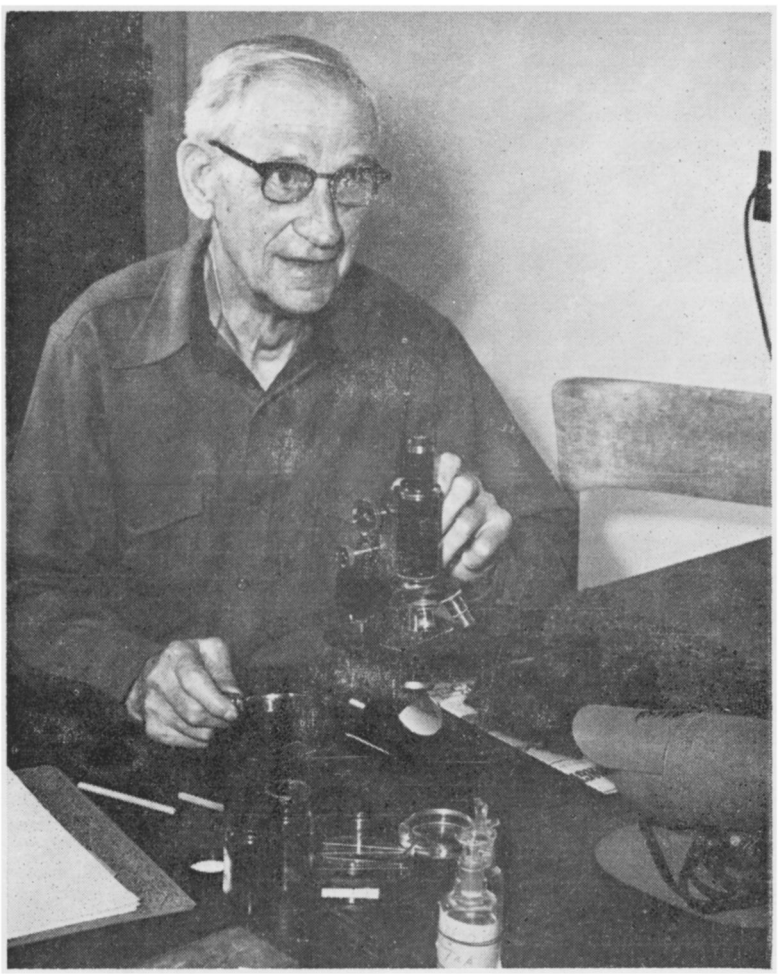

THE SOCIETY'S "EMINENT ECOLOGIST"

Dr. George B. Rigg

George Burton Rigg was born near Woodbine, Iowa, on February 9, 1872. Spending his boyhood on an Iowa farm, it was the weeds to be contended with in cultivated fields and the bright wild flowers among the meadow grasses that first stirred his interest in plants. In high school he began to acquire a botanical vocabulary and learned to identify the plants he saw daily by the use of Gray's Lessons and Manual of Botany.

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At the University of Iowa he selected as much botany as was possible in the rather fixed scientific course offered at that time and was graduated with a B.S. degree. In later association with the Iowa botany department he first heard of ecology as set forth in a volume by Warming.

Graduate work at the University of Washington gave him an M.A. degree with a major in botany, a minor in chemistry, and his first sight of sphagnum bogs as well. Continuing his graduate studies at the University of Chicago, he learned from Henry C. Cowles about plant succession and physiographic ecology as seen in the sand dunes and sphagnum bogs of that area; under the guidance and inspiration of William Crocker he learned to maintain automatically the functional point of view in his research; and he received his Ph.D degree.

His teaching career in botany has been at the University of Washington in Seattle, with summer teaching at the University of Iowa, the University of Chicago, the Laboratories of Biology and Oceanography at Friday Point, and the Provincial sessions for the agricultural training of teachers at Victoria, B. C. Among those who majored with him in their work toward a Ph.D at Washington was H. P. Hansen, whose work on fossil plants is well known.

His research work in ecology has been mainly on marine algae and peat bogs. When Germany first limited the export of potash from its Stassfurt mines, the U. S. Bureau of Soils began an investigation of Pacific Coast kelps as a source of potash fertilizer. Rigg was employed to make the field investigation in the San Juan Islands, the Puget Sound region, and the Strait of Juan de Fuca during the summers of 1911 and 1912. In 1913 he was in charge of a Bureau of Soils expedition to western Alaska. The motor boat Gjoa, chartered for this work, carried three scientists and a crew of three. The trip offered opportunity for the investigation of the ecology of marine plants, including the effects on marine algae of the large quantities of pumice and volcanic ash ejected in the eruption of Mt. Katmai in 1912.

Thirteen summers spent in teaching ecology and the physiology of marine plants at Friday Harbor offered continued opportunities for research. Rigg's representative papers in this field dealt with experimental work on gas pressure and the origin of carbon monoxide in the cavity of the bulb of **Nereocystis** (Rigg and Swain) and the zonation of plants and animals growing in the intertidal zone in the vicinity of Nash Bay near Cape Flattery (Rigg and Miller).

Field research on peat bogs was begun by Rigg in the Puget Sound region in 1908 and was later continued in Alaska, British Columbia, Minnesota, Ohio, the New England states, and West Virginia. The main points of view from which his ecological research has been conducted are: (1) the general course of development of bogs with emphasis on physiographic succession, and (2) the physiological processes of bog plants, especially as influenced by environmental factors. One phase of the latter was the determination of some of the physical and chemical properties of water of sphagnum bogs in collaboration with Thomas G. Thompson. Another phase is illustrated by a continuous record of soil and air temperatures in a sphagnum bog during an entire year.

Later phases of bog research were concerned with the layer of volcanic ash in certain peat deposits. As director of the investigation of peat deposits in the State of Washington, under the auspices of the Washington Division of Mines and Geology, Rigg had opportunity to determine the thickness of this layer and its depth below the surface of the peat deposits. The source of the ash and the approximate date of the eruption ejecting it were investigated in collaboration with Howard R. Gould. This study was continued to include determination of the approximate time that peat deposition began in Puget Sound bogs as a means of approximating the date of the retreat of the Vashon glacial ice from that region and also the annual rate of peat deposition. The carbon 14 determinations for this work were made in the Lamont Geological Laboratory of Columbia University and the expense was defrayed by a grant from the Agnes M. Anderson Research Fund of the University of Washington.

Rigg's current work is the identification of plant remains in the various kinds of peat as an aid in the classification of organic soils. His appointment as Consulting Botanist in the U. S. Soil Conservation Service extends from July to December, 1956.

The Ecological Society of America is proud to award Dr. Riggs its title of Eminent Ecologist in view of his outstanding work in ecology and his high character as a teacher, scientist, and man.