BRANCH OF WILDLIFE REFUGES

Narrative Report Routing Slip

Mr. Salyer _____ ~~Mr. Ackerknecht~~

Mr. Crawford _____

Administrative Services

~~Miss Baum~~

Operations

~~Mr. Formanich~~ _____ ~~Mr. Regan~~ _____

Public Use

~~Mr. Dufont~~ _____ ~~Mr. Kubichek~~ _____

~~Mr. Stollberg~~ _____

Resource Management

Dr. Morley _____ Mr. Hickok _____

Wildlife Management

Mr. Banko _____ Mr. Stiles _____

Mr. Goldman _____

Refuge PATHFINDER _____ Period May - Aug. 1959 _____

PATHFINDER NATIONAL WILDLIFE REFUGE

N A R R A T I V E R E P O R T

May, June, July, August
1959

REFUGE PERSONNEL

Charles E. Kennedy . . . . Refuge Manager
Vera M. Collins . . . . . Refuge Clerk

EXPLANATION
(or excuse)

The incompleteness, brevity and/or complete lack of info in some sections of this report is due to the fact that no refuge manager was on hand during July and August.

Former Manager, (now of the R.O. staff) Harensio B. Crandellio's notes and activities in May and June provided the only info upon which this report is based.

As for myself, I was able to make only two short trips to Pathfinder in August. The first trip was just a quick glance along the Sweetwater, and on the second trip, the truck tried to become part of the lake bottom, so the boat never did get in the small amount of water remaining in the reservoir.

Some ideas about the period were garnered in September.

Charles E. Kennedy
Refuge Manager

PATHFINDER NATIONAL WILDLIFE REFUGE
Laramie, Wyoming

N A R R A T I V E R E P O R T
May, June, July, August
1959

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Pathfinder National Wildlife Refuge
Laramie, Wyoming

NARRATIVE REPORT
May, June, July, August, 1959

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I. GENERAL

A. Weather Conditions.

Pathfinder Refuge had a very dry summer. Neighboring ranchers stated that no rain fell from late May until September 15th.

Strong winds blew on many days making the dry summer seem even drier.

B. Habitat Conditions.

1. Water.

Pathfinder Reservoir is still very low. The Sweetwater Arm, which is normally a lake, is so low that the Sweetwater River meanders along for several miles in its old streambed before it reaches any water backed up by the dam.

The still incompleted tunnel-power project at the dam is partially responsible along with low run-off and the Bureau of Reclamation's water management. With normal run-off this winter, the Bureau assures me the reservoir will gain somewhat.

Strangely enough, most of the small creeks were still running at the end of the period in spite of the dry summer.

2. Food and Cover.

The exposed lake bottoms produced a lot of green browse for the geese. Goose usage was nearly constant along the Sweetwater Arm and occasional at creek mouths and other low meadow-like areas.

II. WILDLIFE

A. Migratory Birds.

1. Canada Geese.

Molting Canada Geese numbers are up slightly from last year: 205 at Sand Creek, 14 near Bishop's Point on the Sweetwater, and 18 at DeWeese Creek for a total of 237. (There were 202 this period last year.) Goose production fell a little this year: 13 broods with 57 young as compared with 17 broods and 102 young last year.

The net results, and compared with last year, are:

	1958	1959
Molters	202	237
Goslings	102	57
Paired Adults	34	26
	338	320

The writer counted 162 geese in the Sweetwater Arm at the close of the period but was unable to make a count for the entire area.

2. Ducks.

Occasional broods were seen by Crandell at all portions of the refuge. Peak numbers occurred around the middle of July, totalling 2500 summering ducks, mostly Mallards, Pintails, Redheads, American Mergansers, and a few Scaup.

B. Upland Game Birds.

Sage Grouse were common along the Sweetwater, Sand Creek and DeWeese Creek.

Chuckars, seen in September, 1958, were not seen this period.

C. Big Game Animals.

1. Antelope

Antelope are the most abundant form of wildlife. They made heavy use of the greenery along the lake bottoms.

2. Mule Deer.

No observations.

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

Cottontails are still very plentiful, and it was a surprise to the writer to learn that they are not classified as game animals in Wyoming.

White-tail Jacks are frequently seen but are not abundant--now.

No observations of coyotes or other predators.

Prairie Dogs and Thirteen-lined Ground Squirrels are frequntly seen.

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

The American [redacted] Ferruginous Rough Leg Hawk and Marsh Hawk were the most common hawks seen by the writer. Others seen less frequently were Red Tails, Sparrow Hawks and Golden Eagles.

A search was made of records here to supply the information sought by the National Audubon Society, State Ornithological groups and Branch of Wildlife Research, on nesting success and winter population of Bald Eagles. None of our records indicate that nesting has ever occurred on Pathfinder Refuge. In the Annual Winter Waterfowl and Bald Eagle Inventory, George Wrakestraw, Biologist, Wyoming Game and Fish Department, reported the following numbers of Bald Eagles on Pathfinder Refuge: Two in January, 1959; none in January, 1958; none in January, 1957; twelve in January, 1958. ← ?

56?

F. Other Birds.

Nothing to report.

G. Fish

Plantings in the reservoir by the Wyoming Game and Fish Department, started last spring and finished this summer, make a grand total of 1,000,000 fingerling trout. Low water levels

are depressing our hopes for the growth of the fingerlings. However, Jim Erickson and Larry Peterson of the Wyoming Game and Fish Department report that some fingerlings captured with gill nets had shown some growth and that the plantings may eventually be successful.

III. REFUGE DEVELOPMENT AND MAINTENANCE

A. Physical Development.

None this period.

B. Plantings.

None this period.

C. Collection of Receipts.

None

D. Control of Vegetation.

None.

E. Planned Burning.

None

F. Fires.

None.

IV. RESOURCE MANAGEMENT

A. Grazing.

No changes.

V. FIELD INVESTIGATION OR APPLIED RESEARCH

A. Food Plot Fences.

No new developments.

B. Banding.

One hundred ninety-two geese were captured at Sand Creek in the annual cooperative banding effort of the Wyoming Game and Fish Department and the Wildlife Service. New bands were placed on one hundred forty of these birds. The other fifty-two had bands and the band returns show they were banded as follows:

Banded at	Date	Number
Pathfinder Refuge	1958	40
	1955	1
	1954	1
	1953	1
Ocean Lake, Riverton, Wyoming	1958	4
	1957	1
	1955	1
Las Cueva Refuge, La Cueva, New Mexico	1958	1
Wheatland Reservoir, Bosler, Wyoming	1956	1
Bear River Refuge, Brigham City, Utah	1954	1

VI. PUBLIC RELATIONS

A. Recreational Uses.

A few hardy souls were able to launch their boats in spite of the low water. Mostly these boaters were water skiers.

B. Refuge Visitors.

Reported in Hutton Lake Refuge Report.

C. Refuge Participation.

Reported in Hutton Lake Refuge Report.

D. Hunting.

Closed to all hunting, except Antelope hunting in September.

D. Violations.

None.

Submitted by:

September 25, 1959

Charles E. Kennedy
Refuge Manager

Reviewed by:

William J. Kuenning
Bureau of Sport Fisheries and Wildlife

10/7/59

TABULATION OF PUBLIC USE

Refuge Pathfinder National Wildlife Refuge
Laramie, Wyoming

	Visitor Days This Period	Visitor Days To Date C.Y.
Hunting Use (Where Permitted)		
Fishing Use	1,000*	1,300
Miscellaneous (All other uses)	3,500*	4,300
Estimated total use, all types	4,500	5,600

*Based on total of same period, 1958.

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

WATERFOWL

REFUGE Pathfinder NW Refuge, Laramie, Wyoming MONTHS OF May 1 TO August 31, 1959

(1) Species	May 1,2	(2) Weeks of reporting period 3-9 1	10-16 2	17-23 3	24-30 4	31-6 5	7-13 6	14-20 7	21-27 8	9	10
Swans:											
Whistling											
Trumpeter											
Geese:											
Canada	32	32	32	*	*	*	*	322	322	*	*
Cackling											
Brant											
White-fronted											
Snow											
Blue											
Other											
Ducks:	5,000	5,000	*	*	*	*	*	*	*	*	*
Mallard											
Black		(Duck use down from previous years due to low water)									
Gadwall											
Baldpate											
Pintail											
Green-winged teal											
Blue-winged teal											
Cinnamon teal											
Shoveler											
Wood											
Redhead											
Ring-necked											
Canvasback											
Scaup											
Goldeneye											
Bufflehead											
Ruddy											
Other			*No information								
Coot:											

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

Cont. NR-1
(Rev. March 1953)

WATERFOWL
(Continuation Sheet)

REFUGE Pathfinder NW Refuge, Laramie, Wyoming MONTHS OF May 1 TO August 31, 19 59

(1) Species	(2) Weeks of reporting period 11	12	13	14	9 - 15 15	16 -22 16	23 - 29 17	30-31 18	(3) Estimated waterfowl days use	(4) Production Broods seen	Estimate total
Swans:											
Whistling											
Trumpeter											
Geese:											
Canada	*	*	*	*	165	165	165	165	8,815	13	57
Cackling					(Sweetwater Arm only)						
Brant											
White-fronted											
Snow											
Blue											
Other											
Ducks:	*	*	*	*	*	*	*	*	45,000	*	*
Mallard											
Black											
Gadwall											
Baldpate											
Pintail											
Green-winged teal											
Blue-winged teal											
Cinnamon teal											
Shoveler											
Wood											
Redhead											
Ring-necked											
Canvasback											
Scaup											
Goldeneye											
Bufflehead											
Ruddy											
Other											
Coot:											

*No information

(over)

	(5) Total Days Use	(6) Peak Number	(7) Total Production
Swans			
Geese	8,815*	5,400*	57
Ducks	45,000*	*	*
Coots			

*Does not reflect true total. Notes were incomplete due to the fact that there was no Refuge Manager at this station during a portion of this period.

SUMMARY

Principal feeding areas Mouths of creeks entering reservoir; Soda Lakes, Sweetwater Arm, and Sand Creek Bay.

Principal nesting areas Soda Lakes, Sweetwater Arm, Sand Creek and Platte River near Sage Creek

Reported by Charles E. Kennedy
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.
1953

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

MIGRATORY BIRDS
(Other than Waterfowl)

Refuge **Pathfinder NW Refuge** Months of **May 1** to **August 31** 195**9**

(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:										

There were infrequent visits to Pathfinder Refuge during the period and no scheduled censuses carried out.

II. Shorebirds, Gulls and Terns:										

(over)

(1)	(2)	(3)	(4)	(5)	(6)
III. Doves and Pigeons:					
Mourning dove		**No Notes this period.**			
White-winged dove					
IV. Predaceous Birds:		**No notes this period.**			
Golden eagle					
Duck hawk					
Horned owl					
Magpie					
Raven					
Crow					

Reported by ~~Charles E. Kennedy, 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.

Interior--Duplicating Section, Washington, D. C. 26014

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 Pathfinder For 12-month period ending August 31, 1959

Reported by Charles E. Kennedy Title Refuge Manager

(1) Area or Unit Designation	(2) Habitat Type	(2) Habitat Acreage		(3) Use-days *	(4) Breeding * Population	(5) Production *
1. Soda Lakes Unit	Crops		Ducks	31,500		
	Upland	1,161	Geese	5,200	3	14
	Marsh	300	Swans			
	Water	600	Coots	100		
	Total	2,061	Total	36,800		
2. Sweetwater Unit	Crops		Ducks	64,500		
	Upland	4,050	Geese	8,625	3	12
	Marsh	260	Swans			
	Water	6,330	Coots	400		
	Total	10,640	Total	73,525		
3. Canyon Creek Unit	Crops		Ducks	1,800		
	Upland	3,840	Geese			
	Marsh	40	Swans			
	Water	5,000	Coots	50		
	Total	8,880	Total	1,850		
4. Sand Creek Unit	Crops		Ducks	32,500		
	Upland	6,220	Geese	12,200	2	8
	Marsh	100	Swans			
	Water	9,600	Coots	100		
	Total	15,920	Total	44,800		
5. DeWeese Creek Unit	Crops		Ducks	6,400		
	Upland	1,920	Geese	1,700	3	14
	Marsh	40	Swans			
	Water	2,200	Coots	150		
	Total	4,160	Total	8,250		
6. Sage Creek Unit	Crops		Ducks	2,800		
	Upland	3,200	Geese	450	2	9
	Marsh	40	Swans			
	Water	1,440	Coots	200		
	Total	4,680	Total	3,450		
	Crops		Ducks			
	Upland		Geese			
	Marsh		Swans			
	Water		Coots			
	Total		Total			

(over)

* Does not reflect true total. No regularly scheduled censuses carried out during May-August period.

INSTRUCTIONS

All tabulated information should be based on the best available techniques for obtaining these data. Estimates having no foundation in fact must be omitted. Refuge grand totals for all categories should be provided in the spaces below the last unit tabulation. Additional forms should be used if the number of units reported upon exceeds the capacity of one page. This report embraces the preceding 12-month period, NOT the fiscal or calendar year, and is submitted annually with the May-August Narrative Report.

(1) **Area or Unit:** A geographical unit which, because of size, terrain characteristics, habitat type and current or anticipated management practices, may be considered an entity apart from other areas in the refuge census pattern. The combined estimated acreages of all units should equal the total refuge area. A detailed map and accompanying verbal description of the habitat types of each unit should be forwarded with the initial report for each refuge, and thereafter need only be submitted to report changes in unit boundaries or their descriptions.

(2) **Habitat:** Crops include all cultivated croplands such as cereals and green forage, planted food patches and agricultural row crops; upland is all uncultivated terrain lying above the plant communities requiring seasonal submergence or a completely saturated soil condition a part of each year, and includes lands whose temporary flooding facilitates use of non-aquatic type foods; marsh extends from the upland community to, but not including, the water type and consists of the relatively stable marginal or shallow-growing emergent vegetation type, including wet meadow and deep marsh; and in the water category are all other water areas inundated most or all of the growing season and extending from the deeper edge of the marsh zone to strictly open-water, embracing such habitat as shallow playa lakes, deep lakes and reservoirs, true shrub and tree swamps, open flowing water and maritime bays, sounds and estuaries. Acreage estimates for all four types should be computed and kept as accurate as possible through reference to available maps supplemented by periodic field observations. The sum of these estimates should equal the area of the entire unit.

(3) **Use-days:** Use-days is computed by multiplying weekly waterfowl population figures by seven, and should agree with information reported on Form NR-1.

(4) **Breeding Population:** An estimate of the total breeding population of each category of birds for each area or unit.

(5) **Production:** Estimated total number of young raised to flight age.

Interior Duplicating Section, Washington, D. C. 27580

3-1752
Form NR-2
(April 1946)

UPLAND GAME BIRDS

1613

Refuge Pathfinder NW Refuge Months of May 1 to August 31, 1959

(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.
Sage Grouse	Sagebrush flats and draws. 10,000 acres.	50			40-60				200	An on-and-off species not restricted to Refuge proper.

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.