Chapter 1.10 Organization of breeding activities

Start of the organization of breeding activities

Pigs, horses and cattle herdbooks were organised at regional level. Owners of potential breeding males brought those animals to shows where they were judged on looks and owners of female animals could see them to decide which one to breed with. The pig breeders were the first to stop showing their boars in public in the late 1960's, followed by the dairy cattle breeders and their bulls in the 1970's. Main reasons were to prevent infectious diseases to spread, and that production figures had become more important than looks. For export (also of semen) it is important that you can prove that animals have never been in contact with certain pathogens. Stallions are still shown in shows, and also used in riding horse competition. Nowadays all horses entering shows and/or competition are vaccinated. In horses each breed has its own herdbook. There are some exceptions, especially in sport horse breeding, where it is not so much the breed, but more the type of horse that is of interest. The Dutch warmblood (KWPN), for example, has developed from a herdbook registry of originally Dutch horses to a registry of horses bred in the Netherlands. It is aimed at breeding highly successful sport horses. This herdbook is open and market driven, rather than focussing on pure breeding. Use of stallions from other countries is allowed, provided they have been approved of by the KWPN.

Organization of breeding nowadays

In commercial farm animal breeding the situation changed quite drastically. From farmers owning males and females, to artificial insemination (AI) companies owning the males (in cattle) and later also breeding females (in pigs). The number of herdbook owners has decreased dramatically in the past decades from many regional herdbooks to a single national herdbook (in cattle) or international breeding companies (in pigs). At first herdbooks were merged to combine forces, but later also because bigger companies took over smaller ones. Poultry breeders started to specialise completely to breeding of laying hens or broilers and to sell that as a product, rather than eggs or meat. They were developing their own pedigree registration system. In cattle breeding the males are owned by a company, but (most of the) females are privately owned. The breeding company sells semen as main product, not animals. So in a way they sell half of the final product: the calf, the other half, the oocyte (i.e. the cow), is privately owned. The situation is very different for pigs and poultry breeding companies Their final products are animals. This means that if other people get hold of their original animals, they can duplicate the product and not have the costs for development. This is an important reason why pig and poultry breeding companies don’t sell purebred animals: then they would give away their genetics. By selling crossbred animals or semen of crossbred animals, they don’t sell the purebreds so no one can reproduce the final product. Commercial companies often keep multiple breeds or lines. Pig and poultry breeding companies keep multiple lines to combine in final products, so they also keep multiple pedigree registrations. But when you buy their products you will not receive specific pedigree information. Pedigree records are only for their own use in selective breeding. In the Netherlands, there are two companies breeding pigs: TOPIGS and Hypor (Hendrix-Genetics). In laying hens (ISA) and Turkey (Hybrid), Hendrix-Genetics is also the owner. Broiler breeding is in the hands of a US company called Cobb, and the division in the Netherlands belongs to Cobb Europe. Globally the number of breeding companies is decreasing, especially related to poultry breeding. In laying hens and in broilers there are only 2 major breeding companies left. In pigs there are a few more, but only 5 larger ones. In cattle there is strong international exchange of semen for many breeds. So in practice, especially in the Holstein Friesian, the population has become one, but with overlapping registries. In summary: farm animal breeding is an increasingly global industry. Farm animal breeding is very different from breeding of horses and companion animals. Especially sport horse breeding studbooks are operating increasingly at an international and competing level. In the Netherlands the largest sport horse breeding studbook is the KWPN. They are very successful internationally in breeding horses for dressage and show jumping. The stallions are approved by the studbook after passing strict selection criteria. The KWPN is an open studbook, which means it does not limit itself to horses that were born and bred in the Netherlands, but it also approves stallions from other studbooks, provided they pass the selection criteria.