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RABBIT BREEDING AND PRODUCTION IN POLAND

The first reference to rabbit breeding in Poland can be found in an XI th century historical document from a monastery in Świątniki near Cracow. However the development of rabbit breeding and production did not begin until after World War II. An important year is 1958 when rabbit meat was exported. Since that time there has been more and more interest in raising rabbits as well as in increasing the numbers of rabbits. During the '70 s a governmental program was worked out for the development of rabbit breeding and raising that took into consideration two types of production: small forms and large-scale. In connection with this, production was begun on 60 new commercial farms /with 250 females in the basic herd/ and 1 large-scale commercial farm /3200 females in the basic herd/.

During the '80 s due to general financial difficulties the production of rabbits was limited. During this period there was a significant increase in domestic rabbit raising.

An attempt to determine the number of rabbits is extremely difficult due to the lack of statistical data. It is estimated that the rabbit population in Poland for the past few years has been the following:

Year	1980	1982	1984	1986	1987
Population /millions/	16	19	20	19	19

Detailed figures dealing with farms and basic herds /reproduction and breeding farms/ are given in Table 1.

It can be seen in the cited data that there is a large disproportion between the national stock of rabbits and the stock on breeding farms. It also can be observed that there is an increasing role of middle breeds on breeding farms. In general, in Poland, the production of rabbits for slaughter is based on crossing between breeds. Approximately 30% of production is based on purebreds - meat breeds /white and Red New Zealand, Californian, White Danish, White Termonde and French Silver/. The purchasing of slaughter rabbits, pelts and fur is presented in Table 2.

Since 1984 the purchase of slaughter rabbits has remained at an even level. Almost all of the live rabbits purchased /97%/ is exported in the form of carcasses or portioned carcasses to Western Europe. The total production of slaughter rabbits in Poland is estimated at 25,000 tons. It is estimated that about 15,000 tons are consumed by the breeders and their families.

The pelts are treated at furrier and hat factories. The products are sold to meet national needs and surpluses are exported.

During the following years there has been a decided decrease in the purchase of angora wool by state purchasing centers. However, production is greater since part of the wool is bought by Polish firms abroad. The lack of statistical data makes it impossible to determine the exact size of angora wool production. Lately there has been definitely more interest in producing angora wool as a result of higher purchasing prices for 1 kg of wool.

Generally in Poland rabbit breeding is small-scale and at home. At the moment there is one commercial farm with 3200 females and 8 farms with basic herds of more than 200 females. The definite majority of farms are small with 3 to 50 females.

Commercial and large farms with herds of more than 200 females are closed with regulated micro-climates. The animals are in metal cages with automatic feeders and watering troughs. The rabbits are fed appropriate feed concentrates.

However animals on small farms are in primitive cages /wooden/ or in so-called deep bedding. Technical equipment is on a very low level without typical cages, automatic feeders and watering-troughs. Usually the cages are outside. This results in seasonal production and makes it impossible to take full advantage of breeding possibilities throughout the entire year.

Rabbit feeding on small farms is based on so-called feed by-products. Various green silages are used to a large extent, plus roots with concentrate supplements /ground grains/. Using such a system it is not possible to take full advantage of production possibilities of rabbits. To date not enough complete concentrate mixtures are produced in Poland for all breeders.

In Poland there are 2 purchasers of rabbits: The Polish Union of Small Animal Breeders organizing about 800 rabbit producers and having about 2500 females in the basic herd, as well as the National Co-operation of Small Animal Breeders, organizing about 500 breeders with a basic herd of about 2,000 females. Breeders are organized according to the following model:

- Polish Union of Small Animal Breeders
- 18 Regional Unions of Small Animal Breeders
- Clubs for local rabbit breeders.

A similar organizational model for the National Co-operation of Small Animal Breeders also exists. The only difference is in the number of regional sections, i.e. there are 16.

Since 1982 local exhibits on rabbits where breeders can present their accomplishments have been resumed. Every 2-3 years National Exhibition on Fur Animals and Rabbits is organized. On

one hand the exhibition presents what breeders have accomplished and the other hand it encourages and popularizes rabbit production in the country.

In Poland there is a scientific program dealing with rabbit breeding and raising. It includes genetic improvement, nutrition and improving methods of rearing and reproduction. The co-ordinator of this research for Poland is the Department of Small Animal Production in the Institute of Animal Science /Balice near Cracow/. Furthermore, scientific research is carried out by the Polish Academy of Science and the Agricultural Academies in Cracow and Warsaw as well as the Animal Science Experimental Station of the Institute of Animal Science in Chorzelów. The above mentioned research is done by 12 scientific workers. Research is carried out on experimental farms where the basic herds are exemplary.

The scientific centers do their research in co-operation with practice. The obtained results are first of all introduced to the experimental farms and then to breeders of the Polish Union of Small Animal Breeders and the National Co-operative of Small Animal Breeders. Meetings are organized with animal science workers in branch breeding unions and with the scientists themselves in order to present the results of their work.

Rabbits in Poland are also used as laboratory animals in various areas of research: genetic, medical, pharmacological, veterinary, etc.

In the animal science programs of the Agricultural Academies one subject is fur animal breeding. This includes rabbit breeding and raising. However the greatest emphasis is placed on: foxes, mink, polecats and nutria. The course lasts 2 semesters /1 year/, and is taught in 7 of the 10 Agricultural Academies in Poland /Szczecin, Poznań, Bydgoszcz, Warsaw, Wrocław, Cracow and Lublin.

Scientific results are published in various scientific magazines. For breeders the monthly "Small Animal Breeding" is

published with different articles for both beginner and advanced breeders of fur bearing animals and rabbits are presented. In this magazine Polish scientists give the results of their research in a popular form.

The most important books published in Poland that deal with rabbit breeding and raising are the following:

Herman W: A Hand Book for Rabbit Breeders. PWRiL, Warsaw 1963.,

Kopański R: Rabbit Breeding. PWRiL, Warsaw 1969.,

Kopański R: Basics for Commercial Rabbit Production. PWRiL,
Warsaw 1977.,

Kopański R: Efficient Rabbit Breeding. PWRiL, Warsaw 1980.,

Niedźwiadek S: Principles of Rabbit Breeding. PWRiL, Warsaw
1984.

These books discuss all aspects of breeding and producing rabbits.

Table 1

Year	Large breeds		Middle breeds		Little breeds		Angora	
	No of farms	No of females	No of farms	No of females	No of farms	No of females	No of farms	No of females
1980	20	233	258	4439	2	20	9	286
1982	47	521	384	6525	4	36	8	164
1984	70	725	240	3398	15	151	4	117
1986	49	632	133	2098	19	258	7	345
1987	46	623	135	3050	17	173	12	417

Table 2

Specification	1980	1982	1984	1986
Buying of slaughter rabbits /t/	12351	13536	10405	10418
Buying of skins of fur /millions psc/	2,1	1,7	1,9	1,8
Buying of skins of felt /millions psc/	4,7	4,3	4,5	3,7
Buying of angora wool /kg/	5367	4282	3076	2303

