and from moderate to heavy use has been continued throughout the period.

B. Refuge Visitors.

<u>Date</u>	<u>Name and Address</u>	<u>Title & Organization</u>	<u>Purpose</u>
5/2	22 Students & Leader Fort Collins, Colo.	Colo. State University	Tour
5/12	Mr. John Gatlin Albuquerque, N.M.	Regional Director	Inspection
5/12	Mr. John Bypulski Albuquerque, N.M.	Reg'l. Supervisor River Basin Studies	Inspection
5/15	Mr. Renard Baer Albuquerque, N.M.	Asst. Reg'l. Supervisor Game Management	Courtesy Call
5/18	Mr. Malcolm Miller Albuquerque, N.M.	Civil Engineer	Topog. Work
5/22	75 Students Monte Vista, Colo.	Jr. High School	Tour
5/25	Mr. Coolidge Maine	Member Audubon Society	Tour
5/25-28	Mr. Jim Walton Albuquerque, N.M.	Realty Officer Lands Branch	Acquisition
4/7-5/31	Mr. Jim Hoglund Albuquerque, N.M.	Engineering Aid	Topog. Work
6/3	Mr. Al Hiesayer Lamar, Colo.	Game Management Agent	Courtesy Call
6/16	Mr. George Hapes McNary, Arizona	Fish Hatchery	Pump Transfer
6/17	Mr. George Barclay Albuquerque, N.M.	Reg'l. Refuge Supervisor	Conference
6/25	Mr. Douglas Washington	Fisheries Branch	Courtesy Call
6/3-4	Mr. Karl Kobes Albuquerque, N.M.	N/L Research Biologist River Basins	Conference
6/3, 4-5	Mr. George Barclay Albuquerque, N.M.	Reg'l. Refuge Supervisor	Conference

<u>Date</u>	<u>Name and Address</u>	<u>Title & Organization</u>	<u>Purpose</u>
6/25	Mr. Lynn Hutchens Albuquerque, N.M.	Reg'l. Fisheries Supvr.	Courtesy Call
6/30	Mr. Ralph Paisano Mr. Edmund Bristol Mr. Richard Coheen Albuquerque, N.M.	Engineering Branch	Starting Topog. Work on Refuge
(Mr. Coheen worked approximately two weeks. Mr. Paisano worked until 9/11. Mr. Edmund Bristol is still supervising the crew on topographic work.)			
7/6	Mr. Wally Woist Mr. Paul Hamilton Denver, Colo.	River Basins	Tour
7/6-10	Mr. Marcus Nelson Albuquerque, N.M.	Asst. Reg'l. Supervisor Refuges	Inspection
7/10	Mr. Austin Beard Mr. Bob Pisell Albuquerque, N.M.	Realty Officer Lands Branch	Acquisition
7/19	Mr. Roe Meyer Denver, Colo.	Game Management Agent	Del. Dove Traps
7/28	Mr. Wayne Dale Stafford, Kansas	Clerk Quivira Refuge	Transfer Harrow
8/12	Mr. Merle Bennett Yuma, Arizona	Asst. Refuge Manager Cabeza Prieta	Transfer Plow
8/15	Mr. George Barclay Albuquerque, N.M.	Reg'l. Refuge Supvr.	Tour
8/15	Mr. Bob Ballou Laramie, Wyoming	Biologist Game & Fish Dept.	Tour
8/17	Mr. Zajanc Denver, Colo.	Branch of Research	Temporary Truck Transfer
8/19-9/17	John W. Henson Albuquerque, N.M.	Engineering	Topog. Work

C. Refuge Participation.

The following trips were made:

- 5/1 Bryant in Regional Office, returned to Monte Vista during afternoon, arrived at 4:00 P.M.
- 5/5 Redfearn and Stegman made trip to Fort Carson to check surplus property.

- 5/17 Bryant departed Monte Vista Refuge at 12:15 P.M. enroute to Denver.
- 5/18 Bryant bought parts for equipment, met with Mr. Olson and Mr. Whitten, State Engineer, discussed water usage on Refuge and turned in well registrations. Departed for Colorado Springs, arrived at 6:15 P.M.
- 5/19 Bryant inspected property at Fort Carson, purchased parts for D7 Cat. in Pueblo and returned to Monte Vista Refuge, arriving at 4:15 P.M.
- 6/2 Redfearn made trip to Fort Carson to pick up surplus property.
- 6/5 Bryant, Redfearn and Mr. Barclay met with Jicarilla Apache Council in Dulce, N.M. regarding new agreement for Burford Lake.
- 6/9 Redfearn picked up 30 goslings in Denver which were shipped from Bowdoin Refuge.
- 6/18 Redfearn checked on surplus property at Fort Carson.
- 8/29-9/3 Redfearn made trip to Page, Arizona, to get trailer house, for use on Burford Lake Area.

Programs were presented to the following groups:

- 5/15 Stegman showed film to Farm Bureau, approximately 35 present.
 - 5/18 Redfearn and Stegman showed film to 27 Kiwanis members.
 - 5/19 Redfearn showed film for 18 Boy Scouts.
 - 5/20 Redfearn presented film and program for 7th and 9th grade students in Junior High School, at Monte Vista, approx. 84 present.
 - 5/21 Bryant gave lecture for the above 7th and 9th grade students.
 - 5/26 Bryant showed film to Baptist Men's group, 40 present.
 - 5/28 Redfearn showed films to 20 9th graders at Junior High School.
- 5/1 Redfearn attended Big Game Meeting, in Monte Vista.

A schedule of programs is now being set up for the Monte Vista Junior High School.

A bowling team of refuge employees has competed in the Monte Vista Men's Summer League. Sponsor of the League is set up as the Fish and Wildlife Service. The men's team will also compete in a winter league which is scheduled to start on October 5, and end on April 11, 1960.

Refuge Manager Bryant has sponsored a women's bowling team which is also listed as a Fish and Wildlife Service team. The women are now competing in the winter league.

D. Hunting.

Our refuge Hunting Plan for the 1959 waterfowl season was submitted for the approval of the Regional and Washington Offices during the period. No major changes in the Plan were requested this year other than the method in which pheasant hunters would

be checked and that the pheasant season on the refuge would correspond with the State season.

E. Violations.

No violations occurred this period.

VII. OTHER ITEMS

A. Items of Interest.

Mr. Wesley E. Parker, our Maintencenceman, was promoted to a Foreman I position during the period. It has been recommended that Maintencenceman, Mr. Elmer G. Olson be appointed to fill Mr. Parker's position and that Mr. William O. McDermath, Maintencenceman be appointed in Mr. Olson's position.

Student Assistant, Thomas M. Holton, was terminated on September 8, so that he might return to school.

Credit for the Wildlife portion of the report should be given to Mr. Don E. Redfearn, Assistant Refuge Manager.

B. Photographs.

Photographs reported on this period were taken by Mr. Robert W. Stegman, Foreman III, and Mr. Don E. Redfearn.

Submitted by:

Dated: September 16, 1959

Charles E. Bryant
Refuge Manager

Reviewed:

Roll 40
Picture 8

6-59



Wildlife students from Colorado State University, Fort Collins.

Roll 39
Picture 5

7-59



This year's production from our captive flock of Canada Geese and the goslings from Bowdoin Refuge in the retaining pen prior to wing clipping.



Young Canada Geese, Quarters No. 5 in background.



New ponds and temporary holding pen for young geese.

Roll 39
Picture 8

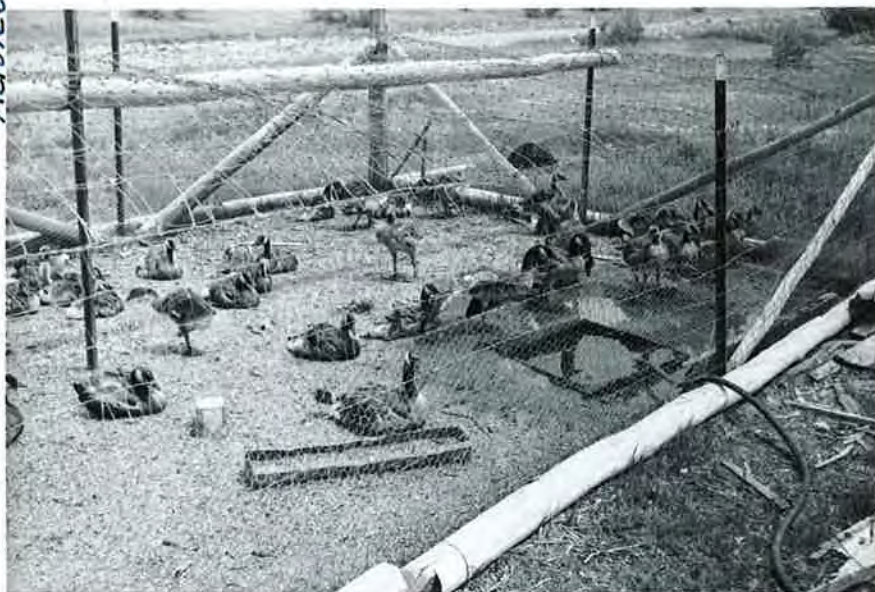
7-59



Extension of old goose pen to conform to present management policy on captive flock.

Roll 38
Picture 6

8-59



Temporary pen for young goslings.

Roll 39
Picture 3

7-4-59



Huck Finn Day, July 4th, at the kids fishing pond.

Roll 39
Picture 2

7-4-59



Hopes were high for winning a prize with the biggest or ugliest fish.

Roll 39
Picture 3

7-4-59



Bamboo poles seemed to work pretty well.

Ro 1138
Picture 4

8-59



Volume gun owned by an adjacent land owner.

Ro 1138
Picture 5

8-59



The type of unit needed by the refuge for irrigation in Unit 2F.

Roll 40
Picture 7

8-59



Barley plantings had excellent result in Unit 4F.

Roll 38
Picture 8

7-59



Dike building project with the use of DW-15s.

Roll 18
Picture 1

8-59



Pouring concrete checks in Unit 4F.

Roll 40
Picture 5

6-59



The dragline as it tried to do some work in Unit 4G.

TABULATION OF PUBLIC USE

Refuge Monte Vista National Wildlife Refuge

	<u>Visitor Days This Period</u>	<u>Visitor Days To Date C.Y.</u>
Hunting Use (Where permitted)	<u>0</u>	<u>44</u>
Fishing Use	<u>1099</u>	<u>1099</u>
Miscellaneous (All other uses)	<u>1200</u>	<u>2100</u>
Estimated total use, all types	<u>2299</u>	<u>3243</u>

ASSOCIATION OF PUBLIC WORKS

Large Scale Maps of the City

Visitor Days To Date 1911	Visitor Days To Date 1911	Visiting the (large scale)
44	0	Visiting the
1000	1000	Visiting the
1000	1000	Visiting the (All other years)
1000	1000	Estimated total was, all years

W A T E R F O W L

REFUGE Monte Vista National Wildlife Refuge MONTHS OF May TO August, 1959

(1) Species	(2) Weeks of reporting period									
	5/3-9 : 1	5/10-16 : 2	5/17-23 : 3	5/24-30 : 4	5/31-6/6 : 5	6/7-13 : 6	6/14-20 : 7	6/21-27 : 8	6/28-7/4 : 9	7/5-11 : 10
Swans:										
Whistling										
Trumpeter										
Geese:										
Canada	56	56	62	49	49	49	49	49	49	49
Cackling										
Brant										
White-fronted										
Snow										
Blue										
Other										
Ducks:										
Mallard	935	935	795	940	221	221	241	241	241	241
Black										
Gadwall	595	595	635	780	290	145	145	145	145	145
Baldpate										
Pintail	550	550	515	10	145	122	122	122	122	122
Green-winged teal	65	65	50	385	50	6	6	6	6	6
Blue-winged teal	136	136	65	50	50	100	100	100	100	100
Cinnamon teal	150	150	130	105	8	95	95	95	95	95
Shoveler	620	620	570	670	58	6	6	6	6	6
Wood										
Redhead	60	60	70	60	20	6	6	6	6	6
Ring-necked										
Canvasback										
Scaup	10	10	5		5					
Goldeneye										
Bufflehead	26	26		26			149			
Ruddy										
Other										
Coot:	330	330	370	290	50	150	150	155	155	155
Int. Dup. Sec.,										
Wash., D. C.										

3 -1750a
Cont. NR-1
(Rev. March 1953)

W A T E R F O W L
(Continuation Sheet)

REFUGE Montic Vista National Wildlife Refuge

MONTHS OF May TO August, 19 59

(1) Species	(2) Weeks of reporting period										(3)	(4)
	: : : : : : : : : : : :										: Estimated	: Production
	: 7/12-18	: 7/19-25	: 7/26-8/1	: 8/2-8	: 8/9-15	: 8/16-22	: 8/23-29	: 8/30-9/5	: 18	: 17	: waterfowl	: Broods:Estimated
: 11	: 12	: 13	: 14	: 15	: 16	: 17	: 18	: 18	: 17	: days use	: seen :	: total
Swans:												
Whistling												
Trumpeter												
Geese:												
Canada	88	88	88	88	88	88	88	88	88	88	8547	
Cackling												
Brant												
White-fronted												
Snow												
Blue												
Other												
Ducks:												
Mallard	314	314	314	314	314	1870	1870	1870	1870	1870	85,337	
Black	90	90	90	90	90	215	215	215	215	215	33,005	98
Gadwall												
Baldpate	345	345	345	345	345	1266	1266	1266	1266	1266	33,935	
Pintail	160	160	160	160	160	690	690	690	690	690	11,480	
Green-winged teal						20	20	20	20	20	12,579	
Blue-winged teal											3,801	
Cinnamon teal	35	35	35	35	35	164	164	164	164	164	25,760	
Shoveler												
Wood											2,100	
Redhead												
Ring-necked											35	
Canvasback											175	
Scaup												
Goldeneye											966	
Bufflehead											1043	
Ruddy												
Other												
Coot:	300	300	300	300	300	60	60	60	60	60	26,705	
				</								

(over)

	(5) Total Days Use	(6) Peak Number	(7) Total Production	SUMMARY
Swans				Principal feeding areas larger pool area located in Unit 20,
Geese	8,547	88	15	40, 60, 100, 110 and refuge farmlands.
Ducks	230,914	4,245	2300	Principal nesting areas Units 40, 60, 60, 70, 100, 110 and
Coots	26,705	370	60	130.

Reported by

Charles H. Bryant, Refuge Manager

INSTRUCTIONS (See Secs. 7531 through 7534, Wildlife Refuges Field Manual)

- (1) Species: In addition to the birds listed on form, other species occurring on refuge during the reporting period should be added in appropriate spaces. Special attention should be given to those species of local and national significance.
- (2) Weeks of Reporting Period: Estimated average refuge populations.
- (3) Estimated Waterfowl Days Use: Average weekly populations x number of days present for each species.
- (4) Production: Estimated number of young produced based on observations and actual counts on representative breeding areas. Brood counts should be made on two or more areas aggregating 10% of the breeding habitat. Estimates having no basis in fact should be omitted.
- (5) Total Days Use: A summary of data recorded under (3).
- (6) Peak Number: Maximum number of waterfowl present on refuge during any census of reporting period.
- (7) Total Production: A summary of data recorded under (4).

3-1751

Form NR-1A

(Nov. 1945)

MIGRATORY BIRDS

(other than waterfowl)

Refuge... Monte Vista Nat'l. W/L Refuge Months of May to August 1959

(1) Species Common Name	(2) First Seen		(3) Peak Numbers		(4) Last Seen		(5) Production			(6) Total Estimated Number	
	Number	Date	Number	Date	Number	Date	Number Colonies	Total # Nests	Total Young	Estimated Number	
I. Water and Marsh Birds:											
Saved Grebe	10	5/10	15	6/20	15	6/20				15	
Pied-billed Grebe	4	5/10	10	5/30	5	6/30				10	
Great blue Heron	6	5/10	6	5/10	1	6/20				6	
Snowy Egret	23	5/10	31	6/14	30	still	present			31	
Black-crowned Night Heron	16	5/10	45	5/24	20	6/6				45	
American Bittern	6	5/10	20	7/26	10	still	present			20	
White-faced Glossy Ibis	8	5/10	20	7/26	20	8/1				20	
Sandhill Crane	20	6/30	20	8/30	20	still	present			20	
II. Shorebirds, Gulls and Terns:											
Wilson's Snipe	10	5/24	10	5/24	10	5/30				10	
Malldeer	60	5/10	100	7/26	75	still	present			100	
Long-billed Dowitcher											
Avocet	75	5/10	150	7/26	50	still	present			150	
Black-necked Stilt	6	5/17	10	5/24	6	6/20				10	
Wilson's Phalarope	350	5/10	400	5/17	200	6/20				400	

(over)

(1)	(2)	(3)	(4)	(5)	(6)
III. <u>Doves and Pigeons:</u>					
Mourning dove	150	5/10	200	6/24	150
White-winged dove					Still present
					200
IV. <u>Predaceous Birds:</u>					
Golden eagle	1	5/17	1	5/17	1
Duck hawk					Still present
Horned owl	6	5/10	10	5/24	5/23
Magpie	150	5/10	250	6/30	Still present
Raven					
Crow	2	5/17	2	5/17	5/17
Bald Eagle					
Red-tailed hawk					
Rough-legged hawk	3	5/10	3	5/10	Still present
Marsh hawk	30	5/17	40	5/24	Still present
Ferruginous falcon					
Sparrow hawk	4	5/10	10	6/30	Still present

INSTRUCTIONS

Charles W. Bryan, Refuge Manager

(1) Species: Use the correct names as found in the A.O.U. Checklist, 1931 Edition, and list group in A.O.U. order. Avoid general terms as "seagull", "tern", etc. In addition to the birds listed on form, other species occurring on refuge during the reporting period should be added in appropriate spaces. Special attention should be given to those species of local and National significance. Groups: I. Water and Marsh Birds (Gaviiformes to Ciconiiformes and Gruiformes)

II. Shorebirds, Gulls and Terns (Charadriiformes)

III. Doves and Pigeons (Columbiformes)

IV. Predaceous Birds (Falconiformes, Strigiformes and predaceous Passeriformes)

(2) First Seen: The first refuge record for the species for the season concerned.

(3) Peak Numbers: The greatest number of the species present in a limited interval of time.

(4) Last Seen: The last refuge record for the species during the season concerned.

(5) Production: Estimated number of young produced based on observations and actual counts.

(6) Total: Estimated total number of the species using the refuge during the period concerned.

3-1750b
Form NR-1B
(Rev. Nov. 1957)

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
BUREAU OF SPORT FISHERIES AND WILDLIFE

WATERFOWL UTILIZATION OF REFUGE HABITAT

Refuge Monte Vista Refuge

For 12-month period ending August 31, 1952

Reported by Charles M. Bryant

Title Refuge Manager

(1) Area or Unit Designation	(2) Habitat Type Acres	(3) Use-days	(4) Breeding Population	(5) Production
Unit #1	Crops	Ducks		
	Upland	Geese		
	Marsh	Swans		
	Water	Coots		
	Total	Total		
Unit #2	Crops	Ducks	3,086,370	26
	Upland	Geese	21,637	12
	Marsh	Swans		
	Water	Coots		
	Total	Total	3,108,007	
Unit #3	Crops	Ducks	226,674	100
	Upland	Geese	28	175
	Marsh	Swans		
	Water	Coots	13,930	
	Total	Total	240,632	
Unit #4	Crops	Ducks	70,490	60
	Upland	Geese		160
	Marsh	Swans		
	Water	Coots		
	Total	Total	70,490	
Unit #5	Crops	Ducks	301,404	100
	Upland	Geese	6,034	250
	Marsh	Swans		
	Water	Coots	1,932	20
	Total	Total	309,372	30
Unit #6	Crops	Ducks	191,135	200
	Upland	Geese	15	500
	Marsh	Swans		
	Water	Coots	7,980	25
	Total	Total	199,129	60
Unit #7	Crops	Ducks	452,460	330
	Upland	Geese	2,289	800
	Marsh	Swans		
	Water	Coots	31,430	25
	Total	Total	487,179	60

3-1750b
Form NM-1B
(Rev. Nov. 1957)

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
BUREAU OF SPORT FISHERIES AND WILDLIFE

WATERFOWL UTILIZATION OF REFUGE HABITAT

Refuge Santa Vista Refuge

For 12-month period ending August 31, 1959

Reported by Charles R. Bryant

Title Refuge Manager

(1)	(2)		(3)	(4)	(5)	
Area or Unit	Habitat			Breeding		
Designation	Type	Acreage	Use-days	Population	Production	
Unit #8	Crops		Ducks	69,489	45	100
	Upland		Geese			
	Marsh	1,081	Swans			
	Water		Coots			
	Total	1,081	Total	69,489		

Unit #9	Crops		Ducks	33,495	45	100
	Upland		Geese			
	Marsh	840	Swans			
	Water		Coots			
	Total	840	Total	33,495		

Unit #10	Crops		Ducks	87,808	50	150
	Upland		Geese			
	Marsh	680	Swans			
	Water		Coots			
	Total	680	Total	87,808		

	Crops		Ducks			
	Upland		Geese			
	Marsh		Swans			
	Water		Coots			
	Total		Total			

	Crops		Ducks			
	Upland		Geese			
	Marsh		Swans			
	Water		Coots			
	Total		Total			

	Crops		Ducks			
	Upland		Geese			
	Marsh		Swans			
	Water		Coots			
	Total		Total			

	Crops		Ducks			
	Upland		Geese			
	Marsh		Swans			
	Water		Coots			
	Total		Total			

UPLAND GAME BIRDS

1613

Refuge Monte Vista Nat'l. W/L Refuge Months of May to August, 19 52

(1) Species Common Name	(2) Density		(3) Young Produced	(4) Sex Ratio	(5) Removals			(6) • Total	(7) Remarks
	Cover types, total acreage of habitat	Acres per Bird			Hunting	For Re- stocking	For Research		
Ring-necked Pheasant	10,963.38 acres brushland, meadow land & agricultural lands.	3.13	Number broods obs. v. d. Estimated Total	2.5 hens 1 cock				Estimated number using Refuge 3500	Pertinent information not specifically requested. List introductions here. Cover and food conditions on the area have been excellent during the period.

INSTRUCTIONS

Form NR-2 - UPLAND GAME BIRDS.*

(1) SPECIES: Use correct common name.

(2) DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.). Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottomland hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.

(3) YOUNG PRODUCED: Estimated number of young produced, based upon observations and actual counts in representative breeding habitat.

(4) SEX RATIO: This column applies primarily to wild turkey, pheasants, etc. Include data on other species if available.

(5) REMOVALS: Indicate total number in each category removed during the report period.

(6) TOTAL: Estimated total number using the refuge during the report period. This may include resident birds plus those migrating into the refuge during certain seasons.

(7) REMARKS: Indicate method used to determine population and area covered in survey. Also include other pertinent information not specifically requested.

* Only columns applicable to the period covered should be used.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

REPORT ON PHOTOGRAPHIC EXPLORATION

This report is to be prepared by the photographer or by a person designated by him. It should contain a description of the work done, the results obtained, and the conclusions reached. It should also contain a list of the photographs taken, and a list of the places visited. It should be prepared in duplicate, one copy to be retained by the photographer and the other by the Bureau of Land Management.

Name of Photographer _____
Address _____
City _____ State _____
Date Reported _____
Place of Purchase _____

Description of new data taken, locality, and purpose (See note on page one of this report)	Photograph Number		Remarks (Leave blank)
	Front	Back	
1. View of _____	1	10	
2. _____	2	11	
3. _____	3	12	
4. _____	4	13	
5. _____	5	14	
6. _____	6	15	
7. _____	7	16	
8. _____	8	17	
9. _____	9	18	
10. _____	10	19	
11. _____	11	20	
12. _____	12	21	
13. _____	13	22	
14. _____	14	23	
15. _____	15	24	
16. _____	16	25	
17. _____	17	26	
18. _____	18	27	
19. _____	19	28	
20. _____	20	29	
21. _____	21	30	
22. _____	22	31	
23. _____	23	32	
24. _____	24	33	
25. _____	25	34	
26. _____	26	35	
27. _____	27	36	
28. _____	28	37	
29. _____	29	38	
30. _____	30	39	
31. _____	31	40	
32. _____	32	41	
33. _____	33	42	
34. _____	34	43	
35. _____	35	44	
36. _____	36	45	
37. _____	37	46	
38. _____	38	47	
39. _____	39	48	
40. _____	40	49	
41. _____	41	50	
42. _____	42	51	
43. _____	43	52	
44. _____	44	53	
45. _____	45	54	
46. _____	46	55	
47. _____	47	56	
48. _____	48	57	
49. _____	49	58	
50. _____	50	59	
51. _____	51	60	
52. _____	52	61	
53. _____	53	62	
54. _____	54	63	
55. _____	55	64	
56. _____	56	65	
57. _____	57	66	
58. _____	58	67	
59. _____	59	68	
60. _____	60	69	
61. _____	61	70	
62. _____	62	71	
63. _____	63	72	
64. _____	64	73	
65. _____	65	74	
66. _____	66	75	
67. _____	67	76	
68. _____	68	77	
69. _____	69	78	
70. _____	70	79	
71. _____	71	80	
72. _____	72	81	
73. _____	73	82	
74. _____	74	83	
75. _____	75	84	
76. _____	76	85	
77. _____	77	86	
78. _____	78	87	
79. _____	79	88	
80. _____	80	89	
81. _____	81	90	
82. _____	82	91	
83. _____	83	92	
84. _____	84	93	
85. _____	85	94	
86. _____	86	95	
87. _____	87	96	
88. _____	88	97	
89. _____	89	98	
90. _____	90	99	
91. _____	91	100	
92. _____	92	101	
93. _____	93	102	
94. _____	94	103	
95. _____	95	104	
96. _____	96	105	
97. _____	97	106	
98. _____	98	107	
99. _____	99	108	
100. _____	100	109	

