

Elmer Seth Savage

June 15, 1884 — November 22, 1943

In the death of Professor Savage on November 22, 1943, the dairy industry lost one of its outstanding leaders, who had exerted a wide influence in this and other states.

Elmer Seth Savage was born at Lancaster, New Hampshire, on June 15, 1884, and grew up in that state on the home farm. After being graduated in 1905 from the New Hampshire College of Agriculture, he taught animal husbandry for two years in the Baron de Hirsch Agricultural School in New Jersey. He then took up graduate studies at Cornell University, serving as assistant in the Department of Animal Husbandry. In 1909 he received the degree of Master of Science in Agriculture and in 1911 the degree of Doctor of Philosophy. In 1933 he was given the honorary degree of Doctor of Science by the University of New Hampshire.

At Cornell he advanced rapidly through the successive ranks of instructor and assistant professor, and in 1913 was appointed to a professorship in the Department of Animal Husbandry. In 1929 he was placed in charge of the dairy cattle division of the Department. Throughout his period of service in the Department, Professor Savage taught large classes of students who were drawn to him because of the soundness of his teaching and of his rare gift of kindling enthusiasm for his subject.

The investigation upon which his doctor's thesis was based dealt with the same general problem on which, some years later, he conducted extensive experiments—the protein requirements of dairy cows. As a result of this early investigation he formulated a set of feeding standards for dairy cows, which became known as the Savage Feeding Standards and found wide use.

In 1927 he began an extensive series of experiments to determine how much protein was needed in the concentrate mixture for dairy cows fed the types of roughages common in the northeastern states. These experiments were of great importance to northeastern dairymen for they proved that it was entirely unnecessary to feed concentrate mixtures as rich in protein as those which had commonly been fed in this region. Just as high production was secured on lesser amounts of protein, and under usual conditions such rations were decidedly more economical.

Later, Professor Savage and his associates conducted extensive experiments to develop more economical methods of raising dairy calves in market milk districts. In these studies the method widely known as the Cornell Calf Starter was developed. Just prior to his death Professor Savage carried on tests to determine the effects of making

decided changes in the formulas of mixed dairy feeds, such as are frequently necessary under present war-time conditions. These experiments showed that considerable changes could be made in formulas without lowering production, provided the mixtures were made up of suitable feeds that supplied the proper amounts of protein, fat, and total digestible nutrients.

Professor Savage was the pioneer advocate of the manufacture of mixed livestock feeds according to "open formulas." Under this plan the manufacturer not only guarantees the chemical composition of the mixed feed, but also states on the tag the exact proportion of each ingredient. This plan was adopted by farm cooperatives throughout the country, and put into operation with the assistance of College Feed Conference Boards which Professor Savage was instrumental in organizing for the purpose of devising formulas for the feeds in question. This development has had a marked influence on the manufacture and processing procedures of the feed industry generally, and has resulted in a large benefit to agriculture.

Professor Savage traveled extensively to study agricultural and dairy conditions in various parts of this country. In 1931 he was a representative of the United States Government at the World's Dairy Congress in Copenhagen, Denmark, and at that time made observations on dairying in several countries.

In addition to experiment station bulletins and articles on dairying published in farm papers, Professor Savage was the author of the book, *Feeding Dairy Cattle*, and of *Feeds and Feeding Manual*, and was the joint author of *Better Dairy Farming*.

Professor Savage was always deeply interested in his fellowmen and took a prominent part in organizations for human betterment. For several years he was a member of the board and also treasurer of the interdenominational organization, Cornell United Religious Work.

Professor Savage always took an active part in the activities of farmers in his home county. He maintained continuous membership in the Farm Bureau and the Grange, and for several years he was Superintendent of Cattle at the New York State Fair. For many years he operated a dairy farm at Ithaca where he developed a purebred Guernsey herd to a 400-pound fat level.

In 1911, Professor Savage was instrumental in organizing the livestock breeders of Tompkins County into a County Breeders' Association with the object of "promoting the breeding and improvement of high grade and purebred livestock in Tompkins County." Professor Savage was Master of the Forest City Grange and Secretary of the Tompkins County Pomona Grange for many years.

Professor Savage was a fellow of the American Association for the Advancement of Science and a member of the American Dairy Science Association and of the American Society of Animal Production. In the last named organization he served as secretary and vice-president. He was a member of the social fraternity, Kappa Sigma, and of the following honorary and professional fraternities: Sigma Xi, Gamma Alpha, and Alpha Zeta.

Not only was Seth, as we all called him, an outstanding agricultural leader, but he also endeared himself to us all by his kindness and helpfulness. The host of his warm friends will long cherish his memory.