

1. State game farms, where wild game may be propagated, for distribution to public and private preserves.

2. Reserves, where the wild life may be maintained—forest and game preserves.

There should be not only one great state preserve like the Adirondack State Park, but every county in the state of New York should have its own smaller reserve, made out of the waste land that is still cheap and available. There is land in every county of the state that would be of far more worth if put to raising timber and game. We have talked much about reforestation: we have practised it little.

Portions of such public reserves should be kept as sanctuaries, free alike from the hunter, the lumberman and the engineer; and in these every wild thing, not harmful to the public, should find a place, and should be let alone. These places would serve as centers of natural propagation and dispersal for wild game species; but they would also keep from extermination many other things in which the hunter is not interested.

They would serve the interests of the public at large by preserving to future generations some of the wealth of life with which nature has endowed our country. There are three important reasons why it should be preserved:

1. Its esthetic value. Many of the wild things, both plants and animals, are interesting and wonderfully beautiful.

2. Its educational value: many of these things are important for teaching purposes; and the youth has a right to know what the native life of his native land was like; otherwise he will not be able to understand its early history.

3. Its possibilities of undeveloped economic values. We are only at the beginning of knowledge how to best utilize our natural resources. We should not exterminate the wild species. We do not know what use the future will have for them. Though they are all products of the evolution of the ages, they may be quickly destroyed, as the history of the passing of the wild pigeon shows. Once gone, they are gone forever. The interest that the public has in keeping them is in the long run far

more important than the interest of the hunter in shooting or the farmer in raising crops.

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## SCIENTIFIC EVENTS

### THE TEACHERS' SCHOOL OF SCIENCE

THE Teachers' School of Science, Boston, announces a summer excursion to Alaska under the charge of Professor Geo. H. Barton. The party will leave Boston on July 6, and after a visit to Toronto, will pass through Lakes Huron and Superior, making a short stop at Sault Ste. Marie. It will then visit Fort Williams and Winnipeg, and spend four days at Jasper Park in the Mount Robson region, thence to Prince Rupert, along the Skeena River to Skagway by steamer, via the Inside Passage and the Lynn Canal (fiord), stopping at Wrangall and Juneau. The party will then go by rail over the White Pass and down the Yukon to Dawson by steamer. Returning, the party will visit Lake Atlin, Vancouver, Seattle and Tacoma, spend three days at Mount Ranier and five days in Glacier National Park. A day each will be spent in Chicago and Toronto, and thence the journey will be by steamer through the Thousand Islands and the Lachine Rapids to Montreal and rail to Boston.

The school will also give its annual field lessons in geology and botany. The schedule of the courses follows:

April 21, Fitchburg—Tourmaline crystals, beryl, mica, feldspar; bathylith, granite, concentric jointing; a monadnock.

April 28, Medford—Decomposition and disintegration (exceptional); frost action, talus.

May 5, Hudson—Bed of dolomite in mica schist, with wernerite, sahlite, titanite, etc.; drumlins and channels of a glacial stream.

May 12, Quincy—Bathylith, granite, erupted into Cambrian slates with much contact phenomena.

May 19, Cedar Grove—Transverse fault; anticlinal fold; melaphyr, tuffs, shale.

May 26, Brighton—Old lava flows; igneous intrusions and dykes; amygdaloidal melaphyr; quartz, epidote, calcite, etc., alteration minerals.

May 30, Annual Field Reunion, Wayside Inn and Nobscot.

June 2, Newton Center—Contemporaneous bed; overturned fold; thrust faults, joints.

June 9, 10, Mts. Tom and Holyoke, Connecticut Valley—Differential erosion; trap and sandstone; reptile footprints; volcanic bombs, etc.

June 17, Atlantic—Stratification folds, cleavage; puddingstone, sandstone, shales, tillite.

June 24, Nantasket—Interbedded tuffs and melaphyr; intersection dykes, baked slates.

#### THE UNIVERSITY OF MICHIGAN MEDICAL SCHOOL AND NATIONAL SERVICE

THE faculty of the University of Michigan Medical School on April 2, 1917, passed the following resolutions:

1. It is the opinion of the faculty of the University of Michigan Medical School that in meeting the demands for medical officers in the national service, the military authorities should give first preference for enlistment to the members of the medical classes of the past two years, viz.: 1915 and 1916.

*Note.*—These young men have recently finished their medical courses and having taken in part or altogether their hospital training, should have the latest and best information in scientific medicine, and not having as yet established themselves in practise, are best fitted to be selected for military service.

2. In view of the probably urgent demands for trained medical men, the faculty of the University of Michigan Medical School desires to place itself on record as being ready and willing to make its courses of instruction continuous through the summers of 1917 and 1918. This proposition will be submitted to the various state boards of licensure for their approval.

*Note.*—If this provision goes into effect, a week after the close of the present session, the session of 1917-18 will begin. Those who are now juniors will become seniors and may be graduated in January, 1918.

*Note.*—In taking this step, not only the military demands upon the medical profession, but civil demands as well are taken into consideration.

3. Taking into consideration the future needs of the country for trained medical men, it is the opinion of the faculty of the University of Michigan Medical School that it is

advisable for the undergraduate medical students to complete their course of instruction and not to enlist.

4. The faculty of the University of Michigan Medical School recommends that not less than two hours per week be set aside for the military drill of undergraduate students, and that in addition to the ordinary infantry drill, we recommend training along the lines developed by the Clinical Society of Albany, and known as the "Albany Plan."

*Note.*—The medical officer should first of all be a soldier. This is necessary in order to make him most efficient as a medical officer.

5. That copies of these resolutions be furnished for suggestions of approval or disapproval to the following bodies:

(1) The surgeons general of the army and navy.

(2) The National Medical Committee on Preparedness.

(3) The National Research Council.

(4) The faculties of other medical schools.

6. That a list of the graduates of the classes of 1915 and 1916, with their standing while in the school and their present addresses, be sent immediately to the surgeons general of the army and navy.

#### BRITISH GOVERNMENT GRANTS FOR SCIENTIFIC RESEARCH

When the establishment of a separate department of scientific and industrial research was announced in December last, Lord Crewe stated that the Chancellor of the Exchequer was prepared to advise the government to devote a sufficient sum to cover operations during the next five years on a scale which would provide four, or perhaps five, times as much for cooperative industrial research as had been spent for the whole purposes of research hitherto. We learn from *Nature* that the civil service estimates just issued include the sum of £1,038,050 to the department of scientific and industrial research, being a net increase of £998,050 upon last year's amount. Grants for investigations carried out by learned and scientific societies, etc., are estimated at £24,000, and grants to students and other persons