

The changing face of the world of duck production

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Duck farming has a long history but the modern duck industry is a relatively small one in most parts of the world.

However, the duck industry is very dynamic and over the last couple of decades has been through a period of rapid expansion. In some parts of the world duck production has started to challenge the consumption of other types of poultry.

This article will look at how duck production has evolved, what its present status is and what possible future developments are in store.

This last point is very important for primary duck breeders like Cherry Valley as they have the challenge of providing the genetics that are capable of satisfying future needs.

Importance of China

Today, more than two thirds of ducks are produced in China and so it is inevitable that what happens or does not happen in China will have a profound impact on the world of duck production.

This being the case, let us first of all look at the recent development of duck production in global terms and in a Chinese context.

Table 1 shows how duck pro-

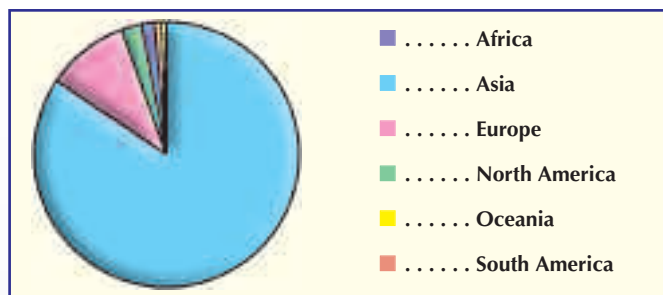


Fig. 1. World duck production by regions.

duction has evolved over the last two decades. In this time global annual production has risen from 460 million ducks to over two billion birds.

Some 85% of global production is in Asia and some 85% of this is concentrated in China.

Today, China produces 75% of the world's ducks, which is a sig-

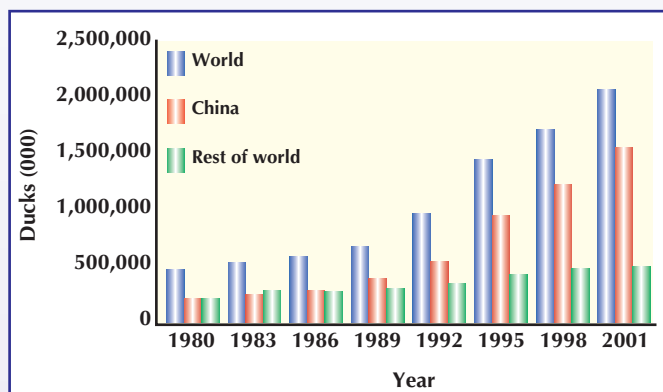


Fig. 2. Change in world duck production.

From this table and from Fig. 1 we can see the importance of Asia in duck production.

nificant increase from the 50% produced by that country just a couple of decades ago.

Outside Asia the consumption of duck is very much related to the Chinese population and, hence, the number of Chinese restaurants in a country.

Notable exceptions to this are France and North America.

Fig. 2 shows the changes in world duck production over the

last two decades. Globally, production has increased in this period by 435% and this growth has been driven by China (675%). Growth in the rest of the world is only 200%.

In many parts of the world duck is very much a minority poultry species. Some would argue that this is because duck is very expensive to produce.

Country	Consumption (kg/capita/year)
Hong Kong	2.5
Singapore	2.5
Taiwan	2.0
France	1.3
China	1.0
Malaysia	0.9
Thailand	0.7
S. Korea	0.5
Japan	0.5
UK	0.4
Germany	0.4
World average	0.4
World (exclusive of China)	0.1

Table 2. Annual duck consumption per capita in major duck consuming countries.

Conversely, those in production would say that if the marketeers could sell more duck, the cost of production, and hence the price of duck meat, would reduce.

Let us now reflect on what is happening in China. Over the last two decades the importance of ducks for meat production (rather than egg production) has come to the fore (see Fig. 3).

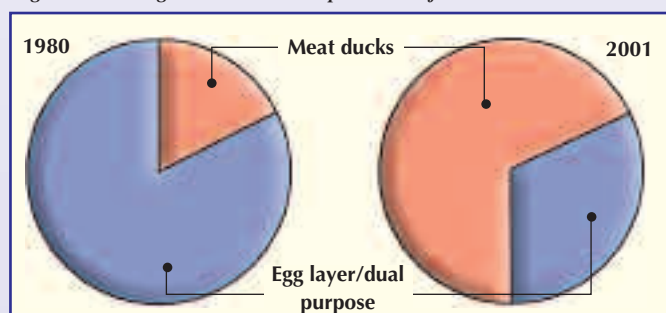
Historically, China was the birthplace of duck farming and the Pekin (the old name for Beijing) is perhaps the most famous duck breed.

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Table 1. World duck production today (000s).

	1980	1989	1995	2001
World	462,916	713,695	1,381,656	2,014,674
China	227,444	393,191	971,992	1,534,500
France	24,000	44,134	65,900	82,000
Thailand	42,667	56,700	64,000	70,000
Vietnam	20,000	32,000	43,200	58,000
Korea	1,100	3,000	13,000	24,000
USA	16,875	21,718	19,528	23,000
Malaysia	9,800	16,300	20,000	22,000
Germany	9,444	14,400	18,700	21,100
UK	7,300	10,975	13,000	20,500
Myanmar	10,140	10,378	14,555	19,822
Egypt	5,768	12,100	13,600	16,100
Indonesia	10,539	11,110	23,780	15,170
Hungary	14,100	15,900	9,000	14,000
Bangladesh	15,000	12,100	13,900	13,000
Philippines	2,400	5,570	9,000	11,000

Fig. 3. The change in China's duck production from 1980 to 2001.



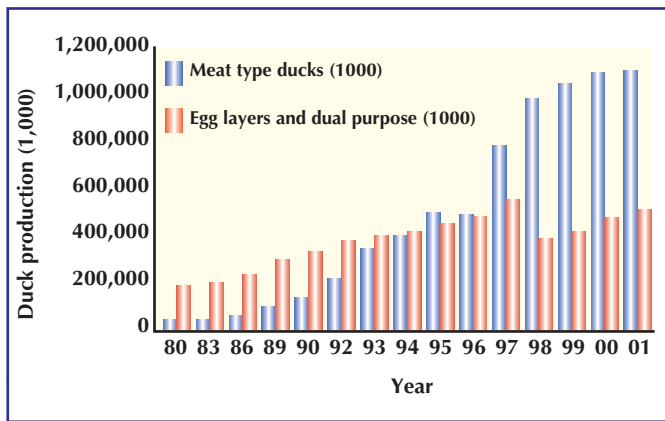


Fig. 4. Duck production by types in China from 1980 to 2001.

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 However, it was only in the late 1980s that meat duck production really took off. Prior to then the majority of ducks were egg layers or dual purpose ducks. Modern duck production has a very short history of only 20 years. During this period of rapid expansion, improved 'Pekin' duck breeds, such as Cherry Valley, were introduced to China and this played an important role in the improvement of production efficiency. From Fig. 4 it can be seen that today China produces a billion meat type ducks per year, which is a 5000% growth over the last two decades.

Variety of systems

Production systems in China are extensive, in which the ducks are outside the whole time, semi-intensive in which the ducks have penned outdoor access and open sided housing, and intensive, in which the ducks are totally confined indoors. Chinese duck production is also rapidly becoming fully integrated. Just 10 years ago in China an annual processing capacity above two million ducks would have been considered a very big pro-

ducer. Today, several companies process 60-100,000 ducks a day and there are many companies producing 5-10 million ducks a year. The integration process has been accompanied by a move from extensive into intensive production.

Continued prosperity

As prosperity continues to grow in China, duck consumption is expected to follow suit because of the tradition of duck consumption in China, the improvements in the efficiency of duck production and China's unique market situation. If we look at per capita consumption of duck meat it is apparent why there is scope for duck consumption to continue to increase and it has the potential to be four billion ducks by 2020, which is four times the current production. In part this will occur because the relative price of the product will reduce. The modern duck achieves 3.2kg at 42 days or 3.5kg at 47 days at respective FCRs of 1.9-2.0 and 2.28 and the modern breeder produces 296 eggs (241 day olds) from a 50 week laying cycle. In many senses China is a

Fig. 5. On-going improvement in production efficiency. A reduction of 0.1 unit in FRC since 2000.

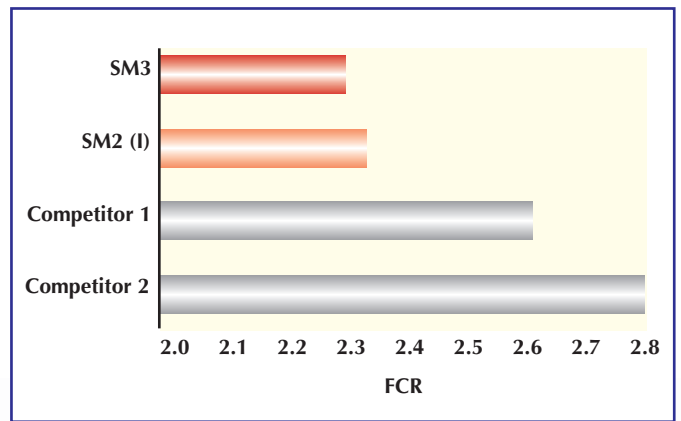
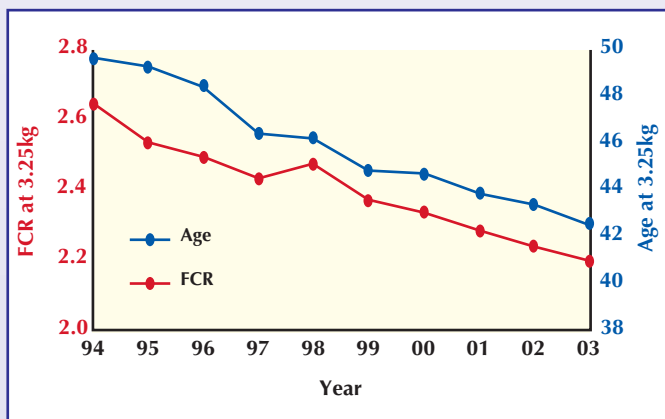


Fig. 6. Comparison between Cherry Valley's SM2 and SM3 final generation products and two of its competitors in terms of FCR.

'dream market'. It has a population that likes duck and an industry that can produce duck meat competitively! In addition, the duck has byproducts, such as its feet, tongue and heart, that can fetch prices equal to, or higher than, those of the meat.

Fig. 6 shows the comparison between Cherry Valley's SM2 and SM3 final generation products and two of its competitors in terms of FCR. Fig. 7 shows the improvements achieved in breeders over the same time base with an improve-

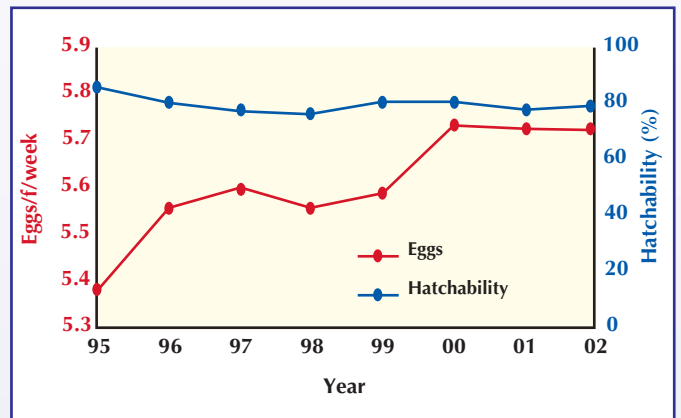


Fig. 7. Continuous improvement in breeding performance.

Looking to the future, duck production will benefit from ducks that perform more efficiently at both breeder and meat levels and an increasingly important portion market. Fig. 5 shows how FCR and age at 3.25kg has improved over the last decade and over the last 10 years Cherry Valley has reduced FCR by 0.4 units.

ment from 5.3 to 5.7 eggs per female per week. When compared to competitors the SM2 and SM3 also show superior total lean meat content (Fig. 8). To some extent breast meat is a byproduct of the Chinese industry and so in China this 'byproduct' is in an even better position to challenge other types of poultry! ■

Fig. 8. Comparison of total lean meat contents.

