the primary differences which mark off the races of man as due to the relative activities of various endocrine glands. While his opinions are highly conjectural they are suggestive and show the importance of further investigation in this interesting field. Stature, for example, is largely regulated by the secretion from the pituitary gland, and Keith maintains that the average European is taller than the average Negro or Mongolian because of the more pronounced activity of this gland in the Caucasian type. The pituitary also probably influences the character of the hair, the texture of the skin, and the cast of features. Hormones from the male gonad are apparently responsible for the main secondary sexual differences. Judging from the more heavily haired condition of the body in Caucasians, he likewise infers that this tissue is more active in them than in the Mongolian and Negroid types. Again, he thinks that the lighter color of the paler-skinned races may have been produced by a greater activity of the adrenal glands, since their secretion tends to destroy pigmentary bodies. According to his hypothesis, then, the Caucasian type is characterized by a relatively greater amount of internal secretion from gonads, and from pituitary, thyroid and adrenal glands. Since racial characteristics are inherited, however, it is evident that such differences of mind or body, in so far as they are referable to the influence of internal secretions, must be assigned eventually to the germinal factors which determine the corresponding differences in the endocrinal glands.

In conclusion, then, I think it is evident from even this cursory review of the endocrine system that we have in the internal secretions a series of powerful agents which profoundly influence our body-structure, our health and our whole personality.

SCIENTIFIC EVENTS

DROUGHT IN THE NESTING AREAS OF WATERFOWL OF THE UNITED STATES AND CANADA

THE reports of representatives of the U. S. Biological Survey who have recently returned from expeditions to northern areas of the United States in company with Canadian officials to the principal duck-breeding areas in Canada indicate that severe limitation of the number of waterfowl to be killed during the coming season may be necessary as a result of long-continued drought in the nesting areas. Although federal regulations governing the shooting of ducks and geese were recently amended to reduce the open season throughout the United States by two weeks this fall and winter, still further restriction of the annual kill may be necessary.

Discouraging reports were made of unprecedented drought; of lakes and ponds and marshes turned into dusty barrens with no sign of aquatic life, and of the almost complete absence of water during the period in the great prairie breeding grounds of southwestern Manitoba, southern Saskatchewan as far north as Saskatoon, and Alberta westward to the foothills of the Rocky Mountains and northward to the vicinity of Edmonton.

A marked shortage of breeding ducks and young was noted in the great delta region of the Peace and Athabaska rivers. In tours of several thousand miles the investigators saw only a few dozen small broods of young ducks in an area that in normal years has produced many millions of mallards, pintails, redheads, canvasbacks, bluebills and teals.

The shallow prairie sloughs and lakes of the region have disappeared following about ten years of reduced rainfall and three seasons of persistent drought. A far-reaching inquiry sent out by the Canadian Government has failed so far to show that the ducks have found other more remote breeding areas.

Not all the ducks and geese that come into the United States are bred in the region surveyed but a very large proportion of the wild fowl that make up the great flights know that country as their birthplace, and the shortage of breeding birds and the loss of so many young will have a serious effect upon shooting conditions both in this country and in Canada. Both the Canadian and United States governments under the migratory-bird treaty are concerned over the disastrous conditions that now threaten the wild fowl of the continent.

The two governments are therefore endeavoring to avert shortages by devising methods for saving an adequate supply of breeders for next season. The severity of the limitations that may be necessary will not be determined definitely until after further conferences between the authorities of Canada and of the United States and until more information is received from the nesting grounds.

To avert the grave possibilities of a permanent disaster to the wild fowl, the gunners in all sections of both countries will probably be asked to reduce their duck shooting this winter to a minimum, so that enough mature birds will survive to breed and thus enable the flocks to replenish themselves with the return of water to the parched areas.

THE INTERNATIONAL PASSAMAQUODDY FISHERIES COMMISSION

THE first members of the scientific staff appointed to investigate the Passamaquoddy fisheries for the

Canadian and American governments have arrived at St. Andrews and are preparing to institute work immediately. The object of the investigation will be to study the probable effect of the international development to generate electric power from the movement of tides in Passamaquoddy Bay and in Cobscook Bay on the fisheries of that region.

A joint meeting of the International Passamaquoddy Fisheries Commission and the advisory committee took place at the Atlantic Biological Station on July 10 at which the program was considered.

President Hoover has appointed Mr. Henry O'Malley, commissioner of fisheries, and Mr. O. E. Sette, in charge of the North Atlantic fishery investigations, as United States commissioners to conduct the investigation. The Honorable W. A. Found, deputy minister of fisheries, and Professor A. G. Huntsman, of the Biological Board of Canada, have been appointed to represent Canada in this investigation.

At a meeting of the commission in Montreal on June 8, to consider arrangements for starting the investigation, Mr. Found was chosen chairman of the commission, and it was decided that four experienced investigators should be selected to conduct investigations on zooplankton, phytoplankton, oceanic chemistry, and physical oceanography and fisheries. Dr. Charles J. Fish, director of the Museum of Science, Buffalo, New York, was selected biologist in charge of zooplankton and executive secretary to the investigative staff. Through the courtesy of the Buffalo Museum, Dr. Fish has been granted leave of absence for this work, and he is now engaged in organizing the investigation and securing subordinate personnel. Dr. E. E. Watson, of Queens University, Kingston, Ontario, a hydrographer with previous experience in local waters, has been appointed to take charge of the investigation in physical oceanography. Headquarters have been established at the Atlantic Biological Station at St. Andrews, New Brunswick.

The commission, and its investigative staff, has the assistance of an advisory committee, which consists of two competent scientific representatives from each country. Professor F. R. Hayes, of the zoological department of Dalhousie University, and Dr. A. W. H. Needler, in charge of the oyster investigations for the biological board, represent Canada. Dr. H. B. Bigelow, director of the Woods Hole Oceanographic Institution, and Professor A. E. Parr, curator of the Bingham Oceanographic Collection, Yale University, represent the United States.

Conclusions have previously been reached that the soundest basis for forecasting the probable effects of the dam upon the fisheries of this region would likely be investigations along the following lines:

(1) Detailed study of the occurrence of the herring in relation to various environmental conditions as an indication of how its availability in the fishery might be affected by the construction of the dams.

(2) The study of the abundance of phytoplankton and zooplankton (as a basis of fish life) in relation to the physical and chemical states of the water in the Bay of Fundy and along the coast of Maine.

(3) Detailed examination of existing hydrographic conditions as indicating the relative importance of the water-mixing at the mouth of the Passamaquoddy Bay as determining the physical and chemical states of the water in the Bay of Fundy and along the coast of Maine.

Two vessels have been loaned for use by the commission. The *Prince,* which in the past has been utilized by the Biological Board of Canada at St. Andrews, has been assigned to the new investigation and at the present time is being outfitted. The second vessel, the *Pelican,* recently constructed for the U. S. Bureau of Fisheries, will shortly leave Boothbay Harbor, Maine, and is expected to arrive in about a week's time. Active field work will for the time being be carried on by Dr. Fish and Dr. Watson. It is expected that additional members of the scientific staff will be announced later.

THE FARADAY CELEBRATION

THE celebration of the hundredth anniversary of the discovery of electro-magnetic induction by Michael Faraday will take place from September 21 to 23 at the Royal Institution of Great Britain where the experiment was made that has transformed our civilization.

Arrangements are being made for the welcome and entertainment of the delegates and guests beginning on Saturday, September 19. Officers of the Royal Institution, with interpreters and guides, will be in attendance to welcome arriving delegates and guests, and to afford any help that may be required. Ladies accompanying delegates and guests will be welcomed and entertained by members of a Ladies' Committee which has been formed for the purpose. Visits to places of interest have been arranged on each day of the celebration. By the courtesy of the general officers of the British Association for the Advancement of Science, delegates and foreign guests at the Faraday celebrations who are not already members of the association will receive complimentary tickets for its centenary meeting.

On Monday, September 21, there will be an informal meeting in the lecture theater of the Royal Institution where a statement regarding the program in English, French and German will be made. In the afternoon a reception for the delegates will be held in the lecture theater by the president and managers of the institution. A Faraday commemorative meet-