

SEVENTY-SIXTH LEGISLATURE

SENATE

NO. 51

In Senate, Jan. 21, 1913.

Presented by Senator Clark of York, and on motion by Senator Allen of Kennebec laid on the table for printing pending reference to a committee.

W. E. LAWRY, Secretary.

STATE OF MAINE

IN THE YEAR OF OUR LORD ONE THOUSAND NINE HUNDRED AND THIRTEEN.

AN ACT to provide for the Conducting of Investigations in Animal Husbandry by the Maine Agricultural Experiment Station.

Be it enacted by the People of the State of Maine, as follows:

Section 1. The Maine Agricultural Experiment Station, 2 in addition to the investigations now conducted by it, shall 3 conduct scientific investigations in animal husbandry, in-4 cluding experiments and observations on dairy cattle and 5 other domestic animals. The said investigations shall be 6 carried out under control of the Director of the Maine Ag-7 ricultural Experiment Station.

SENATE-No. 51.

Sect. 2. There shall be appropriated annually from the 2 state treasury the sum of five thousand dollars in favor of 3 the Maine Agricultural Experiment Station, and the same 4 shall be expended by the Director of said Station in exe-5 cuting the provisions of this act. Payments of said appro-6 priation shall be made quarterly in advance upon the order 7 of the Governor and Council, who shall draw a warrant for 8 that purpose

STATEMENT OF FACT TO ACCOMPANY AN ACT TO PROVIDE FOR THE CONDUCTING OF INVES-TIGATIONS IN ANIMAL HUSBANDRY BY THE MAINE AGRICULTURAL EXPERIMENT STATION.

There has never been carried through anywhere in the world any systematic or comprehensive scientific investigation of the laws of the inheritance of the function of milk production in dairy cattle. Whatever progress has been made up to this time in breeding for this quality has been built largely on an empirical basis. There is no body of well-grounded scientific principles to guide a person at the present time in building up a high producing dairy herd or improving what he already has in such a way that the improvement shall be definite and permanent. The need for investigation which shall lead to the accumulation of knowledge of the principles referred to has been keenly felt for some time past by the dairymen in the state. The dairy industry in Maine is just now in a critical condition. The increased prices of feed without anything like a corresponding increase in the price of milk and other dairy products has materially reduced the profits of the business. For several years past the Maine Dairymen's Association has had a committee empowered to discover ways and means if possible whereby the Maine Agricultural Experiment Station might undertake a comprehensive investigation along the lines indicated. Furthermore this matter has been taken up by the Experiment Station Council and efforts have been made by that body to secure federal funds for this purpose. The experience which the Station has gained in its long and continued experiments on breeding for increased egg production in poultry would be of very material advantage in undertaking work on the problem of breeding for dairy production.

The amount of work, however, under way at the Station uses up all the funds which it has available and it is therefore not possible to embark on any new project of this kind until additional funds are provided from some source.

SENATE—No. 51.

PROPOSED PLAN OF COOPERATION BETWEEN THE COLLEGE OF AGRICULTURE OF THE UNIVERSITY OF MAINE AND THE MAINE AGRICULTURAL EXPERIMENT STATION IN CARRYING FORWARD WORK IN DAIRY BREEDING.

The following plan has been approved by the Board of Trustees of the University of Maine as a means whereby the experimental investigation suggested in the previous paragraph may be undertaken within a short time. The essential feature of the plan is that both the University of Maine through its College of Agriculture and the Maine Agricultural Experiment Station should together contribute the material resources for carrying out such an investigation. The proposed contribution of each of these parties to the work is as follows:

r. The University of Maine. It is proposed that the University shall permit the free and untrammeled use of its present herd and such additions to its herd as may hereafter be made for the purpose of this investigation in breeding. The University retains the right to hold any animals now in the herd, or to purchase others for educational purposes, although they may be of no value to the experiment in progress. Animals which have been used in the experiment may be retained or sold as the University may deem best when they cease to be of value in the experiment. The University, as at present, shall bear the entire cost of feeding, upkeep, and the management of the herd, except half the salary of the herdsman which shall not exceed \$60 per month for the University's share; and shall have, as now, the entire product from the herd and any and all returns derived from the herd. It will retain the privilege of using any or all animals in the herd for teaching purposes in connection with the work in the College of Agriculture, it being understood by mutual agreement that no use will be made of any of the animals in the herd by the University in such way as to effect the conduct of the experimental investigation without at least previous consultation with the Station authorities in charge of the breeding work.

2. The Maine Agricultural Experiment Station. All of the directly interested agricultural organizations of the State (see resolutions on p. 5) have passed resolutions urging the passage of an act providing for an annual appropriation of \$5000 to

the Maine Agricultural Experiment Station for the carrying on of investigations in animal husbandry, with particular reference to this problem of breeding for dairy production. In the event of the passage of such act it is proposed that this sum of money shall be used by the Maine Agricultural Experiment Station in carrying on the scientific part of the investigation. This money will be used chiefly in paying the salaries of the additional staff which will be necessary for the carrying on of this work. This will include an expert and trained investigator and an assistant, a computer, a book-keeper and a stenographer, and an expert herdsman to have charge of the actual work in the barn. (A part of the expense of this man will by mutual agreement be borne by the University since in any event it is necessary to maintain a herdsman in the barn.) Furthermore out of this fund it is expected that the Station will provide the additional apparatus and supplies necessary for carrying on work in this field. It is mutually agreed by the authorities of the College of Agriculture and the Maine Agricultural Experiment Station that the final authority in regard to the conducting of the breeding experiment shall rest in the Biologist of the Maine Agricultural Experiment Station; and the direction of the feeding, care, and management of the herd shall rest in the College of Agriculture; with the understanding that the Biologist of the Experiment Station is to be consulted in regard to any proposed change in feeding, care, or management before such change is inaugurated.

The following resolution was unanimously carried at the meeting of the Maine Dairymen's Association in Portland in December, 1912.

Resolved: That one of the most pressing needs of the live stock interests of Maine today is a more adequate knowledge than now exists in regard to the laws of breeding domestic animals for particular economic purposes. The Maine Dairymen's Association is of the opinion that in order to meet this need the Maine Agricultural Experiment Station should undertake at the earliest possible moment thorough and systematic investigations in the field of animal industry, with special reference to the laws of breeding cattle for productive qualities, and desired hereby to extend its hearty support to the proposed plan to secure an annual appropriation of at least \$5000 to be continued until the investigation is completed.

The same resolution has *also* been unanimously passed by the following agricultural organizations of the State:

The Maine Live Stock Breeders' Association.

The Maine Seed Improvement Association.

The State Grange.

The Maine Creamerymen's Association.

The Maine Federation of Agricultural Students.

SUMMARY.

There are five fundamental reasons why this proposed act should become law. These are:

(1) Because of the great *need* of exact knowledge of the laws of cattle breeding, for the further successful economic development of the industry.

(2) Because by means of the co-operative arrangement described above the State is able to provide for these necessary investigations *most cconomically*, since it is increasing the usefulness and efficiency of the State University's herd and barns.

(3) Because the long-continued experiments in breeding for egg production at the Maine Agricultural Experiment Station have laid a *foundation of knowledge and experience* which will *do away with* the necessity, which would otherwise exist, of making costly and *extensive preliminary experiments*, in order to find out just how best to deal with the problem of breeding for dairy production.

(4) Because there is an opportunity here for Maine to do *fioncering work*; to lead the world in the advancement of useful knowledge in this particular field of dairy production.

(5) Because the work *cannot be undertaken unless* the act is passed. Efforts to secure federal funds for the purpose have failed, and there is no reason to suppose that they would be more successful at any future time.