bird (*Euphagus cyanocephalus*). This is the first record we have of Brewer's Blackbirds wintering in Alberta.—W. RAY SALT.

AN INTERESTING CORN SHOCK FAUNA.—On February 20, 1932, near London, Ontario, I helped a farmer load corn to be hauled to the barn. The corn had been shocked in the usual cone shape at harvest time, and had stood in the field ever since.

From the first shock it was evident that each housed an abundant mammal population. There were large numbers of house mice (*Mus musculus*) and field mice (*Microtus pennsylvanicus*) and one deer mouse (*Peromyscus* probably *bairdii*) was seen. In addition, both European hare (*Lepus europeus*) and cottontail (*Sylvilagus floridanus*) had used the shocks for shelter, and fragments of cobs in the nearest woods told of the visits of black squirrels (*Sciurus carolinensis*).

Each shock was taken apart carefully. In one, right at the top, was a cache of a number of dead *Microtus*. We took the corn away cautiously, hoping to find a weasel. Finally, from the bottom of the shock a large house rat (*Rattus norvegicus*) sprang out, and, since there was no sign of a weasel anywhere it would seem that the cache was his. Curiously enough a nest of the house mouse a few inches from the cache had not been disturbed.

Needless to say, the corn was considerably damaged in all shocks. — C. H. D. CLARKE.

BANDING NESTLING CROWS.—The Illinois Co-operative Crow Investigation appeals to bird banders to make a special effort to band nestling Crows. Familiar though the Crow may be, many details of its life history remain unknown and a special effort on the part of banders to put bands on as large a proportion as possible of this year's crop of young may well yield valuable results —ED.

REVIEWS

PLACER MINING ON THE ROGUE RIVER, OREGON, IN ITS RELATION TO THE FISH AND FISHING IN THAT STREAM. by *Dr. Henry Baldwin Ward. An Ecological Study made for the Oregon State Department of Geology and Mineral Industries, September, 1937—May, 1938. Bulletin No. 10.*

This report may be of some interest to fishermen as well as to other persons. It will be evdient that the conclusions apply to the conditions as they exist on the Rogue River at the present time and do not necessarily apply entirely to conditions elsewhere.

Dr. Ward points out:

1. That the Rogue river has always carried large amounts of silt and at the same time has always supported a large population of salmon and trout.

2. That silt is not a pollutant in that it carries no chemically active deleterous substances; quotation is made from Dr. M. M. Ellis who states that silt (*a*) does not decrease dissolved oxygen, (*b*) does not increase acidity, (*c*) does not increase alkalinity, (*d*) does not increase specific conductance, (*e*) does not increase ammonia, (*f*) is not toxic on fishes

3. That many salmon and trout streams between California and Alaska are seasonally and some constantly loaded heavily with silt that comes from glacial run-off and from bank erosion.

4. That there is no evidence that the intensive placer operations of the early years had any effect in reducing the runs of salmon and trout; on the other hand the reduction in numbers of fish in recent years can be attributed to modification of stream conditions consequent upon settlement of the land in the drainage area and to increased fishing effort.

5. That the placer mining is not carried out during the low water period because of the lack of water for operations; no storage systems being used

Investigation showed:

1. No evidence that silt in the Rogue river

forms a blanket on the stream bed to cover fish foods or spawning grounds with an impermeable layer; in any case, the spawning areas lie chiefly above the locations of the placer mines

2. No evidence that the suspended sediment is injurious to fishes. Experiments by Dr. L. E. Griffin with young chinook (spring) salmon and young cutthroat trout showed that for periods of 28 and 18 days respectively these fishes lived in sediments obtained from the placer mining areas and in amounts equal to and greatly in excess of those occurring in the Rogue river without injury and with growth rates equal to those of fish in clear water.

3. That turbidity measurements at Grant's Pass above the mining area were at times during the months of January, February, March and April, higher than those at Agness below the mining area; measurements on small streams close to mine workings were higher than those at Grant's Pass in at least two instances

On the basis of his observations during September, 1937, and during March and April, 1938, the turbidity measurements and the experiments by Dr. Griffin, Dr. Ward concludes that the addition of sediments from the placer operations as at present conducted on the Rogue river is not inimical to fish.—W. A. C.

PROCEEDINGS OF THE NOVA SCOTIAN INSTITUTE OF SCIENCE, *Halifax, Nova Scotia, Vol. 19, 1937-1938, Part 4, pp. 293-454.*

Two of the four scientific papers are of direct interest to field naturalists. *The Bird Life on the Grand Manan Archipelago*, by Olin Sewall Pettingill, Jr., brings together the work of a long line of famous ornithologists beginning with Audubon, with that of the author and his contemporaries and associates. The result is a complete avifauna, listing 275 species. *The Fish Population of Lake Jesse, Nova Scotia*, by M. W. Smith is a study based on a sample of fish from a lake in which the entire fish population was destroyed by treatment of the lake with copper sulphate.—C. H. D. C.

REPORT OF THE ONTARIO FISHERIES RESEARCH LABORATORY, 1938.

Seven research projects are summarized including a study of parasites and one of small mammals all carried out in 1938 at this active research station in Algonquin Provincial Park, Ontario. Two new publications (No. 56 and 57) have recently been issued.—C. H. D. C.

OUR WILD FLOWERS: a plea for Protection, *by Frank Morris. Publication No. 3, Federation of Ontario Naturalists, 198 College St., Toronto, Price 10 cents.*

Propaganda has perhaps seldom assumed such an attractive form as this. The biology of plant life is described in simple language, and wild flowers are shown to be integral parts of ecological units which embrace the members of the animal kingdom as well. The beauty of wild flowers is described in terms of sugar bush, woodlot, swamp, muskeg and field which are sure to strike responsive chords in all lovers of the countryside.

No laws or restrictions are advocated. Instead the appeal is for unselfish thoughtfulness. We are asked to leave the flowers in their natural setting, and neither to pick nor transplant, nor to buy from those who do. The protection asked is for the whole plant and animal community in sanctuaries where plants and all forms of wild life may be given absolute protection.

Three flower paintings of Robert Holmes are reproduced in colour, the Showy Lady Slipper being from Sam Wood's "Rambles of a Canadian Naturalist." There are also several excerpts from the "Rambles" with ornamental heads, and a photograph of the White Trillium, Ontario's Emblem Flower.

While this pamphlet will be a boon to teachers its lessons are for adults as well as children. It is a splendid contribution to the cause of conservation.—C. H. D. C.

THE NATURAL RESOURCES OF KING TOWNSHIP, *by K. M. Mayall, Toronto, 53 pages, 9 maps, 3 tables, 8 plates, 1 figure.*

This publication is the result of a detailed survey of a rural township near Toronto,