

Of all the banding that I have done in recent years, I enjoy the duck banding more than others, because it requires a spring vacation of ten days to do the work well. Then during the fall, the daily returns stimulate interest. At the present time I cannot give the summary of the 1927 returns but hope to do so in some future issue.

QUINCY, ILLINOIS.

DUCK BANDING NEAR THE CHEYENNE BOTTOMS, KANSAS

BY FRANK W. ROBL

In 1924, I banded 88 birds, of which 78 were water fowl. From these I have received 8 returns, or approximately 9 per cent. Among those returns were two Blue-winged Teal that were shot at Palisada in Campeche, Yucatan Peninsula, Mexico; these returns showed that the flock stayed pretty well together. Another Blue-winged Teal that had been banded here, July 16, was shot at Lake City, Minnesota, on September 16, the same year, showing that ducks hatched here may migrate northward before they start the fall migration for the south.

In 1925, I banded 356 birds, of which 347 were water fowl. The returns from these have been 31, or approximately 9 per cent. Four of these were killed in Canada. My best return in this lot was a Pintail banded February 22, 1925, taken on May 20, 1926, near Kotceba, on the Kobuc River in Alaska, about two hundred and fifty miles north of Nome. In 1926, 225 birds were banded by me, of which 208

were water fowl. Thirty-two returns were reported on those, or a fraction more than 14 per cent. So far in 1927 I have banded 220 birds, all of which are water fowl; there have been 9 returns.

Summing up, I have banded 889 birds, with 80 returns, which is an even 9 per cent. Having no information on the returns to other bird banders I do not know whether the percentage on my returns is good, or not. Most of the ducks I have banded are Pintails, followed numerically by Mallards, Blue-winged Teals, Green-winged Teals, Widgeons, and a few other species. I trap all of these ducks on a little creek about a quarter of a mile from my home, which is only four miles from the now famous Cheyenne Bottoms. The 80 duck returns were obtained in the following localities: Alaska 1, Northwest Territory 1, Saskatchewan 4, Manitoba 2, Arkansas 1, California 4, Iowa 3, Kansas 15, Louisiana 3, Minnesota 1, Mississippi 1, Montana 1, Nebraska 12, North Dakota 8, Oklahoma 5, Oregon 1, South Dakota 1, Texas 12, Wyoming 2, Campeche, Old Mexico 2, Total, 80.

The soil in the Cheyenne Bottoms is blue clay, which is so compact that it makes an almost water-tight bottom. Since there is not natural drainage, evaporation is about the only way for the water to pass off. With another



heavy rainfall next year the water level may be raised high enough to drain off through Cheyenne Creek (where I have my traps), thence into Cow Creek, and thence into the Arkansas River, near Hutchinson.

There is a bill (the Hope Bill, H. R. 7361) now before Congress appropriating \$350,000 to pay damages to land owners and to dredge an inlet and an outlet so the lake may be made permanent. Sportsmen and conservationists are strong supporters of this plan, and the state and federal governments are interested.

There is a good deal of curiosity as to the origin of the Cheyenne Bottoms. One theory is that this great bowl-shaped depression is an ancient buffalo wallow. In former times the buffaloes migrated through this region in enormous herds—perhaps by the hundreds of thousands. In the wet seasons these animals would carry away vast quantities of mud sticking to their shaggy fur. In the dry seasons the fine, soft soil would be whipped up by the winds and carried away.

ELLINWOOD, KANSAS.

[On August 12 and 13, 1927, about ten inches of rain fell over about seven townships in central Kansas. This water drained into a lowland known as the Cheyenne Bottoms, and produced an artificial lake of about 25,000 acres in extent. The name comes from the Cheyenne Indians, who fought the Pawnee Indians for possession of this hunting ground. As a result of this heavy rainfall the bottoms are now under water, varying in depth from one to eight feet. There is no outlet or natural drainage, so the water still remains, except as it evaporates. The soil is not especially good, and it has been used chiefly for hay crops. Many haystacks are now partially submerged, thus causing the loss of thousands of tons of hay.

This is not the first inundation of this area. Up to 1927 it had been dry since 1915, but prior to that it had been more or less under water at various times. It is now estimated that the present water, without new influx, will maintain the lake through 1928, and possibly 1929.

What to do about the situation has become a question of general interest. The land owners and others insist upon a plan of drainage to make the land again available. Another group proposes to let the water stand, thus creating an extensive, permanent inland lake. It is looked upon as an important wild-fowl refuge or shooting ground. As far back as 1904, "during the wet season," much market hunting was done in this area. In the current reports it is stated that at least 500,000 ducks were killed (in 1904) for the markets of Kansas City, St. Louis, and Chicago. The Federal Government has become interested. We understand that a bill (H. R. 7361) has been introduced in Congress authorizing the appropriation of \$350,000 with which to pay for the lands, build dikes, etc.

It is said that those interested in reclaiming the land have a plan for constructing a long drainage ditch, which would be expensive also, and which might result in overflow of new property farther away. What the outcome will be no one can now foretell.—Ed.]