

# The Artificial Insemination Program In Iowa

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THE artificial insemination of dairy cattle was introduced into Iowa in 1942 in the areas near Cedar Rapids and Kanawha. At that time around 3,000 cows were bred artificially and the program has grown steadily until in 1948 120,000 cows were bred artificially in the state.

Many changes in the program have occurred in this short period of time. At the present, every county in Iowa has access to artificial insemination on an organized basis. That is, there is a co-operative unit in every county whose purpose is to provide service to the dairyman in his respective county. These county units have the privilege of purchasing semen from one of the three breeding establishments in Iowa. They hire their own technician and run their own business.

The breeding establishments in Iowa are: (A.) Eastern Iowa Artificial Breeding Association at Cedar Rapids with Dr. James Piree as owner-manager servicing the north and eastern part of Iowa, (B.) Dairy Genetics Incorporated at Des Moines with Dr. Greg Raps as Vice President servicing the southern and western part of Iowa, and (C.) the Northwest Iowa Federated Breeders Cooperative at Sheldon with Dr. Quenton McDonald as manager. This latter breeding establishment services the northwest part of Iowa. All of these veterinarians are Iowa State College graduates.

In the early days of the program, many veterinarians participated but soon found that they could not successfully conduct a practice and inseminate dairy

cattle. At the present time only a few veterinarians are inseminating a small number of cows. The technicians that are doing most of the inseminating are men with a dairy cattle background who are trained at Iowa State College and serve an apprenticeship at the breeding establishment from which they will obtain the semen.

In order to avoid fraudulent registry of animals conceived by artificial insemination, the Purebred Dairy Cattle Association requires that all inseminators be employed by an organization registered with the P.D.C.A. This holds true only when semen is obtained from a bull stud. If semen is obtained from different sources, such as a private herd, different forms are used. Therefore, in order to register artificially conceived animals, the inseminator must work directly for the county organization if the semen has been purchased from a breeding establishment. Some of the breeding establishments sell semen only to county organizations while other breeding establishments will sell semen to both private individuals and county cooperatives. A good many veterinarians do not understand this and are confused when attempting to register animals that are the result of their insemination with semen from a bull stud.

When the artificial insemination program first entered Iowa, the commercial concerns carried the initiative, and it was not until 1944 that the college attempted to help the development of the program. A veterinarian was then placed in the

Dairy Husbandry Department to train technicians, teach advance courses in the physiology of reproduction, and to offer technical aid to the program in the field. At the present time, the local county units are financing a research fund by collecting five cents from each cow inseminated. This fund, which amounts to several thousand dollars, is to be spent on problems pertinent to the field of temporary infertility.

In general, Iowa can be proud of its artificial insemination program. The three bull studs in the state are sound, have very good sires and are using the latest known techniques. This accounts for the rapid increase every year in the number of cows bred and explains why Iowa ranks fifth in number of cows bred in the states using artificial insemination. The veterinary profession from time to time is reminded by a few of its members that certain programs need their attention. Few veterinarians have aided the development of this program, yet it needs and welcomes their help. The mere mechanical task of inseminating the cow can be done by a layman, but the diagnoses and treatments of infertility requires professional skill.

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### New Disease

Serious poultry diseases are making it difficult to produce enough eggs, chickens and turkeys to meet the nation's demands, according to the AVMA committee on poultry.

The committee urges increased attention to disease control to avert future shortages of eggs and poultry.

The poultry group voices special concern over a new virus disease that has the unique power of producing arthritis in chicken embryos. So far, the disease has been troublesome only in certain eastern states. But, "it is quite possible that it is more prevalent in other sections of the country than is realized."

The disease also affects turkeys, but in a different way. In turkeys the disease causes respiratory and nervous disorders.

The nervous disturbances in turkeys are indistinguishable from those induced by Newcastle disease.

To emphasize the danger potential of the new disease, the committee cited Newcastle disease for comparison. Newcastle disease was first recognized in poultry only a few years ago and in a very limited area. The malady has now spread to all but three of the states.

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### Newcastle Immunity

Hens recovered from Newcastle disease not only develop a high grade immunity against the virus infection, but they also seem to confer a degree of immunity on baby chicks hatched from their eggs.

Dr. Harold E. Moses, a veterinary research scientist at Purdue University, has made extensive studies of the nationwide Newcastle disease problem.

He points to the "trans-egg" passage of immunity from one generation to another as one reason for believing that "much may be accomplished by vaccination" in fighting this disease in American poultry flocks.

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### Colostrum

An adequate intake of colostrum is absolutely essential for three reasons: (1) It is laxative and thus helps to clear out the digestive system. (2) Its immune bodies quickly increase resistance by building up a normal immunity in the calf. (3) It is a rich source of vitamin A, if the dam has received a ration containing adequate amounts of pro-vitamin A (carotene) during her dry period.

