in all forest activities except commercial timber sales. It predicts, however, a large revenue from all sources for the fiscal year 1916, the general improvement in business conditions throughout the country having been already felt in the national forests, as shown by an increase during the first three months of about $119,000 over the earnings of the same period last year. During the fiscal year, the total revenues were $2,481,469.35, an increase of $43,759.14 over 1914. Of the $5,662,094.13 provided by the regular appropriation for the Forest Service, says the report, $5,281,000 was expended for protection, utilization and improvements, the cost of protection being increased by an extraordinarily severe fire season which necessitated emergency expenditures that were partly provided for by a deficiency appropriation of $349,243. An additional sum of about $196,000 was spent under the law which permits 10 per cent. of the forest receipts to be employed in road development for the public benefit.

The expenditures include, says the report, the protection of resources which as yet can not be made to bring in cash returns, such as inaccessible timber, as well as those, such as watershed covering and recreational advantages, which yield great general benefits not, however, measurable in money values. In this connection, the report mentions that timber given free to settlers and others was worth more than $206,000, while that sold under the law at cost was worth $33,000 more than the government got for it. The revenue also foregone by allowing free use of certain grazing lands, adds the report, is estimated to exceed $120,000, while a moderate charge for privileges that are free would bring in at least $100,000 more. All this, says the forester, has never been entered on the credit side of the Forest Service ledger.

SOIL SCIENCE

Soil Science is the title of a new monthly journal which is published under the auspices of Rutgers College. The journal, which is international in its scope, is devoted exclusively to problems in soils, including soil physics, soil chemistry and soil biology. Dr. Jacob G. Lipman, of the New Jersey Agricultural Experiment Station, is editor-in-chief, and has associated with him a consulting international board of soil investigators. This group consists of twelve of the leading authorities on soils in the United States and eleven from foreign countries.

It is believed that the journal will fill a distinct need in the field of modern science. Soil investigators have long felt the necessity for a specific medium for the publication of their research work. Heretofore, they have found it necessary to resort to journals not specifically devoted to soil problems. Consequently, they have been put to much inconvenience in keeping before them all the more important papers in soil research. Moreover, they have found it increasingly difficult to secure the prompt publication of their own papers in journals whose contributions cover a wide range of scientific activity. In planning for the publication of *Soil Science,* the editor was guided by the wish to facilitate the bringing to light of the results of soil research. He felt encouraged to believe that the new journal would help to conserve the time and the energies of his fellow students of soils, that it would provide for a more direct contact among men interested in the same problems, and that it would lead to a broader outlook on the entire field of soil fertility.

THE ECOLOGICAL SOCIETY OF AMERICA

A MEETING of ecologists was held at Columbus in convocation week to take action upon the proposal made at the Philadelphia meeting for the formation of a society of ecologists. Over fifty persons were present and the organization committee held letters from about fifty others who expressed interest in the project. In view of these facts it was unanimously voted to organize under the name The Ecological Society of America. It was decided to enroll as charter members not only those present at the organization, but also those who had by letter expressed a desire to be included in the membership, as well as those joining prior

to April 1, 1916. A constitution which had been drafted by the organization committee was adopted, and the following officers were elected: President, Professor V. E. Shelford, of the University of Illinois; vice-president, Professor W. M. Wheeler, of Harvard University; secretary-treasurer, Dr. Forrest Shreve, of the Desert Laboratory. The first regular annual meeting will be held in New York during the next convocation week, where a program will be arranged in harmony with the programs of other societies, so as to minimize serious conflict. Frequent field meetings will be held under the auspices of the society—four having already been arranged for the coming summer. Several proposals for the carrying out of cooperative investigations are also being entertained by the members of the society.

SCIENTIFIC NOTES AND NEWS

A BANQUET will be held in commemoration of the one hundredth anniversary of the organization of the United States Coast and Geodetic Survey on April 6, at the new Willard Hotel, Washington, D. C. The speakers will be: the President of the United States, the Swiss minister, the secretary of the navy, the secretary of commerce and Dr. Thomas Corwin Mendenhall.

THE American Chemical Society will hold its annual session at the University of Illinois from April 17 to 21. On April 19, in connection with these sessions, the new chemistry building of the university will be dedicated. The equipment for the new laboratory is arriving daily and is being installed as rapidly as possible to facilitate the preparation for the dedication of the building. At the dedication exercises Governor Edward F. Dunne will preside and deliver an address. Other addresses will be given by Dr. W. R. Whitney, of the General Electric Company and a member of the U. S. Naval Board, and Professor Alexander Smith, of Columbia University, by President James and others.

DR. L. O. HOWARD, chief of the Bureau of Entomology, U. S. Department of Agriculture, will give the evening lecture at the general meeting of the American Philosophical Society, on the evening of April 14. The subject will be "On Some Disease-bearing Insects."

THE Avogadro Medal has been awarded to Professor H. N. Morse, of the Johns Hopkins University, for the most important contribution to molecular physics made since the meeting held in Turin in 1911, to celebrate the centennial of the announcement of the hypothesis of Avogadro.

THE Illinois Academy of Science has elected the following officers for the ensuing year: *President,* Dr. William B. Trelease, head of the department of botany, University of Illinois; *Vice-president,* Dr. Griffith, of Knox College; *Secretary,* Dr. J. L. Pricer, of Normal University; *Treasurer,* Dr. H. S. Pepoon, of the Lakeview High School of Chicago.

DR. KARL SCHWARZSCHILDT, director of the Astrophysical Observatory at Potsdam, has been given an honorary professorship in the University of Berlin.

PROFESSOR KARL GRAEBE, professor of chemistry at Geneva from 1898 to 1910, discoverer with Liebemann of artificial alizarin, has celebrated his seventy-fifth birthday.

PROFESSOR O. C. GLASER has been appointed director of the Biological Station of the University of Michigan.

THE Associated Geological Engineers have opened a New York office in charge of Frederick G. Clapp, managing geologist of the petroleum division.

THE University of Toronto has granted Velyien E. Henderson, associate professor of pharmacy and pharmacology, leave of absence on his appointment as major in Canadian overseas expeditionary force.

DR. E. W. OLIVE, curator at the Brooklyn Botanic Garden, sailed on February 19 for Porto Rico to study and collect parasitic fungi and other plants.

MR. AND MRS. ROY CHAPMAN ANDREWS are leaving on an expedition to southern China to make collections of mammals for the American Museum of Natural History.