## Waterfowl Conditions in the Missouri Valley

Under the present setup on project 1035 a portion of the field work was done in the Missouri River valley and included surveys of former nesting and shooting areas up and down the river and in the lake region of of northwest Iowa, which is closely linked up with the duck flight down the Missouri valley.

There are 4 regular migration routes which converge in western Iowa and constitute the single wide flight area down the Missouri river. They are the Missouri river itself as it comes down thru South Dakota. The James River in eastern South Dakota, which flows nearly north and south and is only 45 air miles from the Iowa border. The Big Sioux River which is the boundary between the two states is the third route of flight. The fourth streamof ducks comes from the lake region of northwest Iowa via the following rivers and they are the Floydy Little Sioux, Maple and Soldier Rivers. At the present time these ducks all converge or congregate along the Missouri River, which is without refuges and this river is dotted with duck blinds along its entire length from Sioux City to Omaha. The ducks and geese have little chance to reach safety while they tarry in this region.

There are several good areas along the river which have been very closely investigated by different field men and they are now being brot to the attention of the Federal Gov't for purchase, to be set aside as refuge and breeding areas. The area in Woodbury and Monoma counties consisting of about 40,000 acres with a value of about \$4.00 per acre is one of the best of the projest, mainly because it is the resting ground of the Blue and Snow geese during their spring migration flight. Flocks of 1 to 5000 birds are seen often and this past spring a count of birds of the two species showed that more than 30,000 birds a day were passing over the Sioux City region and that the flight continued for nearly a week.

Another area is along the Soldier River near its mouth and here an area of 7000 acres is available for refuge and later fora nesting area. The forks of the Nishnabotna river include over 6000 acres and would also make a fine refuge area. The Waubonsie Lake fegion a few miles notth west of the last mentioned area is a match land of about 1000 acres and would make a good refuge area. The the Whiting marsh in Monana County which is about 11 miles form the river and which contains about 7000 acres offers another ideal site for a refuge. The point is to acquire these lands now that money will be spent for refuge areas and if the areas do prove that ducks can be raised in western Iowa, then plenty of space can be set aside for shooting grounds either near the areas or even in parts of them.

A list of the former breeding birds of the Missouri River region is given to show how the birds have deserted the area due to lack of nesting ground and refuge. These birds all nested in the area up until about 1900. Mallard, Gadwall, Pintail, Green-winged Teal, Blue-winged Teal, Shoveler, Wood Duck, Redhead, Canvasback, Lesser Scaup Duck, Ruddy Duck and Canada Goose. Today we find a few scattered pairs of Mallards, Blue-wing Teal, Shovelers, and a rare Wood Duck or two. The \*\* following birds probably never bred in the western Iowa area but are still migrants in limited numbers -- Whistling Swan, White-fronted Goose, Snow Goose, Blue Goose, Common Brant, Baldpate Duck, Cinnamon Teal, Ring-necke d Duck, American Golden-eye, Buffle-head, Old-squaw, White-winged Scoter, Hooded Merganser, American Merganser, and Red-breasted Merganser.

The prospects are that there will be several purchases of land in the lake region of northwest Iowa for nesting areas and if ducks are are raised there they will need refuge areas along the Missouri River during their flight south in the fall. Therefore the real need of large refuge areas. Much of the land along the Missouri river is unsuited for successful farming and is located so that the building of dikes or dams would shut off numerous shutes along the river and make fine water areas for the birds to rest on. Mr. Battons feeding plan could be ideally worked out in this region, as it is so large that several families could do part time work on the project and make a living for themselves by a little additional truck farming.

The duck crop for this fall will be very short, in fact so short that a closed season might have saved some species from approaching the extinction mark. Mr. A.C. Camerle of the Biological survey was very favorabley impressed with both the Lake region for nesting areas and the Missouri river areas for refuges and recommend that they be proposed as class I projects. In closing the thought should be kept in mind that if every one would by a duck stamp we people out here in lowa can still save our vanishing water fawl and enjoy the sight of that first flock geese in the spring for many years to come.