

tory, has been called to active duty in the Army Air Corps.

ACCORDING to the *News Edition* of the American Chemical Society Dr. Cecil G. Dunn, assistant professor of industrial biology in the department of biology and public health of the Massachusetts Institute of Technology, has been ordered to active duty by the War Department. He has been assigned to head the Section on Research and Development, Subsistence Branch, Supply Division, Office of the Quartermaster General, Washington, D. C.

THE American Society for X-Ray and Electron Diffraction, plans for which were announced in SCIENCE for May 23, starts its existence with a charter membership of 124. The officers elected for 1941 are: *President*, M. L. Huggins, of the Eastman Kodak Company; *Vice-president*, B. E. Warren, of the Massachusetts Institute of Technology; *Secretary-Treasurer*, George Tunell, of the Geophysical Laboratory, Washington, D. C. The first meeting of the society will be held from July 28 to August 1 at Gibson Island, Md., in cooperation with Section C of the American Association for the Advancement of Science. Reservations for this meeting are in charge of Dr. Neil E. Gordon, Gibson Island, Md.

To meet increasing demands for trained meteorologists, the University of Cincinnati has announced a new four-year undergraduate program in meteorology leading to the B.A. degree, which is believed to be among the first of its kind in the United States. Students will be trained for positions with air lines, at airports and air bases, and with weather bureaus. Both the Army and Navy are reported to be facing a shortage of specialists in meteorology, particularly in their air services.

THE Harvard College Observatory will issue this summer a new series of nine popular books covering the principal areas of astronomy, edited by Professor Harlow Shapley and Associate Professor Bart J. Bok. The books will be titled "The Harvard Books on Astronomy," and are written by the Harvard Observatory specialists in the various fields. Five of the

volumes are now in press, and the remaining four will be issued before fall. The volumes will give a complete and simplified presentation of modern scientific knowledge in each of the major fields of astronomy, it was explained. They are designed for adults and secondary school or university students, having acquaintance with the elementary principles of physics. By separating the treatment into nine volumes, of about two hundred pages each, it will be possible to keep the series up to date by issuing new editions of individual volumes.

A COMPLETE replica of the Westinghouse Time Capsule and its contents has been installed as a permanent exhibit at the Hayden Planetarium of the American Museum of Natural History. It was opened to the public at dedication ceremonies on June 17. This 800-pound specially constructed capsule was presented by David S. Youngholm, vice-president of the Westinghouse Electric and Manufacturing Company, and was accepted for the Hayden Planetarium by Professor William H. Barton, Jr., executive curator of that institution.

It is stated in the London *Times* that the herbarium near Hudiksvall, in Sweden, containing 30,000 specimens of preserved roses, compiled and classified by the late Reinhold Matsson, the Swedish churchman and botanist, has been destroyed by fire.

Nature writes: "War has again inflicted severe losses on the University of Louvain. Numerous university buildings were destroyed during hostilities, including the library rebuilt by American generosity and restocked by gifts from nearly every university in the world. Of its 900,000 volumes 15,000 only remain intact, and of its 800 manuscripts only 15 are left."

ACCORDING to *The Australian Journal of Science* the Minister of Labor and Industry, Mr. Holt, has arranged that a scientific mission be sent from Australia to Canada, the United States and Great Britain, in order to coordinate technical work in relation to the war, particularly in the fields of physics and engineering.

DISCUSSION

ESTABLISHMENT OF A NATURAL AREA ON THE HUNTINGTON WILDLIFE FOREST

ON January 18, 1941, the New York State College of Forestry, through the Executive Committee of the Board of Trustees and upon recommendation of Dean Samuel N. Spring, established a Natural Area of approximately 1,000 acres on the Huntington Wildlife Forest. The Forest, a 15,000 acre tract in the central Adirondacks west of Newcomb, N. Y., is held in trust

for the New York State College of Forestry for "investigation, experiment and research in relation to the habits, life histories, [and] methods of propagation and management of fish, birds, . . . and . . . mammals . . ." and is administered by the Roosevelt Wildlife Forest Experiment Station under the direction of R. T. King. The Natural Area, a typical sample of the spruce-northern hardwoods vegetation in the Adirondack region (lower Canadian Zone of Merriam), is a

triangular tract which lies in the northwest part of the Forest, bounded on the southeast by the three-mile long Catlin Lake. It is covered largely by old growth, but not virgin, spruce- northern hardwoods, together with upper spruce slopes, spruce flats and typical lake-shore and lowland vegetation. Several clearings remain from an original settlement.

Appreciation for the role of the Natural Area in land management research is developing rapidly. New possibilities are revealed where multiple land use is designed to supply the highest returns of such renewable resources as timber, wildlife, forage, water and recreational values. New interpretations of the critical controls of vegetation are made possible, not only in terms of the constantly acting and greatly over-emphasized weather and soil, but also of the intermittently acting factors such as fires, hurricanes and epidemic and cyclic population variations. New methods of management are revealed for regions remote or of irregular terrain where the vegetation must be controlled indirectly for conversion to desirable semi-natural types. For such reasons as these, it is of the utmost importance that samples of natural vegetation be preserved or be permitted to develop for study and reference. Increased though still insufficient interest in this subject has been evoked by such statements as those of Shelford,¹ Leopold,² Ashe,³ Pearson,⁴ Adams,⁵ Shelford,⁶ Toumey and Korstian,⁷ Hanson,⁸ Piemeisel,⁹ Baldwin,¹⁰ and Hough.¹¹ Due to the work of these men and others, natural areas have been established in many parts of the country, the most outstanding recent ones being the Panama Canal Zone Biological Area in Gatun Lake and the Tionesta Natural Area of 2,100 acres in northwestern Pennsylvania.

Regretfully, because the foresight of our forefathers was not always as well developed as we consider our own to be, many extensive parts of the northeast have been entirely stripped of their original vegetation cover, leaving nothing to indicate what the land had borne and might bear under a dynamic natural equilibrium. Although this is not entirely true of the Adirondacks, where state-owned virgin timber still exists at the higher elevations, protected by the provisions of the New York State Forest Preserve, no tract has come to the attention of the author which

is at elevations comparable to those of the Huntington Forest and satisfactorily located in reference to other experimental lands as to permit a broadly planned research program. For the fulfillment of such a role, the Huntington Forest Natural Area is dedicated to scientific research of natural equilibria and is to be administered with full recognition of the dangers inherent in unwarranted trespass. It is to serve as an outdoor laboratory for studies of wildlife, flora, forests, soil and influences, and is admirably suited for long-time studies of conditions uninfluenced by anthropic factors. It is designed for investigations of the changes concomitant with the attainment of a dynamic equilibrium of flora, soils and weather, as well as fluctuations and variations in response to biologic and climatic cycles and to natural regeneration. Its position in the Huntington Wildlife Forest will permit it to benefit by the proximity of the technical headquarters of a field experiment station and to serve as an integral check area for purposes of comparison both with other and parallel experiments being run under disturbed conditions and with cultural operations throughout this part of the Adirondack Mountains.

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THE RELATION BETWEEN MENTAL AND PHYSICAL DEVELOPMENT

In a recent publication¹ Professor Franz Boas discussed the results of a growth study done in the Lincoln School. Emphasis was placed on the unexpectedly high relation between intelligence quotients and indices of physical development, both expressed as deviations from the mean of the age group. The graphs in which stature deviations were plotted against intelligence quotient deviations appear to be based on 22 points for the boys and 17 points for the girls. Assuming that these points represent individuals it is possible to compute coefficients of correlation. These are $+ .68 \pm .08$ for the boys and $+ .47 \pm .10$ for the girls. If, however, these points represent averages, the correlations can not be estimated from inspection of the graphs. Measures of variability must also be available.

Professor Boas feels that these results corroborate the inference drawn by him from the work of Porter.² Now, Porter's data show only the means without corresponding measures of variability. From the means alone one would conclude that, at a given age, physically accelerated children are in advanced grade loca-

¹ F. B. Sumner, *SCIENCE*, 54 (1385): 39-43, 1921.

² A. Leopold, *Jour. For.*, 19: 718-721, 1921.

³ W. W. Ashe, *Jour. For.*, 20: 276-283, 1922.

⁴ G. A. Pearson, *Ecol.*, 3: 284-287, 1922.

⁵ C. C. Adams, *N. Y. S. Mus. Bull.* 279: 37-46, 1929.

⁶ V. E. Shelford, *Ecol.*, 14: 240-245, 1933.

⁷ J. W. Toumey and C. F. Korstian, *Foundations of Silviculture*, p. 3, 1937.

⁸ H. C. Hanson, *Sci. Mon.*, 48: 130-146, 1939.

⁹ R. L. Piemeisel, *SCIENCE*, 92(2383): 195-197, 1940.

¹⁰ H. I. Baldwin, *SCIENCE*, 93(2404): 81-82, 1941.

¹¹ A. F. Hough, *Ecol.*, 22: 85-86, 1941.

¹ F. Boas, *SCIENCE*, n.s., 93: 339, 1940.

² W. T. Porter, *Trans. of the Academy of Science of St. Louis*, 6: 161, 1895.