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A LAPLAND LONGSPUR TRAGEDY:

BEING AN ACCOUNT OF A GREAT DESTRUCTION OF THESE BIRDS DURING A STORM IN SOUTHWESTERN MINNESOTA AND NORTHWESTERN IOWA IN MARCH, 1904.¹

BY THOMAS S. ROBERTS, M. D.

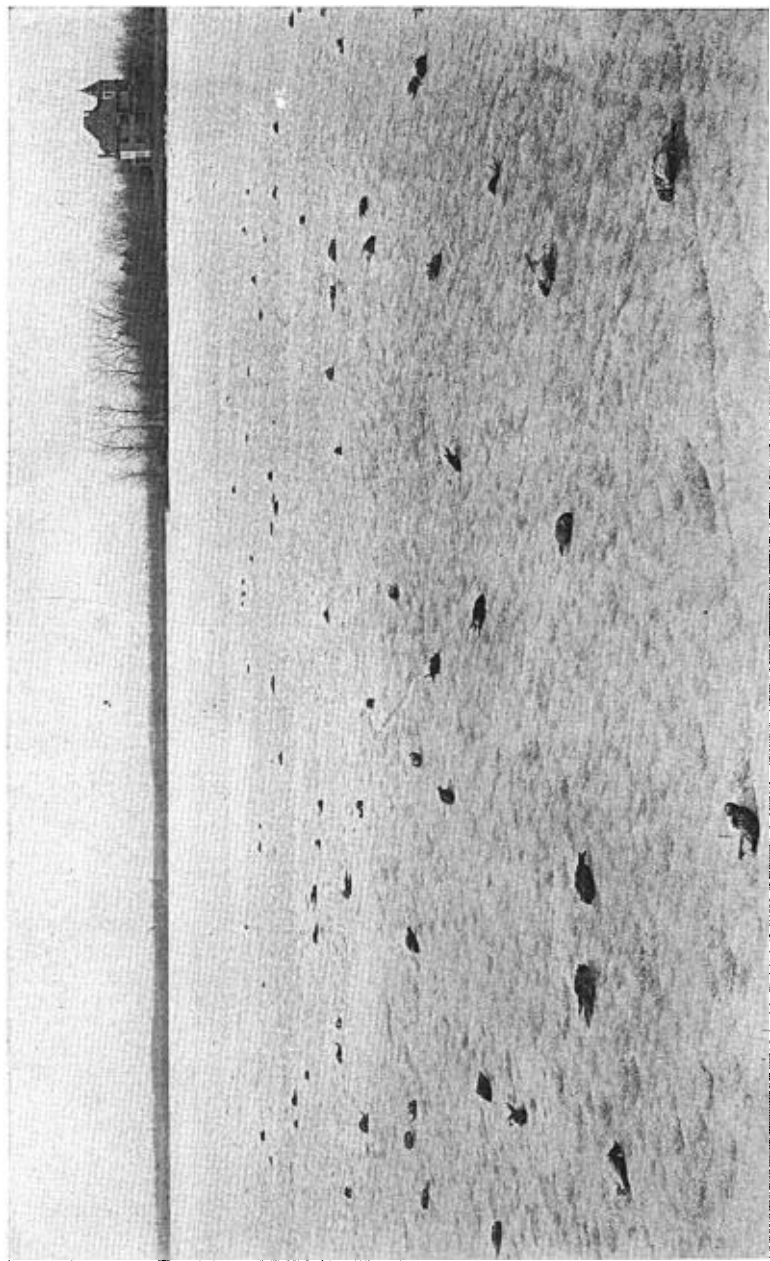
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Plates XIII and XIV.

A CONSIDERABLE amount of interesting and highly valuable information in regard to the always mysterious migratory movements of birds has been obtained of late years by studying the destructive effects of great or unseasonable elemental disturbances; such disturbances operating either alone or, more frequently, in conjunction with various artificial obstructions of human devising. Lighthouses, prominent electric lights in cities and villages, brilliantly illuminated buildings and similar lures, together with the net-work of wires, that now form a huge cobweb over such a large portion of the surface of the globe, serve, especially in times of unusual darkness and storm, to lead to their death countless thousands of the hurrying, migrating hosts. The light of morning permits an inventory of the dead and dying that reveals, not infrequently, facts that are new in regard to the movement, distribution and comparative abundance of little known species and much in regard to many others that may be surprising and that could have been learned in scarcely any other way.

It is my purpose in this article to present to the Union an account of one of these great bird catastrophies that, by reason of its extent

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A LAPLAND LONGSPUR TRAGEDY.

Dead Lapland Longspurs lying where they fell on the ice of a lake near Worthington, Minn., during a storm, March 13-14, 1904.

and some of the questions involved, may prove interesting even if it be possessed of no very great intrinsic value.

About the middle of March, 1904, there appeared in the daily papers of several Minnesota cities and villages brief telegraphic statements of the destruction of large numbers of a small brown bird during the night of March 13-14 in and about the villages of Worthington and Slayton in southwestern Minnesota, well out in the prairie portion of the State. A day or two later several of the dead birds were sent by a physician of Slayton to the State University at Minneapolis, and were referred to the writer for identification. They proved to be Lapland Longspurs (*Calcarius lapponicus*). Nearly a week had now elapsed, but as it was learned by telephoning to one of the towns in question that the accounts were not unfounded or exaggerated and that abundant evidence of the bird destruction still remained, Dr. L. O. Dart was sent as a representative of the State Natural History Survey to gather all possible data bearing upon the event, and it is from the information secured by him that this account is prepared.

Dr. Dart went first to Worthington and Slayton, the two places where the birds were killed in greatest numbers, and there made careful personal examination into the then existing conditions by studying the numbers and distribution of the dead birds and the post mortem findings; and also had a series of interviews with various residents who had been eye-witnesses of the event. A less thorough examination was made at several other places. A few days later letters of inquiry were addressed to the postmasters at some twenty-three villages in southwestern Minnesota, northwestern Iowa and southeastern South Dakota in an attempt to secure further information that might give some definite idea of the extent of the area of destruction. Ten replies were received to these letters. Most of the citizens in the towns where the birds were killed had been so impressed by the extent and unusual character of the phenomenon that they were ready and indeed eager to give their experiences and to get any expression of opinion as to the causes of what was locally called "the great bird shower."

Beginning his observations at Worthington, the county seat of Noble County, on March 22, eight days after the Longspurs were destroyed, Dr. Dart found large numbers of dead birds in all the

streets of the village, but it was said that many had been washed away by a hard rain storm which occurred on the night of the 20th. All over the courthouse yard dead birds lay only five or six feet apart, and this was reported to have been the condition throughout the town the morning after the storm. Adjoining the town on the west and the east lie two small lakes, each having an area, at a very conservative estimate, of one square mile. The winter ice was still on these lakes but the snow had melted and frozen again, thus presenting an unobstructed hard surface. Here the dead birds were more conspicuous than among the grass and mud of the fields and town, and the ice was found to be everywhere dotted with their bodies over the entire surface of both lakes. Dr. Dart walked out to the middle of each lake and made careful estimates by measuring off a number of twenty-foot-square areas in various places and counting the birds in each. The average showed five and a half birds to the four hundred square feet, or a total of 374,328 birds on each lake, which reveals the remarkable fact that in round figures there were 750,000 Lapland Longspurs on the surface of these two lakes alone! And this figure, large as it may seem, is really less than the truth, for the estimate, in order to keep well within bounds, has been cut in one or two places, and a million birds, incredible though it may seem, is probably nearer the truth.

In clumps of bushes around one of these lakes were many live Longspurs, showing evidences of various injuries more or less severe. Some could not fly sufficiently to avoid being taken in the hand. They had evidently managed since the storm to eke out an existence in these sheltered places, unnatural haunts though they were for Lapland Longspurs. At a residence in town were seen two live Longspurs, a male and female, among the plants in a window garden where they had been fed and lived contentedly since their capture on the 14th. They were not at all shy. Dr. Dart states in his notes that from his observations about town he could not determine positively that there were, or had been, more dead birds under the wires than elsewhere.

The interviews had at Worthington resulted as follows: The village night-watchman said that on the night of the 13th-14th there was practically no wind and that snow was falling steadily and quietly during a portion of the night. He first noticed the

birds about 11 P. M. and from that hour they were abundant until morning. They were most numerous in the vicinity of the electric street lamps but he remarked, "they seemed to be everywhere." He saw many fly against buildings and picked them up dead and heard others strike and fall in the darkness. He said the ground in places was covered with dead, wounded and apparently unhurt birds. A great many were buried in the snow with just their heads out and some of them when picked up, warmed, and dried, would fly away as well as ever so far as he could see. These birds appeared to him more bewildered than hurt.

The night telegraph operator stated that he counted sixty-one dead birds in going one and one-half blocks and saw fully one hundred live ones. He caught seven or eight of the latter, carried them home, warmed and dried them and when released next day, they flew off all right, except one bird which was injured. The night was not cold. The snow was in large flakes, quite wet, and fell quietly to the depth of five or six inches. The birds began to arrive about 11 P. M. and continued until three or four in the morning.

Another observer who was out at midnight said that the air was everywhere full of birds but that they were more numerous about the electric lights than elsewhere. He saw some inside of the arc-light globes. Many were captured and examined. Some were injured but others were not. These latter would lie in the snow and make no effort to escape. The feathers of many were soaked from the wet snow. The walks and streets were covered with dead and live birds.

An electrician in the employ of the electric light company reported that on the night in question there was a scarcely perceptible wind from a little east of south. The temperature was above freezing. The birds appeared about 11 P. M. and kept coming until nearly daylight. He corroborated what the others had said but thought that the next morning the dead birds were most numerous under the electric lights and net work of wires in the central portion of the village. The ground in such places was literally covered with them. He took five or six out of one electric light globe. He caught ten or twelve and took them home. They were not timid and ate ravenously out of the hand. All flew away when liberated later.

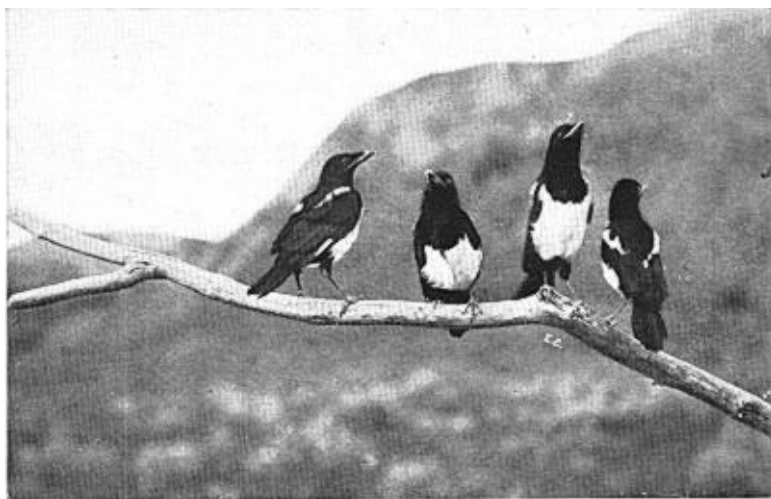


FIG. 1. YOUNG MAGPIES IN THE BADLANDS.

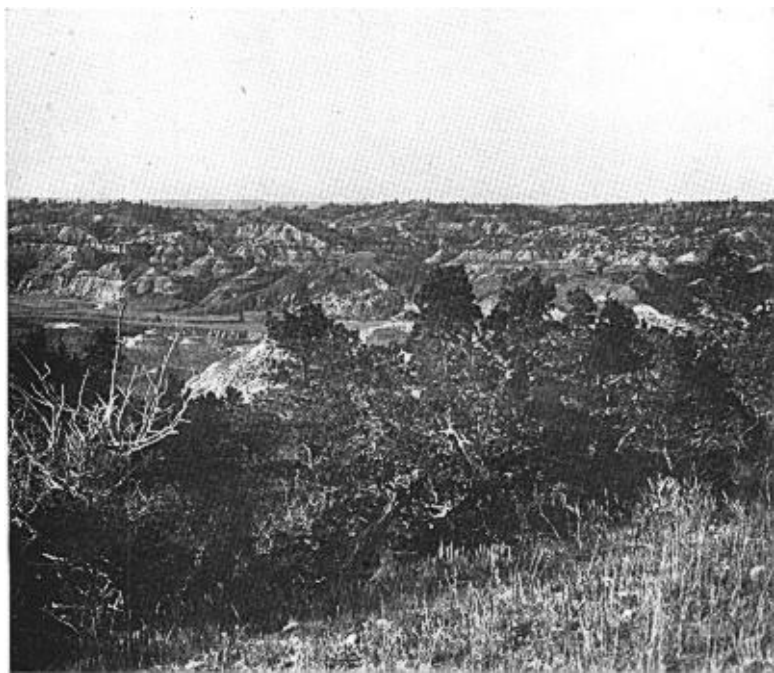


FIG. 2. PIÑON JAY'S HAUNTS ON COTTONWOOD CREEK, DAWSON CO., MONTANA.



Dead Lapland Longspurs lying where they fell among the grass in the Court House Square, Worthington, Minn., during a storm, March 13-14, 1904.



Lapland Longspurs killed during a storm at Worthington, Minn.,
March 13-14, 1904.

A Mr. Drobeck reported that on the morning following the storm he noticed lumps or balls of snow on the roof of his barn and that when they thawed in the morning sun, they were found to contain live birds. The heads of the birds would first appear, and then, shaking off the snow, they would sit for a time in the sun drying and preening themselves and then fly off. He caught several and took them in the house and it was two of these birds that Dr. Dart saw in his window garden a week later. This curious statement was corroborated by a second observer. Evidently the birds had become wet and snow-laden, and falling into the sticky snow had by their efforts rolled themselves into snow-balls.

Dr. Manson and Dr. Humiston, two physicians of Worthington, gave their testimony along the same lines as above. The former added that he noticed that many of the birds had entered the snow head foremost as though they had pitched down head-long rather than as though they had fluttered down as they probably would have done after striking some obstacle. When these birds were picked out of the snow it was found that the snow was stained with blood that had oozed from their mouths.

Slayton, the county seat of Murray County, situated about twenty-five miles north and six miles west of Worthington, was the next place investigated. It was stated by several residents of this village that on March 13, after a rainy and windy afternoon, the wind fell toward night to a gentle breeze from the southeast, and later a heavy wet snow began falling which continued for several hours, but the snow accumulated to a depth of only an inch or two. The temperature was above freezing. There were no electric lights here, the streets being lighted with gas. There were also fewer wires. On the 23d of March, nine days after the storm, Dr. Dart states that dead birds were in evidence everywhere in town. Heads, wings and tails could be seen sticking out of the mud everywhere in the main street and in other streets even to the outskirts of the town. It was stated that on the morning of the 14th twenty-nine dead birds were swept off the seventy-five feet of sidewalk in front of the hotel. From the roof of the latter building Dr. Dart counted nineteen dead Longspurs in the eaves-trough, and undoubtedly many had been washed away by the heavy rain on the 20th. Scattered over the roof of an adjoining building

were a number of dead birds, and others lay in the eaves-trough of still another building.

It was stated that nearly every family in the town had captured from two or three to a dozen or more live birds and that after they had been cared for for a short time they flew off as well as ever. Thirty-six hours after the storm twenty-one live birds were counted harboring in one of the lumber yards. A German farmer living a half mile northwest of the town saw six birds at his place on the morning of the 14th; four were dead and two alive. The latter he caught, took them in the house and later they flew away.

In view of his experience at Worthington, Dr. Dart made an examination of the ice on a small lake a half mile or so from Slayton, but found no dead birds there.

Dr. Davis of Slayton reported that the day following the storm he drove forty miles east of the town and did not see any dead birds outside of the village. He, however, saw flock after flock of Longspurs, and thinks that he never before saw so many of these birds at this time of the year. On the morning of the 14th he picked up fifty dead birds in a space twenty-five by fifty feet behind a store. He thought the greatest destruction was in the central part of the town.

Dr. Lowe, however, said that dead and live birds were all over town and that his children picked up sixty-one in his door yard and that many still remained. He counted twenty-one on the ground under one lamp-post. Dr. Lowe and the editor of the local paper reported that there were many birds perched on the window sills all over town early in the morning after the storm.

The Slayton town marshal said that on the afternoon of the 13th he saw large flocks of small birds on a hill north of town. He first noticed the birds at night a little after nine o'clock. The birds seemed to come from the east and were circling over the town and twittering as though confused and lost. Between nine and ten, he saw many strike windows and fall dead or stunned. After 10 p. m. there were only three street lights burning and around these lamps the dead birds were most numerous. On the following morning most of the dead birds were under the snow. Three or four days after the occurrence many of the birds were still flying about the town.

At Avoca, a little town seven miles southeast of Slayton, Dr. Dart saw dead Longspurs in the streets and on the ice of a small lake near by.

W. J. Ross, station agent at Heron Lake, twenty-five miles southeast of Slayton, reported that many birds were killed there in the same storm — all Longspurs.

Information gleaned by personal interview with a man who had been an eye-witness showed that large numbers of Longspurs had been killed on the night in question at Luverne, the county seat of Rock County, and distant thirty miles due west from Worthington. Also that dead birds were to be seen at all points along the railroad between the two places.

A communication from the postmaster at Sibley, the county seat of Osceola County in northern Iowa, fifteen miles southwest of Worthington, stated that many birds were killed there on the night of the 13th-14th during a snow storm. On the morning of the 14th he saw from seventy-five to one hundred dead birds as he walked three blocks to the post-office. There were also many live birds unable to fly, some of which stayed about several days. There are no electric lights in Sibley.

C. A. Kinsey reported by letter from Adrian, a town eighteen miles west of Worthington, that the birds appeared there in the early half of the night, and while he did not think that they were killed in large numbers, many were on the ground through the night and the following morning, unable to fly.

Reports received from a number of other localities, including letters from John Crawford of Lakefield, John Knox of Jackson, and A. D. Brown of Pipestone, showed, by the negative evidence they furnished, the outside limits of the Longspur flight. In this way it is possible to define fairly well the region within which the destruction took place and it would appear that this area embraced at least fifteen hundred (1500) square miles. There are about forty towns and villages within this region, but many of them are small and probably did not figure largely as centers of bird destruction.

A brief statement may be offered in regard to the post mortem findings of the dead birds. The bodies of many birds were carefully examined at all points where observations were made and the

findings were uniform. Briefly, all died from injuries of various kinds. Besides some one hundred and fifty birds examined carefully in the field, one hundred were picked up on the ice at Worthington and about the village and as a matter of curiosity were brought home, dissected and detailed autopsy notes made of each. A general summary of these notes show that in many the skulls had been fractured and indented, leading to cerebral hemorrhages; while in many more the bones of the body had been variously crushed, accompanied by extensive internal hemorrhages. In some instances the impact had been forcible enough to rupture the intestines, lungs or other viscera. A few had their necks broken. Many had broken wings and legs associated with other more fatal injuries. The birds picked up on the ice had just as extensive injuries as those found elsewhere, and it seemed certain that in their utter confusion they must have dashed headlong onto the surface of the lake from a considerable height. All the birds were very fat and had been in excellent condition. Examination of the stomachs of many dead birds revealed the fact that all were empty except for small amounts of fine gravel; even this was wanting in some instances.

It would be futile to attempt any calculation as to the probable number of birds killed during that one night. The center of destruction seems to have been at Worthington, where, taking the reasonably accurate basis of calculation furnished by the lake surfaces as a guide, it would seem that certainly not far short of a million and a half birds were killed. Not as many were killed at other points, so far as known, but what the grand total for the whole area of fifteen hundred (1500) square miles must have been I will leave for your imagination to picture. All of the birds were Lapland Longspurs. Not an individual of any other species was found.

As to the explanation of this catastrophe: It is plain enough that on the fateful night there was in progress an immense migratory movement of Lapland Longspurs leaving the prairies of Iowa where they had passed the winter months for their summer homes in the Northland, and that becoming confused in the storm-area by the darkness and heavy falling snow they were attracted by the lights of the towns and congregated in great numbers over and about these places. In their bewildered condition great numbers flew

against various obstacles and were killed or stunned while many others sank to the ground exhausted. It would also seem probable that a considerable number became wet and snow-laden by reason of the character of the snow, and thus, unable to fly, were forced downward to the earth to be dashed to death if falling from a considerable height, or simply stunned if from a lower elevation. This theory that the birds fell heavily or darted swiftly downward from high in the air would seem to be the only way to explain the presence and the extensively mutilated condition of the dead birds on the ice of the lakes at Worthington and elsewhere. Many of the dead birds found in the yards and fields and on the roofs of buildings appear to have met death in the same manner.

OBSERVATIONS ON SOME BIRDS PROCURED NEAR CHARLESTON, SOUTH CAROLINA.

BY ARTHUR T. WAYNE.

Colymbus auritus. HORNED GREBE.—This Grebe is exceedingly abundant from November until the middle of March, but it is rare to obtain one in full adult nuptial plumage while the birds sojourn here, as they commence to migrate long before the breeding plumage is acquired. The change from winter to summer plumage begins about the 10th of March. A specimen taken April 7, 1888, was assuming the characteristic nuptial plumage, while a bird shot on March 21, 1906, has the throat mottled with black and the fore neck pale chestnut.

Dr. Eugene Edmund Murphy took a specimen in almost perfect nuptial plumage at Cape Romain on May 15, 1904, and the writer procured a male near Mount Pleasant, on June 5, 1907, which very closely resembles the bird taken by Dr. Murphy. Both of these birds were in good condition, and not wounded, hence it is remarkable that they should have remained on this coast so late in the season of reproduction.

Nyctanassa violacea. YELLOW-CROWNED NIGHT HERON.—On March 23, 1907, the writer shot a female of this handsome