DIVISION OF WILDLIFE REFUGES DATE: 5-29 1941 ROUTING SLIP MR. SALYER SECTION OF HABITAT IMPROVEMENT: MRS. WOODIN Mr. Kubichek MR. BLMER Mr. Smith MRS. GARVIN Mr. Griffith PAD 9-15-41 MR. DUMONT Miss Cook SECTION OF OPERATIONS: SECTION OF ERA: Mr. Rogan AGR 9/reps, Mr. Ball Dr. Bourn W38 18/1 V Mr. Krumos ut 2) Wrs. Wathins Mrs. Fishman Mrs. Kricun SECTION OF LAND MANAGEMENT: STENOGRAPHERS: Miss Price Miss Whorley 720 - 9-18-41 Me Ackerbnocht Ja SECTION OF STRUCTURES: Mr. Taylor 2007 1/4 Wr. Gustofoon 1000 10/13

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Return to:

#### LAKE BOWDOIN NATIONAL WILDLIFE REFUGE MALTA, MONTANA MAY 20, 1941

BIOLOGICAL NARRATIVE REPORT PERIOD FEBRUARY 1, 1941 TO APRIL 30, 1941

#### General. I.

#### Weather Conditions

There has been a decided lack in both snow and rainfall during this period and all indications point to a dry season. Precipitation and temperatures as reported by the Reclamation Weather Station in Malta are as follows:

|          | Precipitation | Max.<br>Temp. | Min.<br>Temp. |
|----------|---------------|---------------|---------------|
| February | .19           | 50            | 20 below      |
| March    | .22           | 69            | 7 below       |
| April    | .91           | 75            | 20            |
| Total    | 1.32 Extremes | 75            | 20 below      |

#### Water Conditions

= 1 inch The main lake raised about .5" this spring which was a result of melting snow on and in the immediate vicinity of the lake and a limited runoff from Black Creek. (See picture no. 537) Very little water was taken from the Reclamation Canal, for to do so would flood out diking operations and development in the Dry Lake area. The ice went out of the lake on April 13th and water now stands at about the 2206.5 ft. contour elevation.

2206.0 - framble level

#### Fires

Four grass fires occured on the Refuge during this period, three of which were set by trains along the Great Northern rightof-way traversing the southern portion of the Refuge. The fourth was set by a farmer's son who was burning weeds in the' vicinity of the Refuge and the fire got out of control, burning about 12 acres of grazing land on the southeast corner of the Refuge. On this latter occasion fire spread on to the Refuge very suddenly in a somewhat isolated area without being noticed until several acres had been burned over. The Patrol Trail in this area acted very well in the capacity for which it was intended to, also serving as a fire lane. With the head of fire checked by the Patrol Trail and with the assistance of some of the local farmers, part of which are members of our Cooperative Fire Suppression crew, we were able to bring the side lines of this fire quickly under control with equipment and N. Y. A. assistance from the headquarters from where the fire was first observed. The fire tool cache in this vicinity would have been

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destroyed had it not been properly protected by a coat of gravel for several feet away from the cache as fire had burned through this area before anyone reached the fire. (See picture no. 538) While the railroad fires are somewhat of a menace, comparatively little damage has been done as yet as all of them were quickly observed and extinguished, but it is felt that on some future occasion these fires will undoubtedly do considerable damage on the Refuge. (See pictures nos. 539-40) All the above fires have been covered by Field Report of Fire forms as included in Divisional Memorandum No. 65.

#### II. Wildlife

#### A. Water Birds

#### 1. Population and Behavior

The first signs of spring migration began on March 10th when about 30 Mallards and Pintails were seen flying about the Refuge and feeding in grain fields in the immediate vicinity. On March 17, 14 Canada Geese were seen on the ice on the main lake and on March 18th several Ring-billed Gulls appeared. The first snow geese appeared on March 29th and later on April 10th about 800 of these birds occupied the Refuge which was the height of their spring migration population. The first Canyasbacks appeared on April 5th and on April 6th a few Pelicans began arriving which were preceded a few days earlier, April 2nd, by the Blue Herons. The Sandhill Cranes arrived on April 10th and the first Curlew on April 16th.

Practically all species of ducks and geese have shown a favorable increase and the most noticeable among these are the Canvasback, Mallard, Baldpate, Pintail and Canada Geese. The Snow Goose migration was much the same as last year, possibly a slight increase. (See pictures nos. 541-42-43) Also a favorable increase has been noticed in Wilson's Phalarope and several of these birds have been observed feeding in small bays from time to time on the northside of the Refuge. (See picture no. 547)

#### 2. Food and Cover

Both food and cover conditions continue to improve throughout the area as over-grazed conditions are remedied by restriction of stock grazing and as a result of various acquatic plantings undertaken the past few years. In an attempt to dispose of some of the excessive growth of Rushes on what is known as Rush Foint on the northwest end of Big Island, some burning operations were undertaken and although not completely successful because of the adverse conditions of burning these Rushes during the winter, a considerable amount of good was accomplished and it is hoped that this burning will relieve the Botulism situation at this point and possibly produce a better growth of Rushes which may be used to a better advantage for both food and cover. (See pictures nos. 544-45)

#### 3. Disease

As a result of an unusually heavy growth of Sago and other acquatic vegetation last year a great mass of this decaying matter, together with considerable fish carcasses that froze out during the winter, has drifted against the East lake shore creating a dangerous situation from a Botulism standpoint. (See pictures nos. 551-67-68) A special report of this situation has been made to the Regional Office under date of May 13, 1941.

#### B. Upland Game Birds

#### 1. Population and Behavior

Chinese Pheasants and Hungarian Partridges continue to increase at the Headquarters and in Black Creek and are well along with their nesting activities at the close of this report (see picture no. 546), one nest being located only a few yards from the Office at the Headquarters. Although I have had no opportunity to get a special observation to these birds I have failed to notice the usual number of Sage Grouse on the Refuge this spring. I intend to look into this matter further in an attempt to determine whether or not there is a scarcity and if so, why.

#### C. Other Birds

A Robin was first observed at the Headquarters this year on March 31st. These and several other similar birds are beginning to inhabit the Refuge in the vicinity of the Headquarters as the growth of trees and shrubs increases.

Of unusual importance, I believe, was the discovery on February 23rd of a Western Horned Larks nest in the immediate vicinity of the Refuge located in about 4" of snow in which was 2 downy young birds from 2 to 3 days old. (See picture no. 548)

#### D. Big Game

The Antelope came through the winter in the best of condition and prospects look good for a sizeable increase this year. At the close of this report these animals are scattered pretty well over the Refuge and the Bucks are generally running in small bands and the Does have selected their individual coulees in preparation for fawning. (See picture no. 549)

#### E. Fur Bearing Animals, Predators, etc.

A total of 15 Coyote pelts and 2 Weasels was the extent of predators taken from the area during the winter and 10 Muskrats were removed from small dams and in the vicinity of water control structures. These were shipped to the Seattle Fur Exchange and sold on April 16th for a total of \$115.39 less 5% commission. (See picture no. 550)

A considerable number of Carp froze out during the winter months in some of the shallower areas of the lake and especially in the canal leading from Reclamation ditch areas. Arrangements were made with McNeil brothers to remove these fish by seigning beneath the ice and it is my opinion that they purposely refrained from doing this work because of their desire to wait until next winter at which time the fish would be of a more marketable size.

#### III. Refuge Development and Maintainance

#### A. Fiscal Development

After considerable delay and much difficulty I was able to get my W. P. A. Project going on February 10th with 25 men. 15 more men were assigned on February 19th and the first job undertaken was to complete the 100 ft. water control structure in Dike 't" near the south end of Dike "B". (See pictures nos. 552-53-54) This work consisted of installation of cat-walk, flash boards, completion of riprap on the lower side and the earth fill between wing walls at east end.

A 50 ft. control structure in the old dike at the east end of the Refuge was also finished. This work consisted chiefly of the same work as on the hundred foot structure. (See pictures nos. 555-56) Other work accomplished during this period by W. P. A. consists of graveling of about 3 miles of trail, construction of a pole boat landing, boat ramp, parking area and widening of driveway in the vicinity of the boat house, (see pictures nos. 557-58); construction of various tool cupboards, shelves, and nail bins in the equipment building, construction of new concrete floor in 28' x 48' equipment building, (see pictures nos. 562-63); development of about 1 mile of trail along spoil bank at upper end of Dry Lake Supply Canal. (See pictures nos. 559-60-61)

Following Mr. Dodge's return from the National Bison Range, dike construction operations were resumed on April 24th and work has been progressing nicely under somewhat favorable working conditions. (See pictures nos. 564-65-66) Somewhat better progress could be made in this work if a regular oiler was available to assist Mr. Dodge in operation of this equipment. This has been impossible since this construction work has not yet been approved by W. P. A. and therefore he has been assisted temporarily by N. Y. A. boys in maintainance, repair, and operation of this machine. This assistance is now becoming unavailable as well as are the possibilities of W. P. A. assistance, therefore it seems that it will be necessary to employ an oiler out of regular funds or for Mr. Dodge to operate this equipment alone which will greatly retard progress in this work.

#### B. Maintainance and Repair

Equipment maintainance during this period has been continued with the assistance of N. Y. A. and all trucks and other equipment have been given the usual checkup and maintainance attention. Some home-made dragline mats were repaired by N. Y. A. boys and other miscellaneous odd jobs around the Head-quarters and in the shop. Last years growth of Crested Wheat Grass was burned off in the vicinity of the Headquarters and other care and attention was given to the general landscape thereabouts.

#### C. Plantings

Since it was impossible to use W. P. A. labor on food patch planting this spring and because of the scarcity of N. Y. A. assistants for the work it was necessary that Mr. Ekedahl take care of most of the farming operations. Approximately 40 acres have been seeded thus far. Also because of the lack of help it has been impossible to carry on the tree and shrub planting I had planned for this season. The only planting that has been done consists of a few conifers, shrubs, and other trees at the Headquarters which I planted myself.

#### D. Distribution of Seed and Nursery Stock:

| Item                   | Quantity<br>on Hand | Surplus to needs of Refuge<br>and available for transfer |
|------------------------|---------------------|--|
| Prairie Bulrush        | 136 bu.             | 40 bu.   |
| Hardstem Bulrush       | 150 lbs.            | 0  |
| Wild Millet            | 100 lbs.            | 0  |
| Pennsylvania Smartweed | 16 bu.              | 0  |
| Sago Pondweed          | 15 lbs.             | 0  |

Seed listed here is stored in granary at Refuge Headquarters where adequate storage is available. The average cost of harvesting the 136 bushels of Prairie Bulrush was approximately 50% per bushel.

#### IV. Public Relations

The usual annual Wildlife Week activities were undertaken prior to and during the week of April 13th to the 19th and newspaper clippings of articles and pictures taken from the Malta, Havre, and Glasgow publications are attached to this report following the collection of photographs.

#### V. Economic Uses of Refuge

No hay, grazing or other permits were issued during this period.

#### VI. Field Investigations and Applied Research

The only activities following under this heading during this period was the burning of Rushes in an attempt to improve food and cover conditions and to eliminate Botulistic conditions. No information is yet available on this experiment.

#### VII. Other Items

I was very much pleased at the opportunity of attending the Refuge Managers Conference at Portland on April 21st to the 24th and I hope that this may be an annual affair. I feel that I received much benefit in contacting the Portland officials and Office Staff as well as the various Refuge Managers and I believe that the various discussions undertaken at this meeting, and in personal contacts while in attendance, will be a big help in carrying on my Refuge Administration and Development activities here at the Bowdoin Refuge.

Following is a narrative report covering Easement Areas under my administration. Also attached is my selection of photographs taken during this period of Development and Wildlife on the Bowdoin Refuge and Easement Areas.

## REPORT ON EASEMENT REFUGE AREAS ADMINISTERED FROM AND IN CONNECTION WITH LAKE BOWDOIN REFUGE

#### Lake Thibedeau, Greedman's Coulee, Black Coulee and Hewitt Lake.

The Thibedeau and Greedman Refuges were inspected on February 28th and I found that while prospects looked favorable for the reservoir at Greedmans' to fill when the snow, available at that time, melted, (See picture no. 569) The outlook for Thibedeau was not so good as there was very little snow on that area. Food and cover conditions are improving a little on the Thibedeau area, especially on upper end of the diversion reservoir unit. (See picture no. 570) Some of these areas will make ideal nesting grounds if and when we are able to fence them.

As shown in picture no. 571 the Diversion Canal headgate at Diversion Reservoir is in need of at least temporary repair. This has needed some attention for sometime but have been waiting to do it with W. P. A. but since prospects are not good for getting any work done on these areas from that source it will probably be necessary to hire some local rancher out of Refuge Maintainance Funds to make this temporary repair.

An inspection of the Hewitt Lake area on April 16th revealed somewhat of a water shortage which is unusual for that area. The lower lake still holds up well but the upper lake is not more than half full. In view of the water shortage and the <u>overgrazed condition of this area</u> I thought an unusual number of birds were present. I especially noticed approximately 300 Scaup on the lower lake which were evidently in their migration flight.

Black Coulee Reservoir filled almost to capacity this spring but did not flow through the spillway. Greedmans' also filled but did not spill. Thibedeau, as usual, got nothing in the main lake although the Diversion Reservoir practically filled and Mud Lake unit filled to about one-half capacity. The Grassy Lake unit is still dry.

#### LAKE BOWDOIN REFUGE MIGRATORY WATERFOWL RECORD SPRING MIGRATION 1941

#### DUCKS

| No.   observed   No.   observed  | ODDATES                | 1941                                    |         | 40 comparison                          |
|--|------------------------|---|---------|--|
| 1. Pintail 6300 3-10-41 4000 3-1-40 2. Showeler 4400 3000 3. Baldpate 6500 4000 4. Teal, Elue-winged 3500 5000 5. Gadwall 4200 1000 6. Mallard 4500 3-10-41 3000 3-10-40 7. Scaup 2000 2000 8. Redhead 1800 1000 9. Ruddy 800 500 Canvasback 1500 800 T. Teal, Green-winged 1200 1000 12. Teal, Cimamon 300 200 13. Bufflehead 500 500 14. Goldeneye 500 500 15. Merganser, American 300 3-6-40 15. Merganser, American 300 3-17-41 800 3-5-80 15. Coose, Canada 1400 3-17-41 800 3-29-40 2. Lesser Snow Goose 1600 3-29-41 1500 3-29-40 3. Goose, White Fronted 100 4. Brant 7 50   |                        |   | Est.    | Date first                             |
| 1. Pintail 6300 3-10-41 4000 3-1-40 2. Shoveler 44400 3000 3. Ealdpate 6500 4000 4. Teal, Elue-winged 3500 3000 5. Gadwall 4200 1000 6. Mallard 4500 3-10-41 3000 3-10-40 7. Scaup 2000 8. Redhead 1800 1000 9. Ruddy 600 500 Canvasback 1500 300 1. Teal, Green-winged 1200 1000 12. Teal, Green-winged 1200 1000 12. Teal, Green-winged 1500 300 13. Bufflehead 500 500 14. Goldeney 500 500 3-6-40 15. Merganser, American 300 300  TOTAL 38300 24800  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX   |                        |   |         |  |
| 2. Shoveler / 4400   |                        | 200000000000000000000000000000000000000 |         | XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX |
| 2. Shoveler / 4400   | 1. Pintail / 6300      | 3-10-41                                 | 4000    | 3-1-40                                 |
| 3. Baldpate / 6500   |                        | 0-10-12                                 |         | 0-1-20                                 |
| 4. Teal, Blue-winged 3500 5. Gadwall   |                        |   |         |  |
| 5. Gadwall   |                        |   |         |  |
| 6. Mallard   | 5. Gedwell / 4200      |   |         |  |
| 7. Scaup   |                        |   |         | 3-10-40                                |
| 8. Redhead   1800   1000   500   Canvasback   1500   800   1000   |                        |   |         | 0-10-20                                |
| 9. Ruddy   |                        |   |         |  |
| Canvasback   1500   800   1000   200   200   200   300 |                        |   |         |  |
| ### Teal, Green-winged   1200   1000   200   300 |                        |   |         | F 7                                    |
| 2. Teal, Cinnamon \ 300 3. Bufflehead \ 500 4. Goldeneye \ 500 5. Merganser, American 300  TOTAL 38300  Z4800  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  |                        |   |         |  |
| 3. Bufflehead / 500  | 2. Teal.Cinnamon √ 300 |   |         |  |
| 4. Goldeneye 500 500 3-6-40 5. Merganser, American 300 24800  **TOTAL 38300 24800  **EESE**  1. Goose, Canada 1400 3-17-41 800 3-5-50 2. Lesser Snow Goose 1500 3-29-41 1500 3-29-40  3. Goose, White Fronted 100 4. Brant 7 50  |                        |   |         |  |
| 5. Merganser, American 300  TOTAL 38300  ZEESE  1. Goose, Canada 1400 2-17-41 2. Lesser Snow Goose 1500 3-29-41 3-600se, White Fronted 100 4. Brant 7 50   |                        |   |         | 3-6-40                                 |
| TOTAL 38300 24800  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  |                        |   | 300     | 2000000                                |
| GEESE  1. Goose, Canada 1400 3-17-41 800 3-5-30 2. Lesser Snow Goose 1500 3-29-41 1500 3-29-40 3. Goose, White Fronted 100 4. Brant 7 50   |                        |   |         |  |
| GEESE  1. Goose, Canada 1400 3-17-41 800 3-5-40 2. Lesser Snow Goose 1500 3-29-41 1500 3-29-40 3. Goose, White Fronted 100 4. Brant 7 50   | TOTAL 38300            |   | 24800   |  |
| 1. Goose, Canada 1400 3-17-41 800 3-5-40 2. Lesser Snow Goose 1500 3-29-41 1500 3-29-40 3. Goose, White Fronted 100 4. Brant 7 50  | *****************      | ****************                        | ******* | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ |
| 1. Goose, Canada 1400 3-17-41 800 3-5-50 2. Lesser Snow Goose 1500 3-29-41 1500 3-29-40 3. Goose, White Fronted 100 4. Brant 7 50  |                        |   |         |  |
| 2. Lesser Snow Goose 1600 3-29-41 1500 3-29-40 3. Goose, White Fronted 100 4. Brant 7 50   |                        | GEESE                                   |         |  |
| 2. Lesser Snow Goose 1500 3-29-41 1500 3-29-40 3. Goose, White Fronted 100 4. Brant 7 50   | 1. Goose Ganada / 1400 | 3-17-41                                 | 800     | 3-5-50                                 |
| 3. Goose, White Fronted 100 4. Brant 7 50  |                        |   |         |  |
| 4. Brant 7 50  |                        |   |         |  |
|  | 4. Brant 7 50          |   |         |  |
| TOTAL 3050 2300  |                        |   |         |  |
|  | TOTAL 3050             |   | 2300    |  |

SWAN

x50 100

1. Swan, Whistling xxxx 50

#### LAKE BOWDOIN REFUGE MIGRATORY WATERFOWL AND GAME BIRD RECORD SPRING MIGRATION 1941

#### CRANES, RAILS, SHOREBIRDS, AND OTHER GAME BIRDS

| XX  | XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX    | XXXXXXXXXXXXXXXXXX                      | XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX | CXCXXXXXXXXXXXXXX    | XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX |
|-----|---|---|---|----------------------|--|
|     |   | 1941                                    |   | 1940                 |  |
|     | SPECIES                                 | Est.                                    | Date first<br>observed                  | Est.                 | Date first                             |
| XX  | XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX | XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX | XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX | No.<br>XXXXXXXXXXXXX | observed                               |
|     |   |   | 1                                       |                      |  |
| 1.  | Avocet /                                | 400                                     |   | 500                  | 4-14-40                                |
| 2.  | Coot, American                          | 4000                                    | 4-8-41                                  | 2500                 |  |
| 3.  | Cranes, Sandhill                        | 1500                                    | 4-10-41                                 | 500                  | 4-16-40                                |
| 4.  | Curlew, Long-billed                     | 200                                     | 4-16-41                                 | 300                  | 4-25-40                                |
| 5.  | Godwit, Marbled                         | 400                                     |   | 300                  | 4-25-40                                |
| 6.  | Killdeer                                | 1500                                    |   | 1000                 | 4-25-40                                |
| 7.  | Morning Dove                            | 300                                     |   | 200                  |  |
| 8.  | Phalarope, Wilson's                     | 2000                                    |   | 1000                 |  |
| 9.  | Plover, Black-bellied                   | 400                                     |   | 400                  |  |
| 10. | Sandpiper,Spotted /                     | 2500                                    |   | 200                  |  |
| 11. | Sandpiper,Stilt /                       | 200                                     |   | 100                  |  |
| 12. | Snipe, Wilson                           | 250                                     |   | 200                  |  |
| 13. | Willett, Western                        | 400                                     |   | 300                  |  |
| 1   | Yellowleg, Lesser                       | 200                                     |   | 200                  |  |
| 15. | Yellowleg, Greater                      | 150                                     |   | 200                  |  |

#### LAKE BOWDOIN REFUGE NON-GAME BIRD RECORD SPRING MIGRATION 1941

| XX  | XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX |                | XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX | 200000000000000000000000000000000000000 | XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX |
|-----|---|----------------|--|---|--|
|     | SPECIES                                 | Est.           | Date first<br>observed                 | Est.                                    | Date first<br>observed                 |
| XX  | CXXXXXXXXXXXXXXXXXXXXXXXX               |                | COCCOCIONAL                            | XXXXXXXXXXXXXXXX                        |  |
| L.  | Bittern, American                       | 40             |  | 25                                      |  |
| 2.  | Grebe, Eared                            | 3000           |  | 3000                                    |  |
| 3.  | Grebe, Western                          | <b>300</b> 350 |  | 200%                                    |  |
| 4.  | Gull,Ring-billed                        | 4000           | 3-18-41                                | 2500                                    | 3-23-40                                |
| 5.  | Gull, California                        | 2500           |  | 2500                                    |  |
| 6.  | Gull, Herring                           | 500            |  | 500                                     |  |
| 7.  | Gull, Franklin                          | 7.             |  | 500                                     |  |
| 8.  | Heron, Great Blue                       | 500            | 4-2-41                                 | 400                                     | 3-29-40                                |
| 9.  | Loon, Common                            | 20             |  | 5                                       |  |
| 10. | Pelican, White                          | 2000           | 4-6-41                                 | 1500                                    | 4-14-40                                |
| 11. | Tern, Common                            | ?              |  | 2000                                    |  |
| 12. | Tern, Black                             | ?              |  | 300                                     |  |

#### LAKE BOWDOIN REFUGE MISCELLANEOUS BIRD AND MAMMAL RECORD 1941

#### OWLS

| XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX      | XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX | XXXXXXXXXXXXXXX   | XXXXXXXX                       | XXXXXXXXXXXXXXXXXX                      |
|--|---|-------------------|--------------------------------|---|
|  | B                                       | EXTENT OF INHABI  |                                | DATES OBSERVED<br>OR REMARKS            |
| SPECIES XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX |   | LRE MODERATE      | COMMON                         |   |
|  |   |                   | and the half h                 | 11.7                                    |
| 1. Owl, Burrowing                            |   |                   | x                              | 78                                      |
| 2. Owl, Short-eared                          |   |                   | x                              | 7 1 1                                   |
| 7 0 1 0 1                                    | . x                                     |                   |                                | 1                                       |
| 4. Owl, Richardson's No (Mi)                 |   | x                 |                                | 13 7 PM                                 |
|  | HAWKS                                   |                   |                                | 777                                     |
|  | 14411110                                |                   |                                | 6.3                                     |
| 1. Hawk, Marsh                               |   |                   | x                              | 17 1                                    |
| 2. Hawk, Cooper's                            |   |                   | x                              | 4 1                                     |
| 3. Hawk, Western Red-tail                    |   | x                 |                                | 144                                     |
| 4. Hawk, Swainson's v                        | 1                                       | x                 | 1 1                            | 771                                     |
| 5. Hawk, American Rough-legged               | 1/                                      |                   | DC .                           | 3 9 9                                   |
| 6. Hawk, Duck                                |   |                   | ж .                            | NY                                      |
| 7. Hawk, Prairie Falcon                      |   | x                 | 17/3                           | 2                                       |
| 8. Hawk, Sparrow                             |   |                   | x                              |   |
|  | EAGLES                                  |                   |                                |   |
| 1  | DAGLES                                  |                   |                                |   |
| 1. Eagle, Golden                             |   | E PROPERTY OF     | 200                            | ear in fall and s                       |
| To Dagro, Gorden (                           |   | x                 |                                | oughout winter.                         |
| 200000000000000000000000000000000000000      | XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX | XXXXXXXXXXXXXX    |                                | XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  |
|  | UPLAND GAME BIRD                        |                   | the same test had ball had had |   |
|  | NESTING                                 | 5 - E & TO / B    |                                |   |
| SPECIE                                       | POPULATION 1941                         | WINTER POPUL      | ATION 19                       | 40 REMARKS                              |
| XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX      | K JOCKSKIKKOKKOKKOKKOKKO                |                   | XXXXXXXXXX                     | XXXXXXXXXXXXXXX                         |
| 1. Pheasant, Ring-necked                     | 200                                     | 350               |                                |   |
| 2. Partridge, Hungarian                      | 150                                     | 50                |                                |   |
| . Sage, Grouse                               | ?                                       | 0                 |                                |   |
| XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX       | XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX | XXXXXXXXXXXXXXXXX | XXXXXXX                        | XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX |
|  | MAMMALS                                 |                   |                                | NXXX                                    |
| SPECIE                                       | EXCENTION SUMMER POPU                   | LATION .          | Ville                          |   |
|  | 1940NOT INCLUDIN                        | NG YOUNG 1941     |                                | REMARKS                                 |
| COCKECKKXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX     |   |                   | XXXXXXXX                       |   |
| 1. Antelope                                  | 25                                      | 32                |                                |   |
| 2. Coyote                                    | 8                                       | 10                |                                |   |
| 3. Badger                                    | 12                                      | 15                |                                |   |
| 4. Muskrat                                   | 800                                     | 2000              |                                |   |
| 5. Mink                                      | 10                                      | 10                |                                |   |
| 6. Weasels, Common                           | 36                                      | 40                |                                |   |
| 7. Weasels, Least                            | 19                                      | 20                |                                |   |
| 8. Skunks                                    | 21                                      | 30                |                                |   |
| OB TRULING                                   | Mr. ale.                                | 00                |                                |   |

#### LAKE BOWDOIN REFUGE INSECTIVOROUS BIRD RECORD

#### 1941

|          | *   |         | XTENT OF INHABI |             | DATES FIRST |         |
|----------|---|---------|-----------------|-------------|-------------|---------|
| V-V-V-   | SPECIE<br>XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX | RARE    | MODERATE        | COMMON      | 1940        | 1941    |
|          | /   | AAAAAAA |                 | MAAAAAAAAAA |             |         |
| 12       | unting, Snow                                  |         |                 | x           |             |         |
| 2.       | Bull-Bat                                      |         |                 | 20          |             | 680     |
| 3.       | Blackbird, Red-winged                         |         |                 | x           |             |         |
| 4.       | Blackbird, Yellow-headed                      |         |                 | x           |             |         |
| 5.       | Blackbird, Brewer's                           |         | x               |             |             |         |
| <b>.</b> | Crow  |         | x               |             |             |         |
| 7.       | Grackle /                                     |         | x               |             | *           |         |
| 8.       | Horned Lark, Prairie                          |         |                 | x           |             |         |
| 9.       | Junoa   |         |                 | x           |             |         |
| 10.      | Kingbird /                                    |         |                 | x           |             |         |
| 11.      | Lark Bunting                                  |         |                 | x           |             |         |
| 12.      | Longspur, McCown's                            |         |                 | x           |             |         |
| 13.      | Longspur, Chestnut-collared                   |         |                 | x           |             |         |
| 0        | Meadowlark, Western                           |         |                 | x           |             |         |
| 15.      | Pipit, American                               |         | x               |             |             |         |
| 16.      | Pheebe ~                                      |         |                 | x           |             |         |
| 17.      | Robin   | x       |                 |             | 5-5-40      | 3-31-41 |
| 18.      | Swallow, Barn                                 |         |                 | x           |             |         |
|          | Sparrow, English                              |         |                 | x           |             |         |
| 20.      | Sparrow, Gantel's                             | x       |                 |             | 5-6-40      |         |
| 21.      | Warbler, Northern Yellow-thro                 | at      |                 | x           |             |         |
| -        | Marbler, or hora                              |         |                 |             |             |         |



#537 Black Creek flowing across patrol trail rock crossing enroute to main Bowoin Lake during spring run-off.



#538 This fire cache would have been destroyed had it not been protected by buffer of gravel when fire set by farmers son spread on to Refuge 4-1941



#539 Fire originated here along G. N. tracks- followed rightOofOway east to signal blocks seen in distance thence on to Refuge to right. See picture # 540 2-23-41



#540 Fire spread from right-of-way onto Refuge here but was quickly brought under control by assistance of local fire cooperation crew. 2-23-41

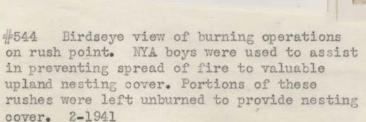






# 541-542-543 Snow goese feeding along west Lake Shore near headquarters 4-10-41







#545 Patrolman Ekedahl setting fire to excessive growth of handmankaraxxxxx hardstem rush on rush point area.
2-1941



#546 One of the many small ponds fringed with dense growth of cover along Black Creek. The pheasants nest here in large numbers



#547 Wilson's Phalarope feeding in small bay on north side of Lake Bowdoin- Close observation will reveal several hundred of them in background.



\$548 Western Horned lark which has just flown off nest containing 2 small birds in hole in 4" of snow which fell 2 days earlier probably while young were hatching, taken April 18-1941





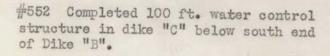
#549 A few of the Antelope grazing on north side of Refuge.



#550 Patrolman Ekedahl with the 15 coyotes, 10 muskrats and 2 weasels taken as surplus on the refuge last winter

#553 Puddled earth fill being made on back side of 100 ft. control structure in Dike "C". This is in addition towakefield piling set in center of dike between walls

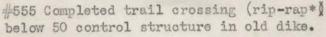






#554 Front side of (Winsor) rubble wing wall on 100 ft. control structure.







#556 Cat-walk and graveling top of wing-wall fills completed on 50 ft. structure in old dike. Town of Bowdoin in background



4557 Boat landing construction at boat Aouse. The temperature is minus 20.



#558 Building boat ramp to boat house using wood rollers.



#559 Hand loading surplus fill in dry Lake supply canal bank for use in filling in construction of patrol trail. low placed in construction of trail on this



#560 Leveling of dry lake supply canal bank

bank.





#561 Loading Letourneau in travel leveling operations on Dry Lake supply canal bank.

#562 Mixing concrete for equipment building floos.





#563 Floating down a section of the steel #564 Casting fill for Dry Lake dike. reinforced concrete floor in equipment Bldg.



perfect operating conditions by operator Murl Dodge.



#566 Dragline in operation on Dry Lake #565 Dragline excavating drain canal and casting dikes all mechanized details are kept in dirt for fill in Dry Lake dike. Note uniformity of both fill and canal



#551 Masses of last years sage drifting into east lake shore as ice breaks up.



#567 This mass of drifting sago lines the east lake shore for at least a couple of miles



#568 This sago drift is toobig and heavy for wave action to wash ashore as usual in previous years.



#569 Snowfall along the north shore of Greedmans Reservoir was fairly heavy (about 6 ") which eventually filled this area almost to capacity.



#570 Creek bottoms at upper end of Diversion Reservoir unit of Thibedeau Refuge looks good for nesting cover- should be fenced.



#571 Diversion canal outlet gates need some repair on lower side of masonry footings.

#### HINSDALE

de Wiele Saturday.

de Wiele Saturday.

Mr. and Mrs. Frank Gaspar, Mrs.
Bernard Gaspar and Mrs. W. H. Jacobs drove to Havre Thursday.

Mr. and Mrs. Ray Richter of Wheeler spent Sunday here.

Mrs. R. R. Black and Mrs. F.

Westrum were in Glas Thursday, April 17, 1941

By Mrs. Peter Bergman

Mr. and Mrs. Fred Kaul and son Wrs. J. J. Beier, who has been vis-Wagner visited Mrs. Mary Van iting at the H. E. Beier, J. J. Martens and J. J. Toews homes, left for her home in West Salem, Ore., on

the early Friday morning train.

Good Friday was observed with fitting services in all churches in all Junior Alex H N

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Clifford I spent Sund Lyle John

ing for Alex Mr. and Easter dinn Alex H. N

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Hone and and rge Hughes

#### It's National Wildlife Restoration Week



 Wildlife increases of the past few years are illustrated by the growing flocks of birds on federal refuges throughout the country, says Albert Van S. Pulling, refuge manager of the fish and wildlife service of the department of the interior, stationed at Fort Peck. A continuing increase, he says, is the aim of the 50,000,000 or more Americans who are this week (April 13-19) celebrating National Wildlife Restoration week sponsored by the National Wildlife federation. This picture of snow geese on the Bowdoin migratory bird refuge near Malta is a fish and wildlife service photo by B. M. Hazeltine, refuge manager. The flock of about 500 is resting and feeding during spring migration. They nest in the far north.

## Federal Agency Joins Nation in Wildlife Week

Some 2,300 regular and 2,300 seasonal employees of the Fish and Wildlife service United States department of interior, are joining 50,000,000 or Americans in celebrating Nation-, al Restoration week, which begins Monday, April 14, sponsored by the National Wildlife federation. National, state, and local organizations throughout country will hold meetings to call the nation's attention to the necessity of conserving the wildlife nonulations reaus still continue," he added.

BACTETO COAST

## Federal Refuges Will Hold Open House During Wildlife Week in U.S.

Bowdoin refuge, National Wild-tives." life refuge, eight miles east of "Mu-Malta during National Wildlife said, "has been carried on with Restoration week which is now (April 14-19) being celebrated throughout the country, sponsored by the National Wildlife federation, it was announced by B. M. Hazeltine, refuge manager of the Fish and Wildlife service,

izations who wish to visit the refuge may make arrangements by telephoning Manager Hazeltine at the refuge headquarters.

"With an area of 14,406 acres. the Bowdoin refuge was established primarily for the protection of waterfowl, shorebirds, white pelicans and upland game. This refuge is one of 263 admin-

Open house will be held at the "is one of the service's objec-

"Much of this work," Hazeltine the aid of the Civilian Conservation corps. Help has also been given by the WPA and the NYA. On the Bowdoin refuge the work has been done with the help of WPA and NYA.

"While all wildlife refuges pro-United States department of the interior.

Individuals and private organ
the first and which service, while all which are in the first and which is the first particularly beneficial to certain birds or mammals." He added that 176 refuges in the nation-He added wide system were established primarily for migratory waterfowl, 50 for colonial non-game girds, 24 for migratory birds, small upland game, ful animals, and other wildlife, and 13 for big-game animals







The above typical scene taken at the Lake Bowdoin wild life sanctuary of a mother Canadian goose watching her half-grown broodwho are feeding. Nearly 250 of these birds nest there each year.

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PHILLIPS COUNTY NEV

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ly, the fur resources of the United deputy game wardens, obtained States will suffer a marked de- evidence in 2,939 cases of gamepletion that may lead to extirpation of some of the valuable spechas created a serious situation, the result that 2,773 convictions Furs of wild animals cannot be were obtained," the service offi-imported, as formerly, and we are cial declared. "That's almost 95now making inroads on our own fur animal supply."

The difficulty, he explained, is that we lack adequate knowledge concerning the status of fur animals in the states.

"It has been said again and again, but cannot be repeated too often, that more fur animals are being taken than are being pro-duced." Hazeltine said, "But duced," Hazeltine said. "But whether we are producing 10,000,000 and taking 15,000,000 or producing 20,000,000 and taking 30,000,000, we don't know." He was certain the take exceeded the annual production. Now is the time to take precautionary measures, he warned, otherwise, it may be too late.

To aid the fur industry, fur trappers, fur farmers and the rab-5 ces, has resulted in co-bit industry, the service mannance by the conservation efforts the U. S. Rabbit Experiment sta-tion in Fontana Colif. the Fur

law violations.

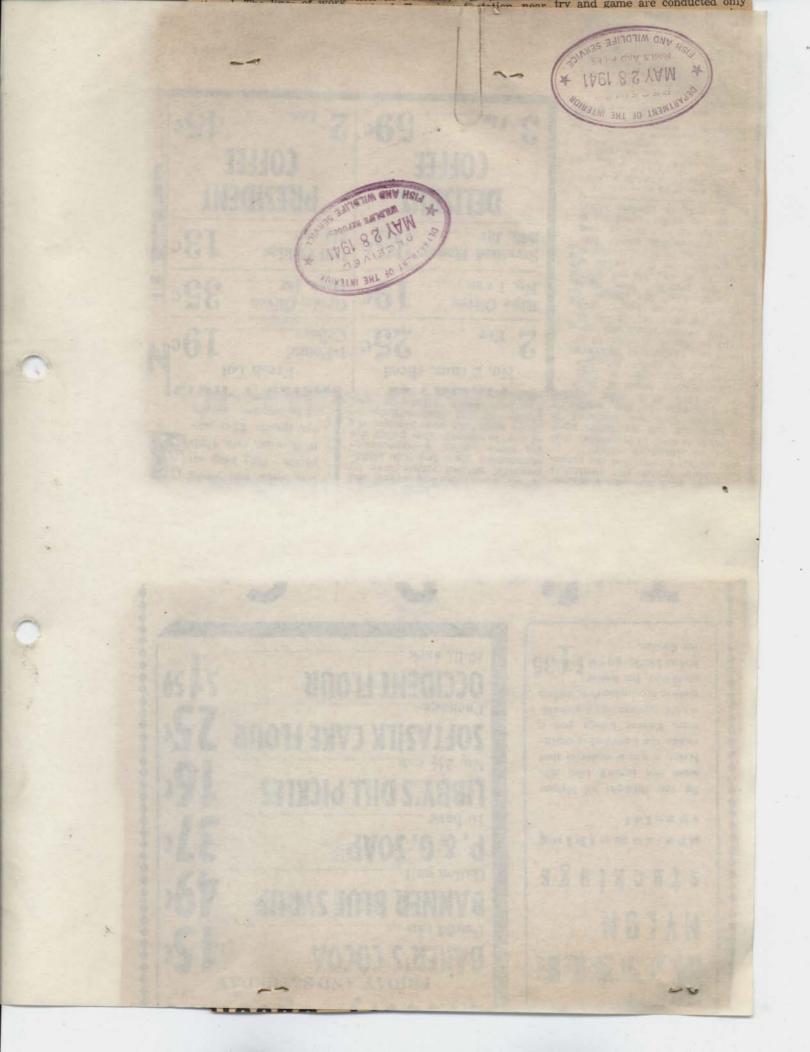
"These cases were prosecuted ies," he asserted, "The war abroad in state and federal courts, with percent convictions."

Kenneth F. Roahen is the U. S. Game Management agent for Montana. In his annual report to the director of the fish and wildlife service, Roahen praised the cooperation received from the Montana State Fish and Game commission.

Without the cooperation of state, county and local officials and private organizations, the service would be unable to conduct its conservation program effectively, Hazeltine asserted.

"Not only does this apply to-law enforcement, federal aid and other projects, but it is equally true of the predatory-animal and rodent control work," he said.

"Incidentally, it is an estab-lished service policy that preda-tory-animal control projects for the protection of livestoe



# THE GLASGOW COURIER

Glasgow, Valley County, Montana, Thursday, April 17, 1941

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ranging in size from 1-acre islands to the Aleutian Islands National Wildlife refuge in Alaska, which comprises almost 2,-000,000 acres and extends 1,200 mlles westward from the Alaska

peninsula.

"Establishing refuges is, of di course, only a beginning," Hazeltine added. "Many of the areas obtained were only prospective refuges at the time and required a great deal of development. Improving refuges," he explained.

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Individuals and private organizations who wish to visit the refuge may make arrangements by telephoning Manager Hazeltine at the refuge headquarters.

"With an area of 14,406 acres, the Bowdoin refuge was established primarily for the protection of waterfowl, shorebirds, white pelicans and upland game. This refuge is one of 263 administered by the Fish and Wildlife

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necessity of conserving the wildlife populations in North America, according to B. M. Hazeltine,
refuge manager stationed at the
Lake Bowdoin refuge eight miles
east of Malta.

"Incidentally, this is the first
year that the Fish and Wildlife
service, as such, has participated
in Wildlife Restoration week," he
said. He recalled that the service
was formed last July when the
bureau of fisheries and the bureau of biological survey were
consolidated by President Roosevelt.

"The consolidation, effected "The consolidation, effected under secretary of the interior, Harold L. Ickes, has resulted in coordinating the conservation efforts of the two organizations," Hazeltine continued. "The lines of work conducted by former bureaus still continue," he added.

DICTETO COAST

MONTANA, SUNDA

15. MORNING, HAVRE.



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IONTAMA 7, 1941.

PHILLIPS COUNTY NEWS, MALTA, MONTANA

Recruits M-Flying

## **Bowdoin Refuge To** Hold Open House This Week

Event Part Of Program Being Celebrated Throughout Nation In Observance Of Wild Life Week, April 14-19

Open house will be held at the Bowdoin Refuge, national wildlife refuge, eight miles east of Malta during National Wildlife Restora-tion Week (April 14-19) which is now being celebrated through-out the country, sponsored by the National Wildlife Federation, it important role in the conservation

for migratory birds, small upland



The above typical scene taken at the Lake Bowdoin wild life sanctuary of a mother Canadian goose watching her half-grown brood who are feeding. Nearly 250 of these birds nest there each year.

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This refuge is one of 263 administered by the fish and wildlife service throughout the United States, Alaska, Puerto Rico and Hawali," Hazeltine said.

These refuges nave a total area of about 13,500,000 acres, ranging in size from 1-acre islands to the Aleutian Islands National Wild-

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The wildlife expert said that the two principal things conser-vationists have done to bring about the present "healthy" status of many forms of wildlife are the establishment of wildlife refuges and the stricter regulation of hunting. These measures, he explained, have made it possible for the wildlife to take ad-vantage of improved climatic conditions following the great drought

"By basing its recommendations for migratory waterfowl hunting regulations on knowledge of the conditions of the birds throughout the year, and by reducing the bag limits and seasons when necessary, overshooting has been curbed and the birds have been given an opportunity to regain their numbers," he asserted.

Hunting regulations are the immediate solution to sudden pop-ulation decreases while refuges provide a long-time plan for a constantly increasing supply of once depleted species.

Refuges are havens where not only sanctuary is provided but where food is available. Adequate water and good cover conditions

water and good cover conditions are also provided on each area.

"The program is paying dividends," Hazeltine said.

"The hunter," he continued.

"finds more birds and mammals to hunt; the trapper, who gains his livelihood from the marshes, finds more fur animals each see, sinds more fur animals each see. finds more fur animals each season, and the general outdoor enthusiast sees more animals in the forests and parks."