has been made to study the coyote in the interactions with all elements of the fauna and its relation to human interests. In consideration of these findings and the absence of facts to show that the coyote is an undesirable element of the wildlife in Yellowstone, it is concluded that artificial control is not advisable under present conditions." The paper in general refutes most of the charges against this animal. Again Olson has defended the presence of the large wolf in the Superior National Forest on the ground that it is really a benefit to the game. All in all the idea is growing that decisions as to the treatment of species suspected or believed to be detrimental to man's interests should await precise data based on special researches.

VI. Conditions Necessary for Needed Scientific Research

To test the value of the kit fox in the control of rodents and the several other modern ideas that have been advanced calls for a large tract of land (approximately 1,000,000 acres). It can be poor land suitable for grazing only. The fauna would have to be largely restored, and the species reduced in numbers allowed to rebuild to original status by protection, in order to bring back an approach to the original balance. The plants would also have to be allowed to recover from overgrazing or plowing. The processes involved in the recovery of the biotic community are much in need of investigation, and thus the time devoted to restoration is as profitable as any other from the research standpoint. The great plains have come to constitute one of the great national economic problems of the United States. The variable rainfall, unscientific exploitation, chiefly with the plow, and the loss of the soil, the reduction of animals beneficial to soils, call for serious longtime research work which can be combined with a National Monument which will preserve the original fauna in a natural state for posterity while retaining historic conditions of the covered wagon days.

At a recent Wildlife Conference[20] in Chicago, the Secretary of Agriculture stated that the United States is at the turning point. We either start saving and restoring our soil and biological resources or go down to economic destruction. (He no doubt had in mind the fate of certain Mediterranean countries.) In the same session a prominent official of the Department of the Interior stated that a sound national policy requires that more land come under public ownership in the national interest, even though it conflicts with some local interests. Public ownership of grassland is necessary for a long time continuous study of grassland problems. Work in this relatively untouched field is an essential part of any national conservation program.

OBITUARY

ROY E. DICKERSON

February ended the careers of a number of prominent geologists. Not the least was Roy E. Dickerson, who died of a coronary thrombosis at the American Institute of Mining and Metallurgical Engineers annual meeting in February. Funeral services were conducted in Arlington, Virginia, and the ashes will be interred in California.

The son of Merritt Michael and Martha Gilmore Dickerson, he was born at Monticello, Ill., on August 8, 1877. His entire university career was at the University of California, where he received the degree of B.S. in 1900, of M.S. in 1910 and a Ph.D. in 1914. His education, however, never ceased and he was as ardent a student on the morning of February 24 as he had been in university days.

Mr. Dickerson taught in California high schools and completed his graduate work while at Polytechnic in San Francisco. In addition, beginning as part-time curator in 1907 he became curator of paleontology at the California Academy of Science. During the summer, he taught at the University of California and acted as paleontologist for the Standard Oil Company of California.

In 1918, he joined the Standard as a full-time employee and became geological superintendent in the Orient. He served the Atlantic Refining Company in Middle and South America from 1926 to 1935, when he was promoted to chief geologist (foreign). In 1942, he became chief of the Technical Section of the Petroleum Division of the Foreign Economic Administration.

During nearly four decades of travel, he was accompanied by his wife, the former Delle Howard, of Cloverdale, Calif., whom he married on July 14, 1904.

Mr. Dickerson's most important publications were in paleontology, physiography and stratigraphy. While a graduate student, he completed a series on the Tertiary of the Pacific Coast. In later years, he devoted attention to the physiographic development of the East Indian and Philippine Islands, particularly as evidenced by the distribution of life. In spite of executive responsibilities of the last decade, he continued study and writing, leaving several unpublished manuscripts.

[20] Widely quoted by the press and to be published in the Transactions of the Ninth North American Wild Life Conference.

As a scientist, he had one of the best geological minds in Washington, and as a man, he was a friend, in all that the name implies. No one was more persistent and stubborn in the search for truth, or more kindly and tolerant in his dealings with humanity. After a trying day in the field, he was never too tired to help a subordinate, to do a favor for an acquaintance, to play a set of tennis or a hand at bridge. Both foreigners and natives, in South America, held him in the highest respect and confidence. He was a hard worker, a brilliant conversationalist, a jolly companion and, above all else, a true and loyal friend. We shall miss him sorely.

H. W. STRALEY, III

PRINCETON, W. VA.

RECENT DEATHS

DR. CLYDE HADLEY MYERS, professor emeritus of plant breeding at Cornell University, died on August 5. He was sixty-one years old.

DR. JOHN C. HESSLER, since 1934 president of James Millikin University, died on July 29 at the age of seventy-four years. Dr. Hessler was professor of chemistry at Millikin University from 1907 to 1920 and at Knox College, Galesburg, from 1921 to 1934.

DR. HARRISON GARMAN died on August 7. He was head of the department of entomology and botany of the Kentucky Agricultural Experiment Station from July, 1889, to 1929, and served as State Entomologist of Kentucky from 1897 to 1929, when he reached the retirement age.

DR. LOUIS A. JULIANELLE, bacteriologist, chairman of the Division of Infectious Diseases of the Public Health Research Institute of the City of New York, died on August 12. He was forty-nine years old.

DR. J. W. HAZZARD, head of the department of zoology at Southern University, Louisiana, died on August 15 at the age of forty years.

A CORRESPONDENT writes: "Dr. Horace Russell, Jr., died on August 5, at the age of twenty-seven years, as a result of injuries received in a fall while horseback riding. He was for five years research fellow and instructor in inorganic chemistry at the California Institute of Technology. He received his bachelor's degree in 1938 at Duke University and the degree of doctor of philosophy at the California Institute of Technology in 1941. He was the author of several scientific articles and was co-author of a book on advanced inorganic chemistry. During the period of the war Dr. Russell was engaged in war work for the Office of Scientific Research and Development. He had been away from Pasadena for several months before his death in connection with this work."

DR. LEO FRANK GOODWIN, professor of industrial chemistry and chemical engineering and head of the department at Queen's University, Canada, died on August 15 at the age of sixty-two years.

SIR HENRY GEORGE LYONS, F.R.S., the meteorologist and geographer, died on August 11 at the age of eighty years.

SCIENTIFIC EVENTS

A NATIONAL CHEMICAL LABORATORY FOR INDIA

A PLAN for the establishment after the war of a National Chemical Laboratory for India to specialize in industrial research and to develop new processes has been drawn up by the Council of Scientific and Industrial Research at Delhi.

It is proposed to follow more or less the lines of the chemical research laboratories of the National Physical Laboratory. Emphasis will be laid on industrial research and the development of new processes up to the pilot plant stage, so that the chemical industry and other industries requiring the aid of chemical research in general will benefit from the investigations carried out. It is pointed out that

in India such facilities for research work up to the pilot plant stage are rarely available and such scientific research as has been carried out so far has not been so convincing to industrialists and the would-be manufacturers as it might have been if the success of a process had been demonstrated on a large scale.

This aspect of the question will distinguish the National Chemical Laboratory from the rest of the laboratories either in the universities or in any technical institution run privately, or under semi-government control. It will maintain the closest cooperation with existing institutions, particularly as the National Laboratory will be able to initiate those ambitious investigations which are not carried out in university laboratories either for want of funds or for the reason that the problems have a predominantly industrial bias.

It is proposed that the laboratory should provide accommodation and facilities for the following main branches of chemistry: inorganic chemistry, including analytical investigations; organic chemistry, including drugs and chemo-therapy; physical chemistry, including high-pressure technique and electro-chemistry; biochemistry, including biological products and chemical engineering. The workshops and pilot plant equipment suggested for the laboratory should enable it to undertake any type of industrial research. Public opinion on the tentative scheme has been invited.