BRANCH OF WILDLIFE REFUGES

NARRATIVE REPORT

ROUTING SLIP DATE 9/27, 1954

Mr. Dalyer _____ Mr. ~~DuMont~~ MAD

Mr. Krumes _____ Miss Baum _____

Section of Operations:

~~Mr. Hall~~ _____ Dr. Morley _____

~~Mr. Hagan~~ ZAR

Section of Habitat Improvement:

~~Mr. Griffith~~ REG 10-4 ~~Mrs. Ambrose~~ _____

~~Mr. Bourn~~ WSB 10-4 ~~Mr. Bates~~ W.S.

Section of Land Management:

~~Mr. Schoenfeld~~ _____ Mr. Davis _____

Stenographers:

_____ _____

_____ _____

_____ _____

REFUGE PRESQUILE

PERIOD MAY - AUGUST, 1954

PRESQUILE NATIONAL WILDLIFE REFUGE

NARRATIVE REPORT FOR THE PERIOD

MAY 1 to AUGUST 31, 1954

PERSONNEL

John L. DeLime	Refuge Manager
James J. Parlow	Refuge Maintenance-Man

INDEX

PRESQUILE NATIONAL WILDLIFE REFUGE

NARRATIVE REPORT FOR THE PERIOD

MAY 1 to AUGUST 31, 1954

I. GENERAL

A. Weather conditions

The fact that portions of Virginia have again been declared drough disaster areas, headlines our weather report - HOT AND DRY. Nearby Richmond reports an excess of 258 degrees in temperature and a deficiency of 9.64 inches of rainfall since January 1, 1954.

Following a dry summer in 1953 and an unprecedented winter drough, lack of soil moisture has been particularly acute. Streams have goon dry, wells failed, city water distributition has been curtailed and many farmers have turned to irrigation in an effort to save crops and pastures.

The refuge and immediate vicinity has been fortunate in receiving more rainfall than surrounding areas. Unfortunately most precipitation has been in the form of rapidly moving squall lines, accompanied by high winds, reaching velocities of 40 - 60 miles per hour, and intense electrical displays. Usually a high pressure area moves in behind the rain front with hot winds which quickly dry out the soil.

We are indebted to Mr. Fred Berger, Cooperative Weather Observer, at Hopewell, Virginia, for the following data.

Precipitation, maximum and minimum temperatures are given below.

	Max. Temp.	Min. Temp.	Precipitation
May	91	37	5.69
June	98	46	1.83
July	101	58	1.38
August	103	59	3.95

B. Water Conditions

The James river is at a very low stage, due to lack of fresh water run-off. At Presquilethe stench of residential and industrial pollution becomes more pronounced with each passing day. Blue crabs are appearing which indicates that the salt content of surrounding waters is increasing.

Last but certainly not least, low water levels are effecting travel to and from the island by forcing suspension of ferry operations from one to four hours on every low tide.

C. Fires

Nothing to report under this heading.

II. WILDLIFE

A. Migratory Birds

1. Populations and Behaviour

Migratory ducks had moved northward prior to May 1. Visits to swamp and marsh indicate a slight increase in resident Wood Ducks. Four broods were observed during June numbering 3-4-4 and 6 ducklings. A recent boat trip into the swamp resulted in the tabulation of 26 individual " Woodies".

Occasionally a stray Black Duck is sighted. We have no records of nesting. One bird was flushed in early May which gave every indication of a nesting duck. However, we were unable to locate the nest.

All of the so-called "resident" or "tame geese" disappeared in mid-June. Unconfirmed reports indicate that they may have joined forces with a flock under similar status, some 15 miles downstream. This exodus, as recorded and reported for the corresponding period last year, seems to be a normal occurrence coinciding with the arrival of hot weather. Prior to their "migration" one pair displayed nesting tendencies although no nests or evidence of nesting success were observed.

Great Blue Heron populations have remained constant. Two American Egrets were present on May 1. A definite influx

occurred during June. Twenty-two of the beautiful white birds were observed in a single afternoon. Occasionally, an immature Little Blue Heron is sighted in company with the egrets. Little Green Herons have been observed on two occasions and are believed to be summer residents. The call of a night heron was heard on May 5 but we were unable to identify the species.

Along the river, Ring-billed, Laughing and Herring Gull populations dropped to a low point in mid-May. A gradual build-up began in July and is still in progress. First reappearences were principally Laughing Gulls.

Caspian, Royal and Common Terns began to show in goodly numbers about July 1. Increases in Caspian and Royals are still being noted but Common Terns appear to be moving on.

Scattered flights of Lesser Yellow-leg present at the beginning of the period soon departed for the breeding grounds. Since then our shore bird observations have been confined to an occasional Spotted Sandpiper. South-bound yellowlegs were seen on August 27 in 1953.

Sora Rail.appeared a few days earlier than last year and marshes now contain their usual populations.

2. Food and Cover

Our first efforts to provide supplemental goose food for fall arrivals were destined to failure. One May 24, five acres of chufas were planted in rows to permit cultivation. Initial stand was far below standard and depredations of Raccoon and Groundhog thinned out rows even more. Rank weed growth soon outstripped the remainder of the crop to such extent that the plot was redisced and planted to milo-maize.

In all 33 acres were planted to Milo-maize with plantings made on June 7, 8, 21 and 28. Thirty-one acres in rows and two acres of a rocky hillside was sown broadcast. Preparation of an excellent seed bed enabled the grain to withstand drough conditions much better than expected. One of our better rains also fell at a particularly critical time. At one time we despaired of saving the entire field due to weeds out-growing the milo. However, three cultivations and one spraying with 2,4-D Weed Killer proved fairly effective in combatting these pests.

Early milo is well on the way toward maturity while late plantings will require another good rain. Seed heads are long and heavy and the entire field may be classed as better than average. Attesting to soil fertility a large percentage of those stalks with mature heads, are pushing out new shoots from joints. If, in some manner we can prevent deer from taking the crop, this one field should produce several tons of "hot" food. However, our prospects are none too good since, as the grain approaches maturity, deer moved into the field and are now stripping many seed heads nightly. Past experience would indicate that this damage will get worse as fall draws near.

Thirteen acres were sown to buckwheat on July 16. An undetected mouse nest in one of the seed bags stopped up several cups on the grain drill and thinned out portions of the planting. A near cloudburst which interrupted the operation proved to be another hindering factor by packing the soil and washing out some seed. An additional 14 acres sown on July 21 germinated well and has out-grown the original planting. Buckwheat is now in full bloom although in need of moisture. As was the case last year deer damage was not apparent until the buckwheat began to bloom.

Five acres of late milo were overplanted to reseeding crimson clover following the last cultivation. Initial germination and growth was excellent but the tender plants are now suffering from lack of moisture.

Two and one-half acres were overplanted to ordinary crimson clover immediately following planting of buckwheat as an experiment. Results are on a par witht those of the reseeding crimson.

Sixteen acres of a Ladino Clover- Orchard Grass mixture will furnish some browse although the clover has deteriorated steadily under pressure of over-browsing last winter, intense heat, lack of moisture and deer grazing during drought periods. Wild pastures are in better condition than they were last year and should furnish fair browse during late winter and early spring.

Duck foods in the nature of sedges, smart weeds, rushes, wild millet, partridge pea and other plants appear to be present in quantities equal to those of last year. Oak mast is in lighter yield. Therefore, all signs point to an early "eat-out" unless we can entice some of the Mallards and Black Ducks into grain fields. Up to this time there has been little evidence

of field feeding by ducks in this area.

3. Botulism

None noted on this refuge.

4. Lead Poisoning and Other Diseases

None Known.

B. Upland Game Birds

1. Populations and Behaviour

Quail: As previously reported past and present land management practices have not been condusive to ideal quail habitat. A single covey was present during the winter. Singles and paired birds are seen regularly but no young have been observed, nor has a nest site been found.

Turkey: Turkey in small numbers have been frequently seen feeding in a Ladino Clover field and along swamp edges. An old hen with two poults has been observed on several occasions. Judging from numbers of mature birds not accompanied by young, this small brood would appear to be the increment for the year.

Dove: Doves are present in numbers equal to those included in the last narrative. They are definitely more numerous than last year. The fact that no increase is reported for the period is thought to be due to birds leaving the island following harvesting of wheat and oat fields on the mainland rather than to nesting failure. Observations of four nests with young substantiates this conclusion.

2. Food and Cover

Lack of a year-round food supply may well be one of the limiting factors in the quail population. Possibly, plantings of B icolor Lespedeza and other seed producing shrubs would be beneficial to this species. Such a project could be

undertaken without detracting from our waterfowl management by utilizing fringes of the sandy dredge spoils area which is unproductive and does not figure in present plans.

With wild turkey displaying increasing tendencies toward field feeding milo plantings should supplement the supply of wild berries, seeds and mast.

Unharvested grain fields should provide an ample food supply for existing dove populations.

3. Diseases

None known on this refuge.

C. Big Game Animals

1. Populations and Behaviour

During warm weather deer feed principally at night. Consequently our sight records are not as high as previously reported. However, tracks and feeding "sign" point to a definite increase, probably due to young of the year. On a single afternoon 5 does were observed accompanied by 12 fawns. Seventeen deer were counted in the buckwheat field on August 30. Of this total 6 were fawns.

Since the swamp apparently supplies little food all feeding is confined to fields and pastures. First, heavy grazing during drought and hot weather resulted in severe damage to Ladino Clover. Now buckwheat and milo are being damaged. Grain taken by the animals is but a part of this damage. Crimson Clover growing under milo is being trampled into the ground as deer wander up and down rows, not to mention those stalks which are broken down and seed shattered. Buckwheat is suffering in a like manner. A herd of 10 to 20 deer can cut quite a swath across a field in passing through.

Considering Presquile's limited acreage of land suitable for agricultural purposes it will be necessary for each acre to produce maximum yield to sustain wintering geese. Under existing conditions deer depredations will definitely cut carrying potentials. Some type of control is a necessity.

What, when and how is the problem. Our efforts to create salt "licks" in traps have resulted in a dismal failure. There is a faint possibility that, as deer become accustomed to feeding on milo, this grain may be used as trap bait.

For the past two weeks we have been chasing deer with dogs each night hoping that the disturbance would cause at least part of the herd to leave the island. At this writing the experiment does not look promising. Too many deer. As the hounds drive from one to ten deer on a swing around the north end of the island, other animals sneak out into grain fields. When the clamour again approaches they bound off into the comparative safety of swamp and marsh, only to repeat the process on the next "go-round". Actually the hounds appear to be more confused than the deer.

An electric "deer-proof" fence has been suggested as a possible solution. Mr. Lawrence Givens, Assistant Regional Supervisor, Branch of Refuges, advanced the idea. Under our peculiar circumstances it may have merit. Fence to be constructed from the southeast corner of the island, running along the edge of agricultural lands, and again into the water, a distance of approximately one mile. However, it would be impossible to complete this fence this fall due to the press of other projects now underway.

2. Food and Cover

Discussed under Populations and Behaviour.

3. Diseases

None known on this refuge.

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

Muskrats appear to be continuing their upward trend. Lush marsh growth make it difficult to conduct a comprehensive census during summer months. However, all signs point to a sizable increase in population. Time has not permitted even an elementary study as to whether or not the species is damaging desirable duck food plants.

No otter have been observed. Slides and their

sprawling tracks indicate a limited, but constant population. Virginia Game Commission Officials report this species on the increase in the tidewater area. Mink also appear to be on an upward cycle.

Groundhog, or Woodchuck, show a marked increase. Numerous dens dotting fields are a nuisance in tractor operations. That food is getting short in some plowed fields is evidenced by several observations of "pigs" feeding on leaves of bushes in fence rows.

Skunk, using abandoned groundhog dens as homes, are also overabundant. Here again the food supply seems limited since one individual has twice gained access to this writers residence by digging through rotted planking. Luckily, its presence was detected on both occasions and a cautious "shooing" served to force Mr. Skunk to beat a slow, but stately, retreat through an open door.

Raccoon also appear to be on a rising cycle as do cotten-tail rabbit. Apparently food in the swamp is a limiting factor in the squirrel population and no change can be reported. Refuge populations of this species is considerably less than in surrounding upland wooded areas.

We have again discovered the new home of our female red fox and her pups. Judging from remains around the den muskrat flesh makes up the bulk of their meat diet. The young have been frequently observed chasing grasshoppers and feeding on black and pokeberries.

E. Predaceous Birds, including Crows, Ravens, and Magpies

Barred owls are permanent residents. We have not recorded the Horned Owl during the period. Red-shouldered and Red-tailed Hawks may also be classed as resident. At least two American Eagles visit the island daily and an occasional Osprey is sighted fishing along the river. American and Fish crows are numerous but not overabundant. In fact, no predaceous species appear to be present in sufficent numbers to arouse concern over possible depredations.

F. Fish

During May and June commercial fisherman made excellent catches in surrounding waters with "pots", gill and fyke nets.

Both Herring and Shad runs were heavier and lasted longer than last year. However, Catfish make up the bulk of all catches and are the "grubstake" for most netters. Carp, overabundant, are usually dumped from nets with no effort made to sell them. An odd note lies in the fact that there is no local market for catfish and most netters ship their catches to towns along the Mississippi River, many going to St. Louis, Missouri.

Sport fishermen enjoyed a period of good angling during June when rockfish made a run upstream. A gravel bar at the southwest tip of the island was a favored spot. One local man caught 22 fair sized "rocks" in two hours.

III. REFUGE DEVELOPMENT MAINTENANCE

A. Physical Development

May and June were rather hectic months as we attempted to complete rehabilitation work on the main house. First, a new oil furnace and heating system was installed by a contractor. Another contractor put in new copper water piping from supply tank to all fixtures in the main house. This job included installation of two new commodes and flush boxes.

Hiring of Carpenters and plaster workers proved to be quite a task. One crew agreed to terms and then backed-out just three days before the work was scheduled to begin. Finally, two qualified carpenters were found, 36 hours before deadline. Their work included: replacing floor joists and flooring in upstairs bathroom, replacing both front and back steps, jacking up, leveling and replacing portions of supporting beams and decking of front and back porches, constructing closets in kitchen, building a partition at head of stairs, patching and replacing floor boards as necessary in every room, and covering kitchen, downstairs hall and both bathroom floors with plywood. It was deemed economical to use this material as a base for laying linoleum rather than sanding the floors since they were in bad condition. Most of the windows could not be opened. Consequenly they were removed, trimmed and replaced. During this operation approximately 50 % of the window glass was replaced.

A crew of four men followed the carpenters removing old plaster, putting on metal lathe and replastering as

necessary. Approximately 80 to 85 percent of the old plaster was removed. This was a costly and time consuming project necessitating specially constructed scaffolding to enable workmen to reach ceilings in downstairs rooms. To give some idea as to the magnitude of the job, 8 tons of sand, 70 bags of plaster, 60 bags of finishing lime and ten bags of guaging plaster went into the work.

Refuge personnel were occupied in procuring and transporting supplies and materials to workmen, removing wallpaper and scraping walls, cleaning-up and hauling scrap lumber, plaster, etc. As usual transportation to and from the island was a major item. One particular day required six hours of Mr. Parlow's time in operating and waiting on the ferry. On several occasions workmen were transported by small boat

Other reconditioning items included the refinishing of floors in five rooms, one hall and steps by contractor. Wooden kitchen cabinets were constructed and installed by contract. Refuge personnel further contributed by procuring paint for walls, ceilings, woodwork, porches and steps; purchase of linoleum for floor covering, excavating for septic tank and general clean-up. All downstairs woodwork was sanded. Painting operations are scheduled to begin in the near future following a thorough scrubbing of all woodwork.

Farming and related activities consumed the major portion of our working hours for this period. As previously reported 140 acres had been plowed at time of last report. Five acres were disced twice, fertilizer spread broadcast, planted to chufas and cultipacked. Due to a poor stand, depredations of Raccoon and weeds, this plot was subsequently redisced three times, planted to milo-maize and cultipacked. Twenty-six additional acres were disced twice, fertilizer applied, planted to milo-maize and cultipacked. All of these plantings were cultivated three times and sprayed with 2,4-D weedkiller once. Following the last cultivation five acres were overplanted to reseeding crimson clover using a Cyclone hand seeder. Cultivator hiller blades were removed and a light cultivation served to cover the seed. Two acres of a rocky hillside were disced three times, fertilizer applied and sown to broadcast milo. Time expended in preparing seed beds has been more than repaid by vigorous growth of the sorghum despite drought, heat and weed competition. Milo is now approaching maturity. However, we are fearful that deer will take most of the crop prior to arrival of wintering waterfowl. Young crimson clover is suffering from lack of moisture and trampling

of deer as they wander up and down rows.

Twenty-seven acres were disced four times, fertilizer applied and sown to buckwheat. A Cyclone hand seeder was used in sowing two and one-half acres of this planting to crimson clover. The plot was then cultipacked. Here again the same problems were hindering factors. However, prospects for a better than average yield are promising if, we can prevent deer from taking the crop.

Management plans called for the remaining 80 acres to lie fallow during summer months with periodic discings to keep down weeds and grass. However, after two discings the building program interrupted the operation and pest growth became too rank for this control method to be effective. Jimson Weeds grew to a height of 6-7 feet and were 3-4 inches in diameter at the base. Rag Weeds were 4-5 feet high and Bermuda Grass formed a solid blanket in some spots. Above plants were interspersed with Polk Weed, Butter Cup, Lambsquarter, Butterprint, Crab and Johnson Grass. To combat these pests it was necessary to clip with the rotary mower, then disc and, finally replow.

Since replowing 20 tons of agricultural limestone and six tons of fertilizer have been spread on the 33 acre "Bottom's Neck " field. The area was then disced to throughly mix soil and chemicals. The acreage will be sown to Ladino Clover and wheat.

A loaded truck breaking through the ferry decking necessitated immediate repairs during June. The two carpenters, assisted by refuge personnel, started on what appeared to be routine replacement of 10 deck planks. Before the job was completed 16 man days had been expended in replacing main top sills on both ends of the barge, splicing in two cross stringers and a bottom sill and replacing the decking.

Later on a serious leak developed in the hull bottom. Investigation disclosed that the lower hull was a single layer of planking in poor condition. Although visible planks were known to be rotten in places we had been advised that another layer of three inch planks had been spiked to the original hull. In this same connection the writer made a trip to Atlanta, driving back a surplus ford passenger vehicle. Plans called for the motor to be used as a replacement power unit for the existing ferry. Since efforts are now being made to obtain a new barge the changeover has been postponed. We are nursing both barge and the 1928 white motor hoping they will

make a few more trips.

Six man days were expended assisting Mr. David Booth, Regional Hydraulic Engineer, running levels for a proposed impoundment in the east marsh.

A Hanson Bro-Jet sprayer, with tractor carrier and pump, and an eight foot drag harrow were received during the period.

Minor maintenance, general-clean-up, mowing weeds, equipment checks and office routine round out the work program.

B. Plantings

1. Aquatics and Marsh Plants

No plantings made.

2. Trees and Shrubs

No plantings made.

3. Upland Herbaceous Plants

No plantings made.

4. Cultivated Crops

Approximately eighty percent of a thirty-three acre milo-maize field approaching maturity. Yield above average despite drought conditions and weed competition. Deer damage increasing daily.

Twenty-seven acres of buckwheat in full bloom with some grain beginning to mature. A soaking rain needed in the next few days to insure crop. Deer grazing extensively in this field.

A five acre chufa planting resulted in a poor stand. Raccoon thinned out rows even more and field was finally replanted to milo-maize.

Seven and one-half acres of milo and buckwheat over-planted to crimson clover. Germination and initial growth excellent although the legume is now suffering from lack of

moisture and trampling of deer.

C. Collections

1. Seed and other propagules

No collections made.

2. Specimens

None collected.

D. Receipts of Seed and Nursery Stock

Two hundred pounds of buckwheat, 50 pounds of ordinary crimson clover and 100 pounds of reseeding crimson clover purchased locally for planting purposes.

IV. ECONOMIC USE OF REFUGE

A. Grazing

None.

B. Haying

None.

C. Fur Harvest

None.

D. Timber Removal

None.

E. Other Uses

None.

V. FIELD INVESTIGATION OR APPLIED RESEARCH

A. Progress Report

In cooperation with the Virginia Commission of Game and Inland Fisheries, the study of Utilization, preference, and Nutritional Value of Winter-Green Agricultural Crops for Goose Food will again be made on refuge lands this winter. A general food shortage and deer competition made it difficult to draw any definite conclusions last year. It is hoped that expansion of agricultural operations will enable Mr. John Bryant, Project Leader, to evaluate test crops during the comming season.

In connection with these test plots one fact is worthy of mention. Those containing Wheat, Barley, Oats, rye, crimson clover and rye grass were plowed last spring. As reported in other fields weed growth soon covered all plots. However, weed succession was quite interesting. Where crimson clover had been plowed under, Jimson Weed occurred in an almost solid stand; where winter grains had been turned under, Ragweed and Lambsquarter made up most of the stand with an occasional Jimson weed. The latter were dwarfed and many died during a protracted dry spell. In those plots where rye grass was plowed under all three species grew in equal proportions and vigour.

VI. PUBLIC RELATIONS

A. Recreational Uses

Presquile's recreational possibilities are limited and difficulities involved in getting to and from the island tend to discourage visitors. A series of accidents on State operated ferries has been another factor. Invariably, those few who have made the trip arrive at low tide when the ferry can not be operated. Because of this uncertainty, necessity of completing other projects, and general poor condition of existing ferry we have made no definite effort to encourage visitors. It is hoped a new barge and power unit can be placed into service prior to arrival of wintering waterfowl since this is the season holding the greatest attraction to visitors.

B. Refuge Visitors

Refuge visitors were as follows

5/1/54 Mr. George Broaddus, Hopewell, Va., Carpenter Repairs.

5/2/54 Mr. Bishop, Richmond, Va., Plumbing contract.

5/10/54 Mr. O. W. Hertless Jr., Richmond, Va., Furnace installation

5/20/54 and frequent trips thereafter Mr. John Bryant, Bacon's Castle, Va., regarding waterfowl food study.

6/4/54 Mr. John Cannon, Ashville, N. C., Bird study

6/6/54 Mr. Dallas Coons, Richmond, Va., Informal visit.

6/28,29 &30/1954 Mr. David Booth, FWS, Atlanta, Ga., Survey proposed impoundment.

6/29/54 Mr. William Baldwin, FWS, Port Wentworth, Ga., informal visit.

7/6/54 Miss Louise Eppes, and party, Hopewell, Va., Bird study.

7/8/54 Mr. P. Rixey Jones, Hopewell, Va., Informal visit.

7/11/54 Mr. Gilbert Holloway and wife, Richmond, Va., Informal visit.

7/29/54 Mr. Edwin Ball, FWS, Atlanta, Ga., Inspection of weed problem.

7/30/54 Mr. Frederic Scott, Richmond, Va., Bird study.

8/1/54 Mr. R. B. Burrell, Richmond, Va., Informal visit.

8/1/54 Mr. Edward Gorman, Va. Game Warden, Richmond, Va., informal visit.

8/8/54 Mr. William Draper & wife, Hopewell, Va., Informal visit.

8/20/54 Mr. Richard Harris, Richmond, Va., Informal visit.

8/22& 23/54 Mr. Carl Fermanich & daughter, FWS, Atlanta, Ga. Inspection.

8/29/54 Mr. J. P. Gill, and wife, Richmond, Va., informal visit.

C. Refuge Participation

Nothing to report under this heading.

D. Hunting

Nothing to report.

E. Fishing

There being no waters within refuge boundary lines open to public fishing there is nothing to report.

F. Violations

While running levels in the east marsh, an outboard motor was heard in one of the larger tidal "guts". Mr. Booth was left rather unceremoniously, standing hip-deep in mud, while an investigation was made. It later developed that the turtle hunters heard us coming and "hid-out" in a branch "gut". Naturally, we took the wrong fork, and after we had passed the trespassers made good their escape with a larger and faster motor. Another "near-miss" with the same men a few days later appears to have put a stop on tutle hunting.

VII. OTHER ITEMS

A. Items of Interest

Nothing to report.

B. Photographs

A few representative photographs are submitted in the Appendix.

Submitted by: John L. DeLime
John L. DeLime

Date Sept. 9, 1954 Title: Refuge Manager

Approved by: _____
Regional Refuge Supervisor

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

WATERFOWL

REFUGE Presquile National Wildlife Refuge MONTHS OF May 1 TO August 31, 1954

(1) Species	(2) Weeks of reporting period 1	2	3	4	5	6	7	8	9	10
Swans:										
Whistling										
Trumpeter										
Geese:										
Canada										
Cackling										
Brant										
White-fronted										
Snow										
Blue										
Other										
Ducks:										
Mallard										
Black	2	2	2	2	2	2	2	2	2	2
Gadwall										
Baldpate										
Pintail										
Green-winged teal										
Blue-winged teal										
Cinnamon teal										
Shoveler										
Wood	15	15	15	15	15	20	20	35	35	
Redhead										
Ring-necked										
Canvasback										
Scaup										
Goldeneye										
Bufflehead										
Ruddy										
Other										
Coot:										

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

~~3-7150a~~ 3-1750a
Cont. NR-1
(Rev. March 1953)

WATERFOWL
(Continuation Sheet)

REFUGE Presquile National Wildlife Refuge MONTHS OF May 1 TO August 31, 1954

(1) Species	(2) Weeks of reporting period: 11	12	13	14	15	16	17	18	(3) Estimated waterfowl days use	(4) Production: Broods seen	Estimated total
Swans:											
Whistling											
Trumpeter											
Geese:											
Canada											
Cackling											
Brant											
White-fronted											
Snow											
Blue											
Other											
Ducks:											
Mallard											
Black	2	2	2	2	2	2	2	2	252		
Gadwall											
Baldpate											
Pintail											
Green-winged teal											
Blue-winged teal											
Cinnamon teal											
Shoveler											
Wood	35	35	35	35	35	35	35	35	2450	4	20
Redhead											
Ring-necked											
Canvasback											
Scaup											
Goldeneye											
Bufflehead											
Ruddy											
Other											
Coot:											

(over)

	(5) Total Days Use	(6) Peak Number	(7) Total Production
Swans			
Geese			
Ducks	2,702	35	20
Coots			

SUMMARY

Principal feeding areas: Swamp and marsh

Principal nesting areas: Tidal swamp

Reported by: John L. DeLime

John L. DeLime, 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).

Interior Duplicating Section, Washington, D. C. 37944
1953

3-1751
Form NR-1A
(Nov. 1945)

MIGRATORY BIRDS
(other than waterfowl)

Refuge Presquile Month of May 1 to August 31 19 54

(1) Species	(2) First Seen		(3) Peak Numbers		(4) Last Seen		(5) Production			(6) Total
Common Name	Number	Date	Number	Date	Number	Date	Number Colonies	Total # Nests	Total Young	Estimated Number
I. Water and Marsh Birds:										
Great Blue Heron			13	Apparently resident						16
American Egret	2	5/1/54	22	Still here						30
Little Blue Heron	1	6/22/54	3	7/8/54	Still Here					5
Little Green Heron	1	5/14/54	2	7/8/54	Still Here					3
II. Shorebirds, Gulls and Terns:										
Ring-billed Gull			250	Resident along river. Not refuge proper.						250
Herring Gull			5	Resident along river. Not refuge proper.						10
Laughing Gull			100	Resident along river. Not refuge proper.						100
Royal Tern	3	7/22/54	55	Still here along river.						125
Common Tern	1	7/23/54	30	Still here along river.						125
Caspian Tern	1	8/2/54	5	Still here along river.						15
Lesser Yellow-leg			12	5/1/54	1	5/21/54				15
Spotted Sandpiper			7	Summer resident along river edges.						10
Sora Rail	2	8/21/54	3	Still here						15

(over)

(1)	(2)	(3)	(4)	(5)	(6)
III. Doves and Pigeons:					
Mourning dove White-winged dove		35 Resident			35
IV. Predaceous Birds:					
Golden eagle					
Duck hawk					
Horned owl		4 Resident			4
Magpie					
Raven					
Crow		30 Resident			30

Reported by John L. DeLime

John L. DeLime, Refuge Manager

INSTRUCTIONS

(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 & 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 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.

3-1752
Form NR-2
(April 1946)

UPLAND GAME BIRDS

1613

Refuge Prosquile Months of May 1 to August 31, 1954

(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.
Bob-white Quail	200 acres, fields field and swamp edges.	12	0						17	Estimate based on day to day observation. No young birds observed.
Wild Turkey	1150 acres. Swamp, marsh and field edges.	95	1	2	60-40				12	Estimate based on day to day observations.

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.

REFUGE GRAIN REPORT

Refuge Presquile Months of May 1 thru August 31 1954

(1) VARIETY	(2) ON HAND BEGINNING OF PERIOD	(3) RECEIVED DURING PERIOD	(4) TOTAL	(5) GRAIN DISPOSED OF				(6) ON HAND END OF PERIOD	(7) PROPOSED USE		
				TRANS-FERRED	SEEDED	FED	TOTAL		SEED	FEED	SURP
Buckwheat	1300 lbs.	200 lbs.	1500	0	1500	0	1500	0			
Milo-Maize	300 lbs.	0	300	0	300	0	300	0			
Chufa	5 bu.	0	5	0	5	0	5	0			
Crimson Clover	50 lbs.	50 lbs	50	0	50	0	50	0			
Crimson Clover (reseeding)	1	100 lbs	100	0	100	0	100	0			

(8) INDICATE SHIPPING OR COLLECTION POINT Milo-maize and Crimson Clover Purchased locally

(9) GRAIN IS STORED AT

(10) REMARKS

APPENDIX

Results of weed control operations in milo-maize, 10 days after spraying.

Showing weed succession in experimental plots. Ragweed and Lambsquarter following winter rye on right. Jimson Weed following Crimson clover on left. Plots plowed same day.

APPENDIX

Comparison of Weed Height in Same Plots.

Repair Operations on the "Drawbridge"

APPENDIX

Carpenters splicing-in bottom sill of ferry barge

Carpenter Burney cutting 6X8's for ferry sills.