MONTHLY NARRATIVE REPORTS FOR THE

DES LACS WILDLIFE REFUGE

1936



A lean-to shelter in an open coulee where the main bulk of the snow has been dropped in a crescent around the shelter (the picture does not show this plainly). There is a thin layer of snow around the shelter. The supposed pile of snow on the side is bulrush stalkd covered with a scanty bit of snow.



Same shelter as above. In spite of the lack of snow immediately around the shelter, the wind whirled about within the lean-to leaving this drift of snow.



The rail type snow fence prevented the snow from drifting in on the lean-to. Wind and snow drifted into the shelter from the openings at the side and back, because these openings are too large. There were no signs of, game birds around this shelter. However, last winter in the thorn apple thicket, (part of which is seen at the left in the picture) was cover for about 40 Hungarian partridges.



This shelter is located on the west side of the Lower Des Lake. Though no signs of birds were seen in the lean-to, 14 Hungarian partridges were flushed from the clump of brush shown in the picture. This shelter furnishes little protection, because of the large opening in the back.



A ski run into Tasker's Coulee with its open brush and woodland cover revealed interesting information on Upland game birds.



At the mouth of this coulee is an 8 acre corn field where at least 100 birds have been feeding. There are numerous tracks in and around this shelter.



Tracks of pheasants by a teepee shelter at the mouth of Tasker's Coulee.



By the stream bottom at mouth of Tasker's Coulee there is excellent cover of willow, weeds, and rose from which numerous pheasants and a covey of Hungarian partridges were flushed.



Further up the coulee in an opening surrounded with abundant cover where there is another lean-to shelter. Note that snow does not show signs of drifting, and that also under layer of straw in the shelter was not covered.



Same shelter during the early part of December.



This lean-to shelter was the first one built.



Side view of the same shelter.



The inside view of another lean-to shelter that was built among trees marginal to brush. Note that the straw if free from snow.



This lean-to was located on a small knoll surrounded by a dense thicket of choke-cherry and thorn apple. It was visited by more birds than any shelter observed this winter. Straw and gravel had been moved about by the birds.



Type of thicket surrounding the preceeding shelter. Note the pheasant tracks.



Pheasant tracks in loose snow.

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Excerpt from the December narrative for the es Lacs Refuge,

Bulrush Rootstock

Collective of hund The dense solid bed of hard-stem bulrush found of the Lower Des hacs Lake has been improved for waterfowl by the digging out of rootstocks of this plant along winding channels.

> 58 truckloads of these root-stocks with dirt left on have been piled marginal to pendsites where they willbe planted next spring. Approximately 30 loads have left in a reserve pile.

130 truck loads of rootstocks have been sent to the Unper Souris

Refuge.

Part of these rootstocks have already been planted in the recently flooded pondsites at this refuge: others will be planted next spring.

In all 218 truckloads of rootstocks here been dug.

Habitat Improvements

Lean-to shelters: To date 20 lean-to shelters have been constructed. Various locations were chosen in open coulees having no cover, in coulees having clumps of brush, and within heavy brush and wood cover. The construction of these shelters is addording to the specification given by Mr. Salyer.

Studies made of desire sable locations during subsero weather (15-20° below zero) after the recent heavy snows and blizzard showed that these shelters built in open coulees having only scant cover are not used by birds; in fact, there are no signs of birds within a 2 mile of some.

Most of the shelters placed within the woods and marginal to

dense brush are being used by the birds.

A possible exception to these statements is the lean-to shelter built by the corn field near Tasker's doulee. Here nubbings of corn found in the field have attracted approximately 100 birds, mainly pheasants, some Hungarian Partridges, and few sharptailed grouse. However, the stream bottoms marginal to both field and shelter has a dense growth of willow, weeds, and rose that are well above the snow. Furthermore, the teenee type of hideout shelters are also used by the birds in the birds in the same manner that a thicket would be. Observations of the Camp Superintendent and his foremen varify the above statements.

Island Improvements

The severe weather during the latter part of December has seriously handicapped island improvements. The "Snake" island in pondsite #3 and the large island in pondsite #4 have been sufficiently gravelled.

John H. Steenis

Assistant Refuge Manager



Des Lacs Refuge

From this field of rushes 218 truck loads of bulrush rootstock with the dirt left on was dug. The rootstock will be planted at the Upper Souris and Des Lacs Refuges.



Solid beds of hardstem bulrush were improved by digging out winding channels about 15 feet in width.

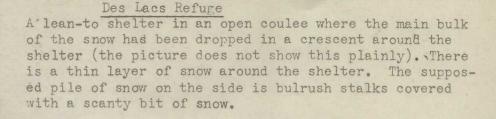


A rootstock of hardstem bulrush.



Loading trucks.







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Des Lacs Refuge



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