report on the first eighteen months' work of the ethnographical department of the Geological Survey of Canada, which, it will be remembered, was a direct outcome of the visit of this Association to Winnipeg in 1909, and Dr. Hrdlička, in a letter from Siberia addressed to the President, announced that he had discovered in north-eastern Asia living representatives of the ancient race which gave North America its Indians.

## BIRD NOTES.

IN an article on the food of nestling birds published in the Journal of the Board of Agriculture for September, 1912, Mr. W. E. Collinge commences by referring to the fact that in the early stages of life birds daily consume more than their own weight of food. It is also mentioned that since nearly all birds except pigeons feed their young upon an animal diet, and that the nesting season occurs when insects are most abundant, the value of birds as insect-destroyers is self-apparent.

In *Witherby's British Birds* for October an instance of one cuckoo laying in the nest of a marsh-warbler and of a second in that of a rock-pipit are recorded. Only about five instances of a similar event have been previously recorded in the case of each species.

To *The Zoologist* for October Mr. Harvie Brown contributes the first part of an article on the past and present distribution of the fulmar petrel on both sides of the Atlantic, and its recent spread in northern Britain.

For about a century naturalists were content with the name *Strix flammea* for the barn-owl. The late Prof. Newton proposed to replace the generic name by Aluco, but this usage was recently stated by Mr. G. M. Mathews to be invalid. In No. 4 of *The Austral Avian Record*, after referring to a couple of alternative generic designations, the same writer brings forward the name *Flammea vulgaris* as one to which no objection can be taken. It seems a pity to try to displace a name which has become almost a household word. This replacement of long-accepted names of British birds by others of earlier date forms the subject of an editorial article in the September number of *The Scottish Naturalist*, where it is remarked that "though our sympathies are strongly in favour of the British Association's rules, yet we are willing to view the present situation in a liberal spirit. There must, however, be concessions, and we regard it as essential that a number of time-honoured names must be conserved."

In the above-mentioned issue of *The Scottish Naturalist*, Mr. Eagle Clarke describes, with an illustration, a male hybrid between an eider drake and a wild duck, which was shot early in 1912 in the Orkneys. What appears to have been a fellow-hybrid was seen on the Pentland Skerries in the following May. No other instance of a similar hybrid appears to be on record.

We are indebted to Mr. W. Junk, of Berlin, for a copy of a sale catalogue of ornithological literature.

R. L.

## REPORT OF THE METEOROLOGICAL COMMITTEE.

THE report of the Meteorological Committee for the year ended March 31, 1912, shows that several important matters were dealt with during that period, *e.g.* the reconsideration of the relations with the Post Office as regards weather telegraphy, the incorporation in the official network of stations which had previously sent their observations to the Royal Meteorological Society, the publication of results of various classes of observations, and the revision of rules under which the increasing number of telegraphic reports from health resorts can be accepted for communication to the Press.

The present capabilities of international and wireless weather telegraphy are well illustrated by the frontispiece synoptic chart for April 1 of the distribution of weather phenomena over a large part of the northern hemisphere compiled from data received within ten days of the date of the chart. One great advantage has been conceded by the Post Office at the request of H.M. Treasury in allowing priority of transmission to certain classes of meteorological telegrams and to storm warnings; but very much still remains to be effected in the way of facilitating the telegraphic distribution of forecasts to all parts of the United Kingdom by some financial arrangement by which the Meteorological Office would be placed on a better footing in carrying out its important public work than that accorded to a "private person."

The percentage of complete success and the sum of successes (complete and partial) of the 8h. 30m. p.m. forecasts for the year 1911 were both higher than in any year since 1879, when the present service of daily forecasts was inaugurated. The "further outlook" frequently appended to the forecasts for twenty-four hours has also been remarkably successful. Want of space precludes special mention here of the useful work carried on in other departments of the office.

## THE METALS IN ANTIQUITY.

THE Huxley memorial lecture was given by Prof. W. Gowland, F.R.S., on Tuesday, November 19, at the Royal Anthropological Institute, the subject being "The Metals in Antiquity." After pointing out the sources whence our knowledge of the use of metals by man in prehistoric and protohistoric times was derived, the lecturer gave an account of the primitive metallurgy of copper, tin, gold, lead, silver, and iron, the conditions under which they were extracted from their ores, and the localities in which they were first obtained.

The origin of the smelting furnace was traced to the camp fire, in which, if by chance a lump of ore either of copper carbonate, tin-stone, or brown iron ore or hæmatite, had been one of the ring of stones surrounding the camp or domestic fire and had accidentally become embedded in its embers, it would undoubtedly be reduced to metal.

The metals which occur—native copper, gold, and iron—were undoubtedly the first to be known to man in the localities in which they occurred, but until the art of smelting metals had been invented, the discovery and use of the native metals was insufficient to affect to any great extent the old Stone age culture.

Gold, although doubtless the first metal to be known in many localities owing to its wide distribution in the sands of rivers, was useless for any practical purpose.

Copper, however, or an alloy of the metal with tin, antimony, or arsenic, was extracted from ores at a very remote period, and it or its alloys was the first to be applied to practical use. In fact, the first metal to be obtained by primitive man by smelting copper ores depended on their composition, and in the localities where tin did not occur it was a more or less impure copper.

The extraction of gold from its ores on a large scale in the earliest times was attributed to the Sudan



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