

**NARRATIVE REPORT**

**SALTON SEA NATIONAL WILDLIFE REFUGE**

**BRAWLEY, CALIFORNIA**

**November, 1941 to January, 1942**

**Submitted by**

**LUTHER C. GOLDMAN  
Jr. Refuge Manager**

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**I. GENERAL****A. Weather Conditions**

	<u>Cloudy days</u>	<u>Precipitation</u>	<u>Average Max. temp.</u>	<u>Average Min. temp.</u>
<u>November</u>	--	.07	79°	51°
<u>December</u>	7	.09	69°	45°
<u>January</u>	5	.12	75°	42°
Total	12	.28 inches		

(Above information was obtained from Brawley Weather Station.)

The period, as a whole, was somewhat drier than the same period last year. The total precipitation during the previous November-January quarter was 3.30 inches while only .28 inches has been recorded for the same months just passed.

A sudden cold wave on November 19th and 20th caused heavy loss to the winter pea crop of Imperial Valley. It was estimated that at least 50% of the crop was destroyed.

The maximum temperature reading for the quarter was 93°, reached on November 1. The minimum reading of 30° was reached on January 3.

**B. Water Conditions**

The Salton Sea has risen .90 feet between the months of November 1st and February 2nd.

Following are the readings for the quarter covered in this report, up to February 2nd.

November 1, 1941	-241.70
December 1, 1941	-241.50
January 1, 1942	-241.00
February 2, 1942	-240.80

All elevations are below sea level, and the gage was set from U.S.G.S. bench mark at Fig Tree John's Spring, the elevation of which is -196.25 feet. (readings acquired from Imperial Irrigation District)

work on the Coachella branch of the All-American Canal has been halted during the war emergency, and what effect the completed canal will have on the level of the Salton Sea will probably remain an unanswered question for some time to come.

Chief Engineer, J.M. Dowd, of the Imperial Irrigation District says there is a possibility of the Sea's rising five feet more after the All-American Canal is in full operation. The silt problem is not as great in the Salton Sea area as in the past because of the dams along the Colorado River which create slack waters where silt loads are deposited. For some months, however, sluicing out of the Imperial and Laguna Dams has been carried on to supply silt to seal the All-American Canal, and in the words of Engineer Dowd, "Silt loads in the Alamo and New Rivers look like old times." Engineer Dowd claims they should not have to sluice out as much in the future, therefore cutting down on the amount of water and silt flowing in the Alamo and New Rivers to the Sea. However, more land will be brought under cultivation with the completion of the Coachella branch of the All-American Canal, and consequently more water will be expected to come down the waste ditches to the Sea to raise its level. Many farmers waste more water than they should. Some soil is hard and the waste goes off in a hurry without doing good until a sustained load is held on it. Other soil is softer and absorbs the water readily. Education in the proper use

of water would cut down the amount of waste going into the Sea. Engineer Dowd said another reason for running so much water is to have it available to supply the need of farmers at all times. Sometimes the demands for water come all at once, and it is necessary to have the water available. Other times not so much water is used, and so the surplus runs into the sea to help raise the water level.

A fresh-water waste ditch flooding the north halves of Sections #30 and #29 S. 13 E., T. 11 S. (outside of the Refuge) has created a fine duck and goose area, and the shallow water attracts numerous shore birds of several species. At the present rate of change, this area will soon be ruined.

## II. Wildlife

### A. Ducks and Geese

The duck population in the Salton Sea area has improved in size in the three years in which the refuge manager has had an opportunity to observe it. Whether some climatic condition has caused more ducks to remain in the Valley last year and this year over the preceding year is not known yet. It is possible this year that the mild winter kept the birds in northern California for so long that they were reluctant to make a long flight into Mexico so late in the season, and thus stayed in the State. We would like to believe rather, that our increase here at Salton Sea is just the natural outcome of our conservation activities along the Pacific Flyway.

It was not until November 4 that large numbers of ducks began to arrive from points north. Most of these incoming birds were baldpates

but many pintails were with them. They soon found the protected areas and used them during the daytime. At sunset, they left the Salton Sea and Imperial State Refuges and visited fields to the south in the Valley, returning just after sunrise. It was estimated that 200,000 ducks were in these daily flights. The rice fields suffered considerable damage.

The snow goose population increased on December 6 from about 600 to 2,500 birds. By January 3, 4,000 snow geese were using the area, along with 212 Canada geese. Toward the middle of January, the snow geese were estimated at 6,500, and 473 Canada geese were counted. Only a few white-fronted geese were using the area during this quarter. About 150 of this species made up the entire population in Imperial Valley.

Approximately 800 canvasbacks and redheads were observed during a trip across the Refuge on the 6th of December. The canvasbacks were more numerous than redheads throughout the season. Heretofore, these species had been about equal in number.

Duck and goose numbers in Imperial Valley at the end of this quarter were approximately as follows:

Gadwall	100
Baldpate	125,000
Pintail	125,000
Green-winged teal	6,000
Cinnamon teal	2,000
Shoveler	600
Redhead	300

Canvasback	1,000
Lesser scaup	500
Bufflehead	25
Ruddy duck	4,000
Canada goose	500
White-fronted goose	150
Lesser snow goose	<u>6,500</u>
Total	270,525

Some ducks had already started northward out of Mexico by the end of January. An influx of approximately 110,000 pintails and some baldpates arrived in the Valley on January 28. About 10,000 of these did not stop, but the rest came down on the Imperial state Game refuge along the Alamo River and there brought the population up to approximately 300,000. This is the largest number ever recorded on the refuge, according to Mr. Russell Reedy, Manager. About 2000 pintails appeared on Weist Lake (in the Kockwood District) which almost never holds more than a dozen diving ducks. These new birds did not stay long. The movement continued northward on the 30th. The majority of the ducks and geese of Imperial Valley are not on the Salton Sea Refuge, but rest in the marshes just outside its boundaries, at the private gun clubs, and on the State Refuge.

#### B. Other Birds

On December 2nd a mass of eared grebes, one half-mile in diameter, was observed about 2 miles off Sandy Beach on the Sea. These birds

would not take to the air all in one flock, so that they could be estimated more easily, but would merely separate when the refuge outboard boat came among them, some flying when crowded too closely. However, 300,000 is a conservative estimate of the numbers of eared grebes in that flock.

No more than 173 little brown cranes used the area this quarter. It is interesting to note that 7 sandhill cranes were among 117 little brown cranes observed on January 25. During the winters of 1939 and 1940, as many as 600 little brown cranes were using the refuge area, but perhaps increased hunting and fishing activities this year in the vicinity of the refuge has caused them to move elsewhere.

### III. Refuge Development and Maintenance

#### A. Physical Development

No refuge development was initiated and none of any nature has been planned here by our department, with the possible exception of a duck trap. Some difficulty is being encountered in finding a suitable place for traps within the refuge boundaries. One or two places on private hunt clubs and at the State game refuge are far more favorable than is the Salton Sea Refuge.

The U. S. Coast Guard, Treasury Department, has withdrawn the east half of Section #28, T. 11 S., R. 11 E. from the refuge for the duration of the national emergency, and has completed a dock in the northwest quarter of the northeast quarter. According to Coast Guard and Navy officials, planes will use the Salton Sea only in rough weather, or when the coastal landing points in southern California



are blanketed in fog, or in the event that an enemy might prevent safe landing there.

Ten boundary markers were replaced during this quarter.

#### B. Collections

The stomachs and intestinal tracts of six raccoons were collected for the Division of Wildlife Research, in response to a memorandum received from Dr. Clarence Cottam.

A study specimen of a prairie falcon, shot by a hunter as it dove at his decoys, was made on November 22. On January 30, a study specimen was made of a canvasback which seemingly died of old age. (Plumage good, nothing noticed wrong internally, but condition of bird weak and emaciated when taken.)

#### IV. Public Relations

##### A. Recreational Uses

##### 1. Local hunting

More hunters than ever came to hunt in the Imperial Valley during the 1941 season. Hunting was not as good over most of the season as had been predicted. Ducks and geese were slow coming to the Valley from the north. After the season was over, many ducks and geese arrived. Local hunters, seeking better shooting, have been complaining and campaigning against the early season in southern California. Farmers are adding their complaints to those of the sportsmen because, they say, hunters would help keep the birds on the move and "jumpy" when they are here in their greatest numbers, and better control would result.

Seasonal bag limit records were kept for 19 hunters. These men hunted in the vicinity of the Salton Sea, on the Alamo River, and at the rice fields near Imperial, California. Their records show that 235 ducks were killed during 145 hunting days. This makes a daily average of 1.6 ducks per hunter. The length of the hunting day was restricted, in most cases, to only two or 3 hours, since most of these men had to report for work at 8:00 am. or 9:00 am. The same 19 men made 25 trips after geese, killing 28 (an average of 1.05 per man).

## 2. Visitors

Farmers and hunters made frequent visits to headquarters. Other visitors include bird enthusiasts, conservationists, and game wardens as follows:

- 11/6,7,9,13,25/41 Mr. Leo Rossier, State Game Warden, El Centro, Calif.
- 11/10/41 Mr. Robert Hart, State Fish and Game, Stationed at Imperial State Game Refuge during winter.
- 11/11-13/41 Mr. and Mrs. William F. Atkinson, bird enthusiasts, Scarsdale, N. Y.
- 11/11-13/41 Mrs. Raymond Ingersoll, N. Y. Audubon Society, Brooklyn, N.Y.
- 11/13-16/41 Mr. A. W. Elder, Fish and Wildlife Service, Los Angeles, Calif.
- 11/20/41 Mr. and Mrs. Lee Arnold, bird enthusiasts, Yuma, Arizona.
- 12/4-6/41 Mr. Cecil S. Williams, Fish and Wildlife Service, Brigham, Utah.
- 12/6-7/41 Mr. William Bluit
- |   |                         |   |                                  |
|---|-------------------------|---|----------------------------------|
| " | <u>Mr. Jack Metzger</u> | } | Law enforcement officers, Calif. |
| " | <u>Mr. Leo Rossier</u>  |   |                                  |
|   |                         |   |                                  |

- 12/6-7/41 Mr. Walter Shannon } Law enforcement officers,  
 " Mr. C. Hayfield } Calif. Dept. Fish and Game
- 12/6-7/41 Mr. A. W. Elder, Fish and Wildlife Service, Los Angeles, Calif.  
 " Mr. Sidney Platford, Cooper Club, Los Angeles, Calif.  
 " Mr. Paul Fairbanks, photographer and bird enthusiast, Los Angeles, Calif.
- 12/13/41 Mr. Hunter Foster, student, Brawley, Calif.
- 12/19-21/41 Mr. James Murdock, Audubon Soc. Member, Glendale, Calif.
- 12/20/41 Mr. and Mrs. Lee Arnold, Yuma, Arizona
- 1/2,5/42 Mr. Hunter Foster, Brawley, Calif.
- 1/5,7/42 Mr. Robert Jefferson, bird enthusiast, Brawley, Calif.
- 1/6-7/42 Mr. A. W. Elder, Fish and Wildlife Service, Los Angeles, Calif.
- 1/11/42 Mr. Clifton Van Horn and Family, University of Arizona Agri. Experiment Station, Yuma, Arizona.
- 1/18/42 Mr. Geno A. Amundson, <sup>Ret. WW2</sup> Fish and Wildlife Service, Yuma, Ariz.  
 " Mr. Hugh Wright, " "
- 1/20/42 Mr. William Bluit, State Game Warden, and wife, Indio, Calif.
- 1/23-25/42 Mr. and Mrs. Donald Bleitz, bird photographers, Hollywood, Calif
- 1/24-25/42 Mr. and Mrs. Earl Sanders, Fish and Wildlife Service, Yuma, Ariz

### B. Violations

Nov. 9. R. C. McCall, J. M. Hart of Imperial, Calif., H. Herrell of Bell, Calif., Jacob Lahon and Alfred Maffke, of Los Angeles. Fined 50.00 in State Court at Westmorland for hunting on federal refuge.

Nov. 13. Complaints were filed against Roscoe Jacobelis, Peter Losulle, Frank Losorell of Los Angeles for shooting shorebirds (avocets and long-billed dowitchers). Peter Losulle had no license . A fine of

\$25.00 each was later paid at Judge Kuns' Court in Calipatria, Calif.

Mr. Elder served the notices in Los Angeles.

Nov. 20. Citations written for Assemblyman Harvey Hestain of Brawley, Calif., and Joseph Wolfe of San Diego, Calif. for shooting before legal hour. Cases turned over to State Warden, Rossier.

Nov. 25. H. Scholerman, Los Angeles, and Ben Scupen, Calipatria, Calif., fined \$25.00 each for hunting on federal refuge in Judge Kuns' Court in Calipatria.

The refuge manager cooperated with Game Management Agent Elder and with State officers in patrolling the refuge and vicinity.

#### C. Meetings

The refuge manager gave a bird talk at a meeting <sup>of the D.A.R.</sup> at Calipatria, Calif., on November 8, attended a meeting at Yuma, Arizona, between the California and Arizona Game Commissions on November 17, and attended, also, a public hearing on flood control and soil erosion prevention on January 7, at Brawley, California.

#### V. Other Items

##### A. Crop Damage and Control

Many acres of alfalfa were lost and considerable damage was done in the rice fields and in freshly sown barley fields by ducks. Unfortunately, the revolving light beacon (which has proven a success in Imperial Valley as a duck-scaring device) was automatically ruled out recently by a county ordinance prohibiting use of lights that can not be extinguished within one minute after a blackout signal.

The beacons, located at a distance from ranch houses, could not, under their present construction, be turned off in one minute's time. No doubt, considerable crop damage could have been avoided had these lights been permitted to operate.

One herding permit #H-176 was issued this quarter to Mr. L. M. Deitrich, an alfalfa farmer.

Harvest of the 1941 rice crop from 5100 acres, which commenced the first week in November, was brought to a close on January 1.

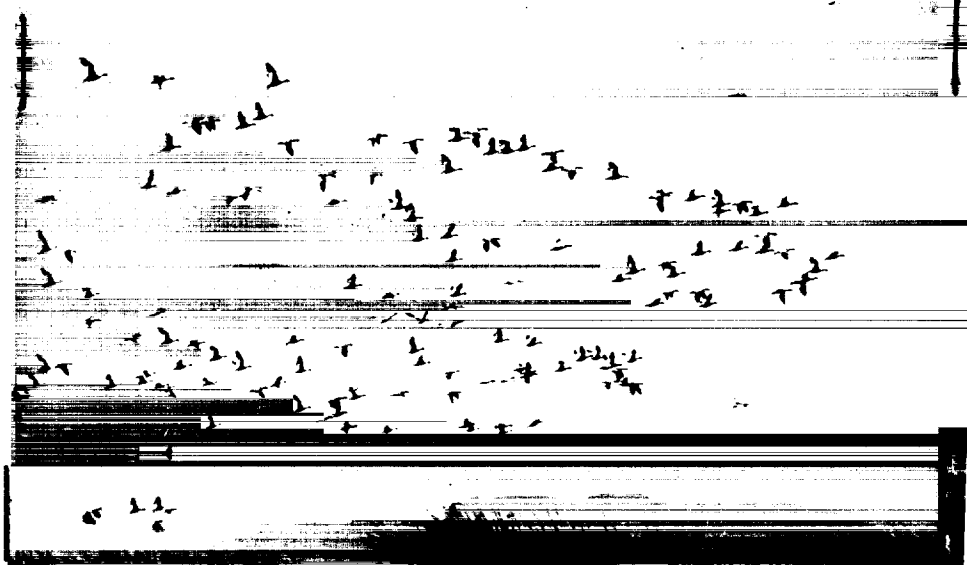
The Imperial Valley Rice Growers Cooperative Association and Milling Company announced that Imperial Valley growers will plant 20,000 acres of rice next season. This additional acreage of rice will mean more waterfowl control work next winter. A new rice mill has been completed at a cost of \$100,000.

B. "Bird Count"

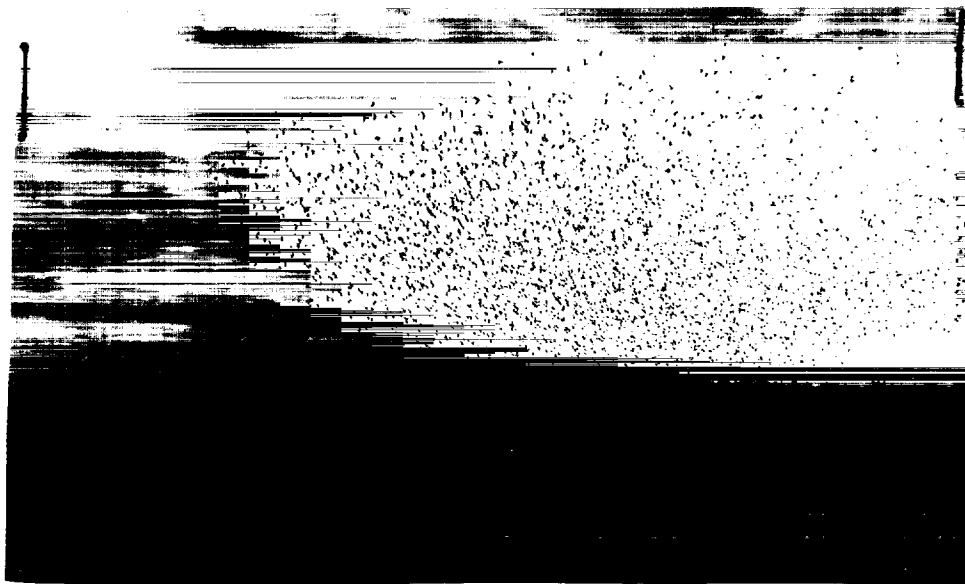
The annual Christmas Bird Count was taken on December 21, when 86 species (same number as last year) were recorded for the day. The 15-mile circle in which the census was taken included parts of the Salton Sea National Wildlife Refuge, Imperial State Game Refuge, and their vicinities, open fields, fence rows, desert vegetation, mesquite and willow thickets, cattail marsh, shallow water mud and silt flats, fresh and brackish water. Individual birds counted totaled 265,972 species. As usual, pintail and baldpate ducks made up the greater part of the total number

The refuge manager cooperated with the authorities in Yuma in taking the Christmas Bird Count on December 22 on the Imperial National

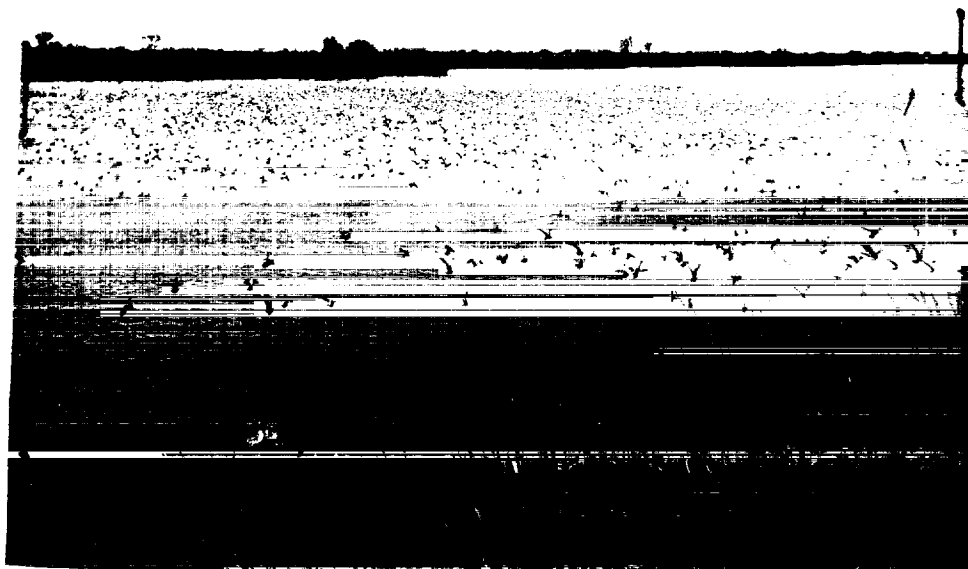
Wildlife Refuge and vicinity. The total number of species observed was 73 while 1,556 individuals were recorded.



Snow geese at delta of New River  
Picture taken January 24, 1942.



Blackbirds flying into milo maize field  
This species (redwing) is increasing in Imperial  
Valley. Picture taken November 26, 1941.



Some of 300,000 baldpates and pintails  
recorded on Imperial State Game Refuge on January  
29, 1942.



Sora (female) that literally hung itself when it struck a barbed wire fence near Imperial, California. Picture taken January 25, 1942

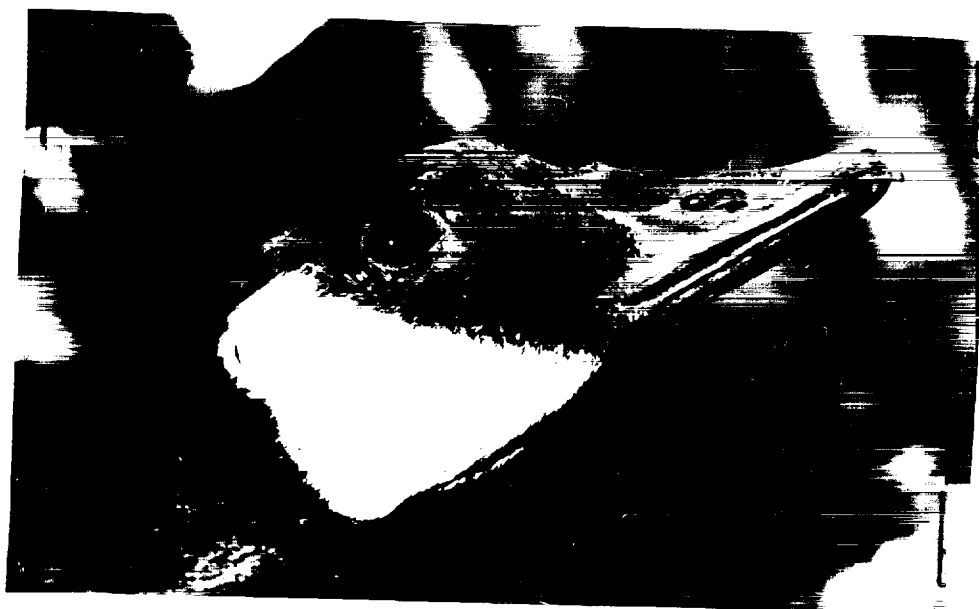


Pintail(female) . One of many cripples left after the hunting season is over. Picture taken January 25, 1942.





6,500 snow geese were using the Refuge and vicinity by January 16. Picture taken January 24, 1942.



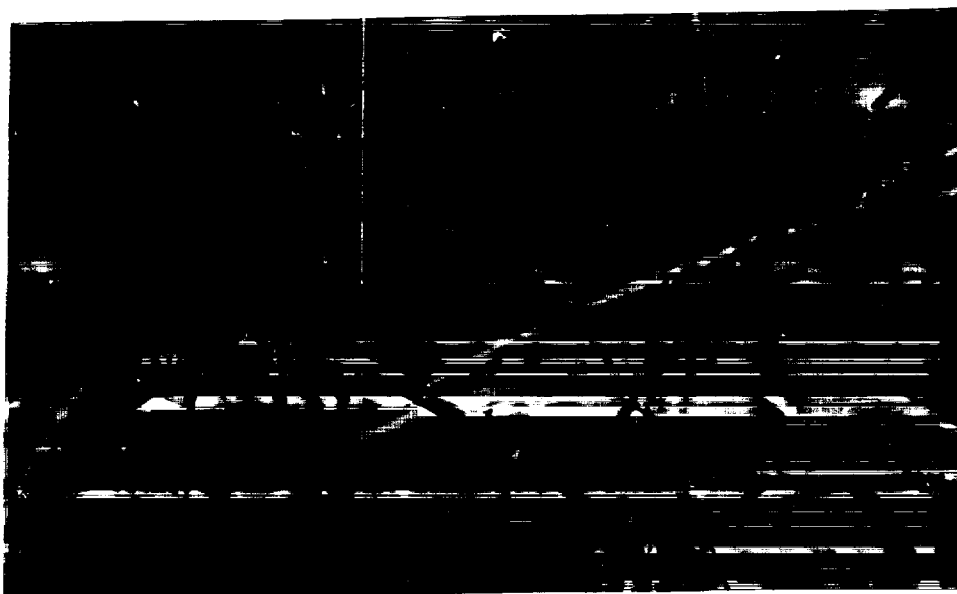
Portrait of wounded Canada goose.  
Picture taken November 30, 1941.



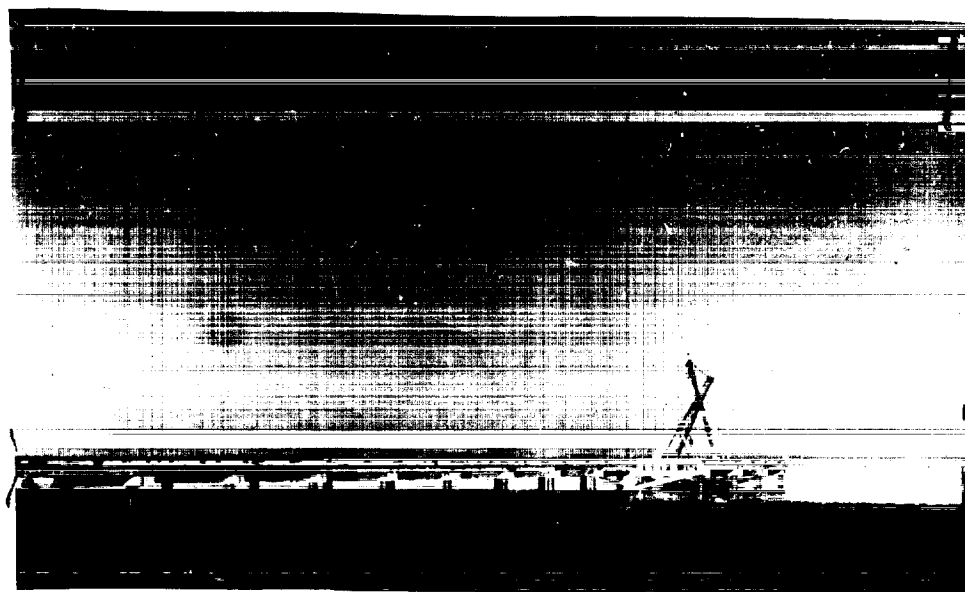
Note green cattails where snow geese have been feeding. Picture taken January 24, 1942.



Heavy cattail stumps remain after snow geese have wrenched off the green stalks within a few inches of the ground. Picture taken January 24, 1942.



Snow geese include the coarse leaves and  
some stems of Phragmites communis in their diet.  
Picture taken January 24, 1942.



U. S. Coast Guard dock at Sandy Beach.  
Picture taken January 26, 1942.