MONTE VISTA NATIONAL WILDLIFE REFUGE

NARRATIVE REPORT

JANUARY, FEBRUARY, MARCH, APRIL

1956

PERSONNEL:

Charles R. Bryant, Refuge Manager
Robert W. Stegman, Foreman, Mixed-gang
V. Fay Pope, Clerk-Typist
Wesley E. Parker, Maintenance Man

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I. GENERAL

A. Weather Conditions.

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

	Snow	Precipitation		Max. Temp.	Min. Temp.
January	12"	0.55		58	-9
February	2"	0.15		52	-18
March	7"	0.31		69	4
April		0.29		70	10
	21"	1.30	Extremes	75	-18

Cold weather prevailed during January and February with temperatures below zero being reached each night. The coldest night occurred on February 9, when 18° below zero prevailed as compared with 20° below zero during the same period last year.

Snowfall during the period was considerably less than that received during the same period last year but due to snows during the last period water content on the high ranges are approximately the same or slightly better than last year. Light snows totaling 7 inches was received on the 11, 12 and 13 of March, which was very beneficial here in the Valley.

High winds have prevailed throughout March and April of this year and have left the valley in a very dry condition for seeding of grain crops.

B. Water Conditions.

Again this spring water conditions are very discouraging. Water content in the upper ranges are slightly better than a year ago but are still 20% below normal and with the dry conditions here in the valley the additional amount of run which we may receive from the Rio Grande River will probably leave us in poorer shape than we were at this time a year ago.

The water debt to New Mexico and Texas has not decreased any during the last year and will certainly not be decreased any this year. At this time a year ago there was talk of releasing at least 10% or 15% of the River due to New Mexico and Texas to comply with the compact and we are sure that thinking along this line will probably be brought before the valley farmers again this year. The Rio Grande Water Users Association has stated that they will carry this to court before releasing any waters which have been legally filed on and it is believed that this will eventually wind up in a court case.

The Rio Grande River flow this period has been approximately the same as that of last year. No water has been received by the Monte Vista Canal at this time but earlier filings in the Valley were started during the middle of April.

Spring Creek flow is approximately the same as that of a year ago with approximately 3 second feet being utilized at this time.

Water in the Sheridan South ditches was started on April 25.

Small artesian wells on the area were being used for irrigation of meadow lands and storage in pond areas during the first part of April. All of the smaller wells are considerably down in flow this year as compared with last year. Additional pump wells have been installed in this flow in the near vicinity of the refuge and unless heavy snows are received this coming year we can expect at least 50% of the small wells to dry up during the coming summer.

All of our deeper wells are holding up very well and are being utilized in irrigation of farmlands, meadow lands and grazing lands.

Well No. 4 has shown some decrease and this is probably due to pumping of deeper wells to the South and East of us.

Our larger artesian wells will be very valuable to us this year with the shortage of river water that is expected and the decrease in our smaller wells. Irrigation reservoirs should be established around each of these wells so that we can better utilize the water present. This is now being accomplished by grouping Wells No. 1, 3 and 4 in the lower end of Unit 11 and then dumping into the south meadow ditch lateral. By using this method we can move across approximately 160 acres in two days time, whereas by separating the wells we can only cover a small portion of this acreage.

C. Fires.

No fires have occurred on the refuge during this period.

The fire hazard has been quite high throughout the period due to the dry ground conditions which have prevailed.

Roadways have been bladed and act as fire lanes and flooding along side major travel roads was put into affect to lessen this hazard.

Spring burnings by the Canal Company and adjoining farmers have kept us at unrest throughout the latter part of the period but no trouble was experienced with this burning other than the loss that occurred to Pheasants that had started nesting during the early part of April.

As stated before we have become a member of the local Monte Vista Rural Fire Protective Association and they are on call at any time to fight fires within the refuge area.

II. WILDLIFE

A. Migratory Birds.

1. Populations and Behavior.

Waterfowl populations during the period have shown a high increase over that of a year ago. The total days use last year was 612,705 days as compared with 1,189,966 days use this year. The peak number increased from 6,233 last year to 21,668 this year.

The major population was composed of Mallards with Pintail, Gadwall, Green-winged Teal, Blue-winged Teal, Cinnamon Teal and Ruddy all showing high increase.

The barley fields within the area were used almost exclusively by these birds with waste grain still being available at this time in Unit 13.

Migrations were noted during the early part of March and continued throughout the period. It appears at this time that our hold-over nesting population will be considerably larger this year than it was at the same time last year, as approximately 2940 birds are now present as compared with 1000 birds being present during the last week of the period last year.

It is believed that the Ruddy duck may nest here this year inasmuch as populations are still remaining whereas they had departed by the middle of April last year. These birds have used our series of ponds along spring creek almost exclusively.

Lesser Canada Geese again migrated through the valley this year but very few stopped over on the refuge. These birds continue to use the lower Rio Grande River and the San Luis Lakes which are located on the East side of the valley. Fall plantings of grain might be in order to make the area more attractive to the birds on spring migration and this will be attempted during the coming year.

Our decoy flock of Canada Geese have started to nest during the latter part of the period and this is being watched with interest by a great deal of people here in the valley. We have continued to hold the birds in our smaller display pen rather than releasing them in the upper Spring Creek area as losses would certainly be experienced from lead poisoning if this was attempted. If hatch losses are high due to the confining of the birds to a small area arrangements will be made to spread the birds during the coming year and nests will be robbed and eggs hatched by chickens.

Our Sandhill Crane populations built up quite rapidly this year with first arrivals noted on March 1. The population continued to increase throughout March and the peak population of 800 was reached in the last week of March. This population fell off rapidly the first week of April and none remained at the end of the period.

Increases have been noted in all of our marsh and shore birds population this spring, especially so in Wilson Snipe, Avocet, Greater Yellow Legs, Lesser Yellow Legs, Long Billed Curlew and Bittern. Heavy use of ponds adjoining Spring Creek has been made by our shore bird population with very little spread being noted on smaller ponds, which was also the case last year.

2 Whistling Swan were on the area during the week of March 18 to 24. This is a new addition to our bird list and it would be very desirable to have more of these birds visit the area.

2. Food and Cover.

Food conditions were very good throughout the period. Waterfowl populations continued to feed on our unharvested grain fields. Most of the ponds on the area were open throughout the period and Horned pondweed was used heavily by the waterfowl.

With the start of irrigation of meadows on the refuge and in the vicinity of the refuge the shift of waterfowl was made to them for feed. This tends to spread our nesting population throughout the valley and probably results in a higher nesting success than would be had were the birds concentrated in one unit.

3. Diseases.

Several waterfowl were again lost this year to lead poisoning. This loss is probably quite high throughout the

valley as there are a number of shooting clubs which have been shot over for a long period of time. If time permits a study of this condition should probably be made throughout the valley in the coming fall and winter months. This could probably be worked in by the Regional Biologist and would certainly be desireable here on the refuge. Localized spots in the upper Spring Creek could probably be draglined and eliminate most of the loss which occurs on the refuge. The only problem that would result would be opposition from other water users and this would probably be have to be cleared with them before any work is done.

B. Upland Game Birds.

1. Populations and Behavior.

Pheasant populations were approximately the same as last period when a heavy increase was noted over last year's population. Nesting has started up at this time and it is expected that a good hatch can be expected with very good cover present and the predators have been almost completely eliminated on the refuge.

Mourning Doves moved into the refuge during the early part of April and approximately 500 birds are present at this time. Very little nesting activity has been noted and until such time as cover plantings reach a mature size it is not expected that we will see much increase. Banding work on young and adult birds will be carried on during the coming year.

2. Food and Cover.

Food and cover conditions have been very good throughout this period. Additional cover plantings and spread of our farm lands will tend to increase this.

3. Diseases.

None were noted during the period.

C. Big Game Animals.

No big game animals are present on the area.

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

Muskrat populations continue to increase within the area. Quite a lot of trouble around structures has been experienced this year and trapping operations will be put into effect this

fall. At this time we feel that trapping should be made by refuge personnel rather than on a permit basis as only certain spots within the area should be trapped heavily at this time.

Skunks were quite high in number during the early part of the period. A poison program was put into effect during the early part of January and we feel that at least 90% of the skunk on the area were removed. A high kill resulted from skunk taking Magpie which had been killed with our strychnine program. The take from this probably resulted in a higher kill ratio than our initial poisoning for skunk only.

Badger is still present on the area in small numbers. A few were taken during the trapping program but we were still undecided as to what extent Badger contributed to our nesting loss. We hope through nesting studies this year to tell more about loss to nesting resulting from the Badger.

Thirteen-Striped Ground Squirrel are still numerous on the area but we do not believe that any damage to nesting was experienced from this animal.

Rabbits, Cottom-tail and Jack, HAVE continued to increase on the area and it will certainly be desirable to eliminate some of these animals this year.

If our Pheasant and Rabbit shooting program goes through as scheduled we believe that a large number of them will be taken at that time.

During April a large number of Jackrabbits have died due to some disease but this does not seem to be restricting numbers to any great extent. Young rabbits were noted during the latter part of the period.

Coyotes in small numbers were observed during the early part of the period. None have been noted during the latter part of the period and it can be expected that the ones on the area have moved back into the foothills just West of the Refuge.

Weasel were noted quite frequently during the early part of the period and a small number of them will be worked during our Muskrat trapping program this fall.

E. Predaceous Birds.

A Magpie poisoning program was carried on during the early part of the period by the use of traps and by placing strychnine in suet. Our best kill resulted on pre-bait stations which were made for these birds. This was accomplished by drilling holes in

corral posts and placing suet in them and letting the birds take it for approximately 7 days then baiting with our strychnine with the suet. Large numbers of birds were taken by this method and then in turn when eaten by skunks a secondary kill resulted which gave us very good success on Magpie and Skunk.

Golden Eagles continued to build up in the area this year and 22 were present from January 8 through January 31. These birds were noted to take an occasional duck but most of their feed was probably Jackrabbits and other rodents on the area.

Bald Eagles also built up at this time and 6 were noted on January 31. Two have continued to use the area throughout the period and are still present at this time.

Horned Owls again nested in willow trees in Unit #3 and 2 young were produced this year. These birds are almost fully feathered out at this time.

Marsh Hawks are resident on the area and can be observed at any time. Numbers are about the same as last period.

A Marsh Hawk banded during the spring of 1954 was killed in the fall of 1955 in old Mexico, which had traveled a distance of approximately 1200 miles.

Sparrow Hawks and Rough-legged Hawks moved to the refuge during the last part of April and are still present on the area.

One Duck Hawk has used the area throughout the period and was noted to take a Blue-winged Teal during the latter part of March.

F. Fish.

The only fish present on the area are Trout and Carp and these are confined to the upper part of Spring Creek. A few suckers have moved into the lower ponds alongside Spring Creek and it is expected that if permanent waters are maintained in these ponds that this population will increase.

If the present plans are approved at least 4 ponds will be constructed to be used for public fishing. Fish will be received from the State and stocking of legal size fish will be done.

III. REFUGE DEVELOPMENT & MAINTENANCE

A. Physical Development.

Jobs that have been completed and started are listed below:

Approximately 800 feet of curbing and sidewalks poured at service building.
Dirt and manure hauled in for service building fill.
Irrigation system for headquarters lawn installed.
Complete checkup made on the following equipment:

- Ford Dump Truck
- Reo Stake Truck
- International Stake and Dump Truck
- Chevrolet Pickup 1954
- Chevrolet Pickup 1955
- Ford Fordor Sedan
- Willys Pickup
- 2 Farmall Tractors
- Minn.-Moline Tractor
- D7 Cat.

Major equipment property numbers were engraved on new equipment.
Magpie and Skunk trapping and poisoning program was carried on through the period.
9 steel gates were made and installed.
Clean up was made of old corrals, hay stacks, roads, etc. throughout the refuge.
70 sign posts were purchased and painted.
Foundation poured, blocks laid and roof installed on oil house.
Approximately 15 miles small ditches reworked with ditcher.
2 bridges completed in Units 22 and 23.
Approximately 1/2 mile manure dikes built in meadows to give better coverage of water.
1400' drain made in Unit 22 for pick up of water out of Unit 23.
General maintenance and repair to equipment.

B. Plantings.

Windbreak plantings in Unit 3 and 4 were irrigated. Approximately 2,000 yards of shoreline seeded around Spring Creek ponds, with 60% alta-fesque, 30% sweet clover, 5% brome grass, 5% tall wheat. Germination of seed was approximately 70%. Approximately 1400 seedling trees were secured for windbreak plantings.

C. Collections.

Kentucky Blue Grass, Alfalfa and Spelt seed were purchased for spring plantings. Approximately 500 pounds of Sago Bondweed was received from Hart Mountain Refuge for seeding ponds, plus 1,000 pounds Sweet Clover seed received for use in farm plantings. Approximately 500 pounds Brome seed received from Mud Lake Refuge for overseeding of meadow grass. Approximately 3 Tons Horned Pondweed moved from upper Spring Creek to other small ponds on the area.

IV. ECONOMIC USE OF REFUGE

A. Grazing.

No grazing permits were issued during the period. Grazing units on the refuge are in better shape this year than they were a year ago. Grazing will be carried on within the Woods and Muller tract during the summer months on a permit without charge. Units formerly in grazing can be hayed and will be put into that use this year so that additional growth can be had on our pond banks.

B. Haying.

No haying permits were issued during the period. As stated before all haying within the area are very dry but with the additional artesian wells that have been drilled and better management of waters it is believed that our harvest will be as great or greater than last year.

A large number of people have applied for permits at this time but we are waiting approval of our Interim Operational Plan before going ahead with any leasing procedure.

C. Fur Harvest.

No ~~fuit~~ harvest was made during the period which has been stated under Fur Animals. We plan to trap Muskrat this fall. No furs were saved during our poisoning program on Skunks as the market value on these pelts would not justify the time involved in handling them.

D. Cultivated Crops.

200 Acres has been plowed in Unit 22, 23 and 3, with turnover moldboard for spring planting. This land was harrowed, land planed and has been planted at this time to tre-bi barley and peas. 45 acres has been disced with the D7 Cat, disced, harrowed and is being land planed for planting of spelt and tre-bi barley. All barley plantings contain a small amount of Sweet Clover. 120 acres of the above mentioned plantings have been ~~irrigated~~ and good germination received except in localized spots where the alkali content is very heavy. Approximately 4" application of water was placed on this unit during the first irrigation and alkali spots were flooded twice. Water used was from Well No. 7 which is putting out approximately 1450 gallons per minute artesian flow.

80 acres in Unit 13 was cut with rotary mower and will be put into barley this year. Approximately 40 acres in Unit 1 was cut with a rotary mower and will be put into barley with a mixture of alfalfa during the coming period. Sweet Clover seed in Unit 13

has made a very good start and approximately 80 acres will be left and turned under during the coming year.

V. FIELD INVESTIGATION OR APPLIED RESEARCH

A. Progress Report.

Refer to Refuge Development and Maintenance in the Cultivated Crop Section.

VI. PUBLIC RELATIONS

A. Recreational Uses.

No recreational areas are provided on the refuge. A small amount of ice skating did occur on ponds adjoining the main travel roads.

B. Refuge Visitors.

1. A large increase in refuge visitors developed during the period mostly due to our display pen containing our decoy Goose flock and the large numbers of various species of ducks that were feeding with these birds. A number of visitors were taken on tours throughout the area and a road for public travel should be completed as soon as possible. If funds are available in the coming year roadways will be fixed up and it will probably double or triple our refuge visitors at that time.

2. Official visitors.

1/5	Mr. McDonald & Mr. Lillpop	State Fish Hatchery	Monte Vista,Colo.
1/10	Mr. Jim Walton	Lands, R.O.	Albuquerque, N.M.
1/31	Mr. Ted Conrardy	Lands, R.O.	Albuquerque,N.M.
2/25	Mr. Barclay & Mr. Conrardy	R.O.	Albuquerque,N.M.
2/29	Mr. Weigand, et.al.	S.C.S.	
3/8	Mr. Jesse Williams	Colo.StateG&FDept.	
3/15	Mr. Conrardy & Mr. Walton	Lands, R.O.	Albuquerque,N.M.
3/16	" "	"	"
4/12	Mr.Baer & Mr. Robertson	Agents	Denver, Colo.
4/12	Mr. Alfred Paulson,	Marshall Nurseries	Denver, Colo.
4/20	Mr. Gatlin	R.O.	Albuquerque,N.M.

C. Refuge Participation

All of the refuge staff have been participating in the Ground Observer Corps, one of the stations being located at refuge headquarters. Day time watches are being taken care of by refuge personnel with no other participation being made by local people at this time.

Cooperation has been made with the local San Luis Valley Rural Electric Coop. in running pump tests on wells within the area to show how differences in efficiency ratings can be obtained by proper selection of pump by first test pumping well.

Bryant and Stegman again this year helped the local Lions Club with the drive for the Red Cross.

Films were obtained for showing by several interested parties.

D. Hunting.

No hunting has been permitted on the refuge up to this time. Recommendations were made for Pheasant and Rabbit hunting during the coming year. No seasons were open on resident game during the period.

E. Violations.

No violations occurred during the period.

VII. OTHER ITEMS

The refuge took over control of Woods and Muller lands during the latter part of the period.

A new Operational Plan was forwarded covering all lands under our control.

Plans are being formulated for a 4H Club project and will be forwarded in the near future for approval.

Submitted by:

Charles R. Bryant
Refuge Manager

Date: May 9, 1956

Approved by:

John C. Gatlin
Regional Director

TABULATION OF PUBLIC USE

Refuge Monte Vista National Wildlife Refuge, Colorado

	Visitor Days This Period	Visitor Days To Date C.Y.
1. Hunting Use (Where permitted)	None	None
2. Fishing Use	None	None
3. Miscellaneous (All other uses)	600	600
Estimated total use all types	600	600

SUMMARY OF YEAR'S ACCOMPLISHMENTS

ON THE

MONTE VISTA NATIONAL WILDLIFE REFUGE

Weather conditions during the year have continued to be very dry with the water table in the valley showing a sharp decrease.

Several of the small artesian wells within the area have gone dry during the summer months and producing very little in the fall and spring months.

Only one haying was received on most of the units of the refuge but sufficient water was available to carry on with our agriculture crops.

Wells No. 3, 4, 5, 6 and 7 were drilled during the year. Well No. 3 was equipped with a 15 horsepower motor and pump which will produce 1838 gallons per minute. Well No. 4 produced 790 gallons per minute artesian flow. Well No. 5 produced 801 gallons per minute artesian flow. Well No. 6 gives a sufficient supply for headquarters and Well No. 7 produces 1390 gallons per minute artesian flow. These wells have certainly helped with increased production of hay, agricultural crops and cover for our nesting birds.

Three additional deep artesian wells have been scheduled for drilling.

Movement from the Monte Vista Post Office to our new service building was completed during the early part of the year.

Bryant was moved from Quarters 1 to Quarters 3.

Stegman moved into Quarters 1.

Parker moved into Quarters 4.

Approximately 300 acres was planted to barley in Unit 1, 3, 4 and 13. Yield was very good and a large portion of this land had sufficient feed present to eliminate crop depredation complaints in the vicinity of the refuge.

Waterfowl populations were very high during the fall of 1955 and wintering populations were considerably above those of a year ago.

A poisoning program on skunks and magpies have decreased our loss of nesting birds very sharply, and increased cover and food should bring about a higher hatch during the coming year.

Dave Salazar, Homer Turner and Eileen Turner were paid for 380 acres of additional land for the refuge.

Options were taken on the Woods, Muller, Long, Pearsall and Steinert properties, giving us an over-all acreage of approximately 7,775 acres.

A total of 1428 bushel of barley was harvested and during the coming year this will be used for feeding of our decoy goose flock and other waterfowl.

Approximately 13 miles of small irrigation ditches were reworked and cleaned throughout the refuge.

One bridge was built across Spring Creek and a new roadway into Units 11, 13 and adjoining Units 22, 23 and 24.

Twenty-seven small ponds were constructed in Units 15, 16, 17, 18 and 20.

Four ponds of approximately 20 acres each were constructed in Units 15 and 16.

One and one-tenth mile of dike in Unit 11 was reworked and control structures placed in same. The top of the dike is used for roadway from headquarters to Units on East side.

Eight sheet piling structures were completed in South meadow ditch Unit 16.

Seven and one-half mile of roads and trails were reworked and built up to higher grade.

New display pen and pool with wind shelter and islands were constructed in Unit 5.

Measuring wier was installed in Unit 7 by Monte Vista Canal Co.

Eleven flumes under the roadways were installed and riprapped.

Approximately 10 acres in Unit 4 was treated with 2,000 pounds of gypsum to the acre for treatment of alkali on this land.

Quarters No. 1, 2 and 4 were repaired during the year.

Corrals, barns and houses on the Berry property and Salazar property were sold under bid.

Generally speaking we feel that quite a lot of progress has been made on the refuge this year. Especially so in getting ditches, ponds, measuring wiers, dividing boxes and structures situated so that better management of the waters available resulted.

Charles R. Bryant
Refuge Manager

3-1750
Form NR-1
(Rev. March 1953)

COPY

WATERFOWL

REFUGE Monte Vista National Wildlife Refuge, Colorado MONTHS OF January TO April, 1956

(1) Species	(2) Weeks of reporting period 1	2	3	4	5	6	7	8	9	10
Swans:										
Whistling										
Trumpeter										
Geese:										
Canada									21	3
Cackling										
Brant										
White-fronted										
Snow										
Blue										
Other										
Ducks:										
Mallard	20,000	20,000	5,000	4,000	4,000	4,000	4,500	4,500	11,000	11,000
Black										
Gadwall	500	500	200	150	150	150	150	150	300	300
Baldpate										
Pintail	1,000	1,000	500	300	300	300	350	400	3,000	3,500
Green-winged teal	50	50	50	30	20	20	20	30	80	200
Blue-winged teal	50	50	50	40	30	30	30	30	60	60
Cinnamon teal										
Shoveler	50	50	30	20	20	20	20	20	50	50
Wood										
Redhead										1
Ring-necked										
Canvasback	2	2	2							
Scaup										
Goldeneye	12	12	10							
Bufflehead	4	4		2					2	
Ruddy										4
Other Am. Merganser					20	20	20	20	20	20
Coot:										

Int. Dup. Sec.,
Wash., D. C. 37944

S-1150
Form RB-1
(Rev. March 1953)

COPY

WATERFOWL

REFUGE North Platte National Wildlife Refuge, Colorado MONTHS OF January TO April, 1954

(1) Species	(2) Weeks of reporting period 1	2	3	4	5	6	7	8	9	10
Swans:										
Whistling										
Trumpeter										
Geese:										
Canada									21	2
Cackling										
Brant										
White-fronted										
Snow										
Ross										
Other										
Ducks:										
Mallard	20,000	20,000	5,000	4,000	4,000	4,000	4,500	4,500	11,000	11,000
Black										
Gadwall	500	500	200	150	150	150	150	150	300	300
Baldpate										
Pintail	1,000	1,000	500	300	300	300	350	400	1,000	3,500
Green-winged teal	50	5	50	30	20	20	20	30	80	200
Blue-winged teal	50	50	50	40	30	30	30	30	20	60
Cinnamon teal										
Shoveler	50	50	30	20	20	20	20	20	50	50
Wood										
Redhead										1
Ring-necked										
Canvasback	2	2	2							
Scaup										
Goldeneye	12	12	10							
Bufflehead	4	4		2					2	
Ruddy										4
Other Am. Mergansers					20	20	20	20	20	20
Coots:										

Int. Dup. Sec.,
Wash., D. C.

Cont. NR-1
(Rev. March 1953)

COPY

COPY

WATERFOWL
(Continuation Sheet)

REFUGE Monte Vista National Wildlife Refuge, Colorado MONTHS OF January TO April, 1956

(1) Species	(2) Weeks of reporting period 11	12	13	14	15	16	17	18	(3) Estimated waterfowl days use	(4) Production Broods seen	Estimat total
Swans:											
Whistling		2							14		
Trumpeter											
Geese:											
Canada	3	3	3						231		
Cackling											
Brant											
White-fronted											
Snow											
Blue											
Other											
Ducks:											
Mallard	11,000	11,000	11,000	7,000	3,000	2,000	2,000		945,000		
Black											
Gadwall	300	300	500	700	200	200	200		33,250		
Baldpate											
Pintail	3,500	3,500	4,000	4,000	200	200	200		183,750		
Green-winged teal	200	200	500	500	150	80	80		6,810		
Blue-winged teal	60	60	300	300	175	70	70		4,455		
Cinnamon teal			70	70	70	60	60		990		
Shoveler	50	50	100	250	250	70	70		3,510		
Wood											
Redhead	1	1	1						21		
Ring-necked				12					84		
Canvasback									42		
Scaup				28	30	20	20		686		
Goldeneye				30	30	30	30		1078		
Bufflehead				8	8				196		
Ruddy	4	4	200	200	200	200	200		7084		
Other Am. Merganser	20	20	60	70	80	50	10		3010		
Coot:				10	10				140		

(over)

	(5) Total Days Use	(6) Peak Number	(7) Total Production
Swans	14	2	
Geese	231	21	
Ducks	1,189,966	21,668	
Coots	140	10	

SUMMARY

Principal feeding areas refuge grain fields

Principal nesting areas

Reported by Charles R. Bryant, Refuge Manager

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

(1) Species: In addition to the birds listed on forms, 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).

Interior Duplicating Section, Wash., D.C. 944
1953

3-1751
Form NR-1A
(Aug. 1952)

MIGRATORY BIRDS
(Other than Waterfowl)

Refuge Monte Vista Nat'l Wildlife Refuge Months of January to April 1956

(1) Species	(2) First Seen		(3) Peak Concentration		(4) Last Seen		(5) Production			(6) Total
Common Name	Number	Date	Number	Inclusive Dates	Number	Date	Number Colonies	Total # Nests	Total Young	Estimated Use
I. Water and Marsh Birds:										
Pied-billed Grebe	1	1/3/56	1	1/14/56	1	1/14/56				11
Sandhill Crane	42	3/1/56	800	3/25/56	7	4/21/56				10518
Wilson's Snipe	20	3/25/56	20	3/25/56	16	4/28/56				1574
Avocet	8	3/25/56	90	4/28/56	Still Present					966
Greater Yellow Legs	200	4/22/56	200	4/22/56	Still Present					1400
Bittern	2	4/22/56	2	4/22/56	Still Present					14
Black-crowned Night Heron	5	3/26/56	25	4/28/56	Still Present					9968
Snowy Egret	2	4/16/56	2	4/16/56	Still Present					70
II. Shorebirds, Gulls and Terns:										

(over)

(1)	(2)		(3)		(4)		(5)		(6)
III. Doves and Pigeons:									
Mourning dove									
White-winged dove									
IV. Predaceous Birds:									
Golden eagle	12	1/1/56	22	1/15/56	2 Still Present				994
Duck hawk									
Horned owl	4	Resident species							
Magpie	20	Resident species							
Raven									
Crow	100	1/1/56	100	1/1/56	100	3/3/56			5425
Bald Eagle	4	1/1/56	6	1/8/56	2 Still Present				306

Reported by Charles R. Bryant, Refuge Mgr.

INSTRUCTIONS (See Sec. 7532, Wildlife Refuges Field Manual)

(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 Gruiiformes)
II. Shorebirds, Gulls and Terns (Charadriiformes)
III. Doves and Pigeons (Columbiformes)
IV. Predaceous Birds (Falconiformes, Strigiformes and predaceous Passeriformes)

(2) First Seen: The first migration record for the species for the reporting period.

(3) Peak Numbers: Estimated number and inclusive dates when peak population of the species occurred.

(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 species days use (average population X no. days present) of refuge during the reporting period.

3-1752
Form NR-2
(April 1946)

UPLAND GAME BIRDS

Refuge Monte Vista Nat'l Wildlife Refuge Months of January to April, 1945 56

(1) Species	(2) Density		(3) Young Produced		(4) Sex Ratio	(5) Removals			(6) Total	(7) Remarks
Common Name	Cover types, total acreage of habitat	Acres per Bird	Number broods obs'v'd.	Estimated Total	Percentage	Hunting	For Re-stocking	For Research	Estimated number using Refuge	Pertinent information not specifically requested. List introductions here.
Ring-necked Pheasant	7,775 Creosewood, Meadows Parslands				70% Hens 30% Cocks				12,600	Populations on the area are building up very rapidly

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.

3-1754
Form NR-4
(June 1945)

SMALL MAMMALS

Refuge Monte Vista Nat'l Wildlife Refuge Year ending April 30, 1956

(1) Species	(2) Density		(3) Removals					(4) Disposition of Furs						(5) Total Population
								Share Trapping						
Common Name	Cover Types & Total Acreage of Habitat	Acres Per Animal	Hunting	Fur Harvest	Predator Control *	For Re-stocking	For Re-search	Permit Number	Trappers Share	Refuge share	Total Refuge Furs Shipped	Furs Donated	Furs Destroyed	
Skunk	7,775 acres of brush, native meadow & farmland													10
Muskrat	Springs, creeks, 210 small ponds, and ditches													1000
Cottontail Rabbit	" "													800
Jackrabbit														1000
Thirteen Striped Ground Squirrel														1000
Badger														10
Coyotes														1
Weasel														25

* List removals by Predator Animal Hunter

REMARKS:

Reported by Charles R. Bryant, Refuge Manager

INSTRUCTIONS

Form NR-4 - SMALL MAMMALS (Include data on all species of importance in the management program; i. e., muskrats, beaver, coon, mink, coyote. Data on small rodents may be omitted except for estimated total population of each species considered in control operations.)

(1) SPECIES: Use correct common name. Example: Striped skunk, spotted skunk, short-tailed weasel, gray squirrel, fox squirrel, white-tailed jackrabbit, etc. (Accepted common names in current use are found in the "Field Book of North American Mammals" by H. E. Anthony and the "Manual of the Vertebrate Animals of the Northeastern United States" by David Starr Jordan.)

(2) DENSITY: Applies particularly to those species considered in removal programs. 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, bottom land 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) REMOVALS: Indicate the total number under each category removed since April 30 of the previous year, including any taken on the refuge by Service Predatory Animal Hunter. Also show any removals not falling under headingslisted.

(4) DISPOSITION OF FUR: On share-trapped furs list the permit number, trapper's share, and refuge share. Indicate the number of pelts shipped to market, including furs taken by Service personnel. Total number of pelts of each species destroyed because of unprimeness or damaged condition, and furs donated to institutions or other agencies should be shown in the column provided.

(5) TOTAL POPULATION: Estimated total population of each species reported on as of April 30.

REMARKS: Indicate inventory method(s) used, size of sample area(s), introductions, and any other pertinent information not specifically requested.

116007

3-601
(Sept. 1940)

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE

REPORT ON PHOTOGRAPHIC EXPOSURES

NOTE.—This form is to be prepared from field memoranda and forwarded with all films, whether developed or undeveloped. If developed negatives are submitted, the proper roll number and exposure number should be put on the edge of each negative—in ink. It is important to give adequate information regarding each expoures—date taken, locality, name of refuge if appropriate, and what the picture is intended to illustrate, if not obvious.

Author Charles R. Bryant, Refuge Mgr. *Date submitted* January 23, 1956

Address Monte Vista Nat'l Wildlife Refuge *Films issued or purchased* , 19

PERMANENT NUMBER (LEAVE BLANK)	TEMPORARY NUMBER ROLL	TEMPORARY NUMBER EXPOSURE	DESCRIPTION OF VIEW, DATE TAKEN, LOCALITY, AND PURPOSE (USE MORE THAN ONE LINE FOR EACH, IF NECESSARY)
		1 Blank	
		2 Blank	
	19	3	House on Joseph C. Long tract (116)
	19	4	House
Corrected v.f.p.	19	5	Outbuildings
	19	6	Bunkhouse
	19	7	Barn
	19	8	Chicken House
	19		↑
	19	9	Shed
	19	10	Sheep and corrals
	19	11	Cattle and corrals
	19	12	Calves and pen
	19	13	House from East to West
	19	14	2" Well supplying corrals
		15 Blank	
	19	16 Barn 17	4" well, SE corner looking NE
	19	18	2" well, house and garden supply
	19	19	Looking south from NW corner
	19	20	8" well, S center of west boundary
	19	21	Looking North from SW corner
	19	22	Lee Woods buildings tract 126

U. S. GOVERNMENT PRINTING OFFICE 16—18285

S-801
(Sept. 1940)

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE

REPORT ON PHOTOGRAPHIC EXPOSURES

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	19	2	House
	19	3	Outbuildings
	19	4	Bunkhouse
	19	7	Barn
	19	8	Chicken House
	19		
	19	9	Shed
	19	10	Sheep and corrals
	19	11	Cattle and corrals
	19	12	Calves and pen
	19	13	House from East to West
	19	14	2" Well supplying corrals
	19	15	4" well, SE corner looking NE
	19	16	2" well, house and garden supply
	19	17	Looking south from NW corner
	19	20	8" well, S center of west boundary
	19	21	Looking North from SW corner
	19	22	Lee Woods buildings tract 126

U. S. GOVERNMENT PRINTING OFFICE 16—18086