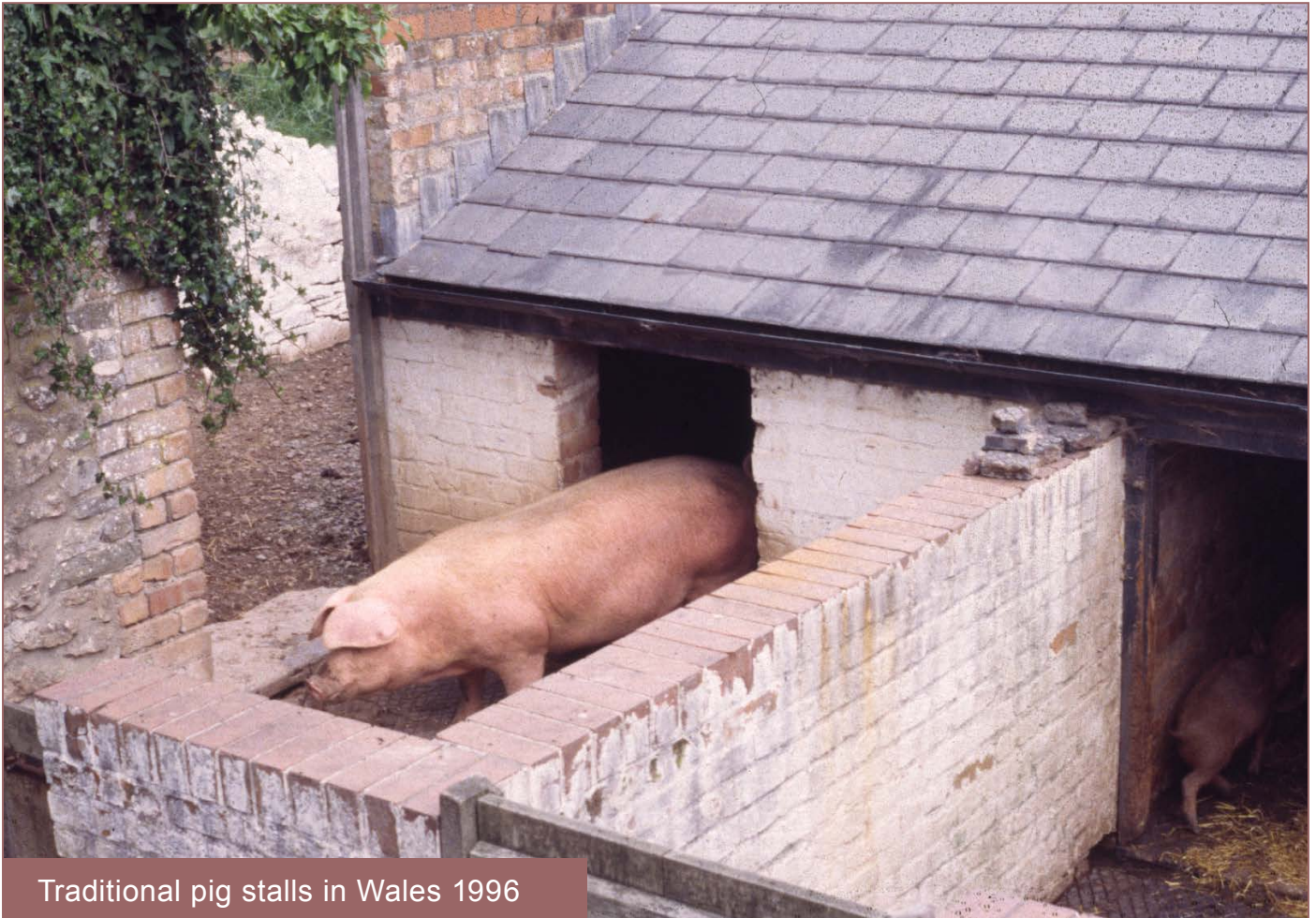


CHAPTER 1 INTRODUCTION

*The domesticated pigs of today have all evolved from the wild boar (*Sus scrofa*). It is likely that humans domesticated the first boars as long ago as 7,000 to 9,000 BCE, and it is thought that they may even have been domesticated twice in history.*



Traditional pig stalls in Wales 1996

Domesticated Pigs in Human History

These days, there are still plenty of wild boar populations throughout the world and it is interesting to note the differences in their physical traits, despite the fact that their behaviours remain much the same as those of their ancestors. One notable difference is that the domesticated pig has a much smaller head in comparison to the wild boar, and its head is small in

proportion to its body. The modern day domesticated pig also has less body hair and it has an extra layer of body fat compared to the wild boar.

Farmers would have favoured the selection of wild boars which held more preferable traits such as size and docility, and perhaps ones which held more flesh for meat. Initially, it is thought that humans kept pigs in an open system which would have allowed their domesticated pigs to have bred with

wild boar. These litters were then bred for similar traits, eventually resulting in our modern day domesticated pig. Prior to the 1950's, farmers would only keep a few pigs on mixed farms i.e. crops and pigs. Originally, females would be housed outside during summer months in a pen with a wallowing mud pit. When housed indoors over the winter, the pigs would have had plenty of straw held in loose pens.

Humans originally began farming pigs for their meat. They differed from other farmed animals as pigs have a shorter gestation period and could produce large litters. This would then feed families and villages. The pigs would also be fed the scrap food from households and estates which kept them. Pig farming then would have consisted of a small number of individuals, or they were kept on smallholdings.

Pigs nowadays are raised on both a small and large scale across the world, primarily for their meat; but there are other uses too:

- As pets
- For show
- Heart valves for humans from pig breeds developed and grown especially for that purpose
- Pig pancreas glands provide insulin for diabetics
- Pig hides are used to make pigskin leather
- To dispose of food waste, weeds and garden pests

- To produce useful manure
- Hair bristles used to create brushes
- In some European countries, they assist humans in hunting for truffles

Why do we need Different Breeds of Pigs?

There are a variety of different breeds of pig in our modern world, and this is mainly because each breed is used for different purposes i.e. pork, bacon, ham, lard, pets.

Pork breeds are generally more muscular and larger. Bacon breeds are generally leaner. Pig lard was once important as a lubricant, and in manufacturing various products including soap and cosmetics; but its use has declined.



Classification & Identification Characteristics

In today's farming world, there are a number of different terminology relating to the different life stages of the breeding and rearing of the domesticated pig. These include:

Boars: adult male pigs which are generally used for mating.

Gilts: young female pigs which have not yet farrowed i.e. produced a litter. It is commonly desirable for them to have minimal back fat and have heavy, smooth muscles, and preferably long bodies with rapid weight gain that will produce large litters.

Sows: adult female pigs which have farrowed either one or more litters.

Dry sows: adult female pigs during the period from late weaning to next farrowing, i.e. which are not producing milk.

Farrowing sows: adult female pigs which are farrowing. This lasts until weaning, in which they become dry sows again.

Piglets: young pigs are referred to as piglets from birth until weaning at around two to four weeks.

Weaners: youngsters which are in weaning until around the age of ten weeks.

Rearing pigs: pigs aged from ten weeks until slaughter at age six months.

Growers/growing pigs: this is in the early stages of meat rearing.

Fatteners or finishers: this is in the later stages of rearing.

Breed Registration

By law, in the United Kingdom, if farmers intend to keep pigs they must notify APHA (Animal and Plant Health Agency) within thirty days of the pig's arrival. APHA will then provide an identification mark for the herd which will assist in identification. This herd mark is usually either one to two letters plus four digits. If the farmer wishes to intensively farm pigs, with the exception of outdoor reared or pigs kept outdoors, then they must contact the Environmental Agency who will provide a permit if there are 750 or more sows, or over 2,000 production pigs of 30kg or more. Records should be kept fully up to date by law, and if any pigs are being moved then they should be identified, reported and recorded.

If acquiring pedigree pigs, it is important to ensure that the breeding stock and breeder are both registered with the BPA (British Pig Association). If you intend to breed pedigree pigs then it is worthwhile registering your breeding stock as this will produce a higher financial outcome than if you do not register your herd. You will require a BPA registration book if you intend to show your pigs at any BPA event.

In the United States there are many different swine breed associations, e.g. American Hereford Association, American Angus Association, that register and maintain information on breeding stock. There is also the

National Swine Registry which is a combined association representing four breeds: Duroc, Yorkshire, Hampshire and Landrace. The information recorded by these associations may commonly include:

- The date and number of pigs farrowed
- Numbers of males and females raised
- Ear notches and/or tattoo at birth (according to guidelines from the registration body)
- Name and contact details for the breeder and owner
- Name and registration number of the sire and dam
- Litter number

Different countries will have varying laws and registration systems in place

to manage pig breeds. Australia, for instance, has a limited number of registered breeds that are farmed commercially and nine of these are represented by the Australian Pig Breeder's Association. Because Australia also has a significant problem with feral pigs, there are laws that restrict the way in which pigs can be moved around the country; and considerable effort is put into controlling what breeds are located where. Pigs must be registered on the National Livestock Identification System - Pigs (NLISP) which accounts for identification and movement of pigs for food safety, biosecurity, product integrity, and market access.

If you plan to raise pigs, particularly where biosecurity is of heightened importance, it is important that you understand the laws that apply to registration of breeds and related matters in your country.



The Landrace breed, originally developed in Denmark has become widely used across many countries.

Breeds

There are literally hundreds of named breeds of pigs; including:

- **Aksai Black Pied** - originally from Kazakhstan
- **American Yorkshire** – also known simply as Yorkshire; most popular breed in USA
- **Angelin Saddleback** - a German breed developed in 1937 by crossing a Landrace with a Wessex Saddleback
- **Arapawa Island** – originated in New Zealand
- **Auckland Island Pig** – originated in New Zealand
- **Australian Yorkshire** – originated from Yorkshire breed pigs brought to Australia from Yorkshire England; not from the USA
- **Ba Xuyen** - from Vietnam
- **Basque** – from France
- **Baston** – see Lincolnshire Curly Coated Pig
- **Bayeaux** – from Normandy, France
- **Bazna** – from Romania
- **Beijing Black** – from China
- **Belarus Black Pied** – from Belarus
- **Belgian Landrace** - from Belgium
- **Bentheim Black Pied** – from Germany
- **Berkshire*** - third most popular in USA
- **Breitovo** – from Russia, a general purpose pig
- **British Landrace** – originated from Landrace pigs brought to Britain from Scandinavia in 1949
- **Blanc de l'Ouest** – originated from western France
- **British Lop** – originated from United Kingdom, and old breed
- **British Saddleback** – crossed between the Wessex and the Essex Saddleback, from United Kingdom
- **Bulgarian White** – from Bulgaria
- **Celtic Pig** – indigenous to north west Spain; common in the early 20th century; numbers then declined but have been recovering in the 21st century
- **Chato Murciano** - from Spain
- **Chester White** – Originated in Chester County, Pennsylvania
- **Choctaw Hog** - from USA
- **Creole Pig** – originated in Haiti
- **Cumberland Pig** – a breed from the north of England, used for making Cumberland sausage; but became extinct in the 1960's. In 2008, Penrith Animal Conservation Centre recreated the Cumberland breed using DNA analysis as a foundation for a breeding program.

- **Danish Landrace** – the parent of all the other Landrace breeds
- **Danish Protest Pig** – originated in Germany
- **Duroc*** - second most popular breed in USA
- **Dutch Landrace Pig** – originated in the Netherlands, although mixed with the German Landrace and Danish Landrace
- **Essex** - from UK
- **Estonian Bacon** – from Estonia
- **Fengjing Pig** - from China
- **Forest Mountain** – from Armenia
- **Gascon** – from France
- **Gloucestershire Old Spots** – English
- **Gottingen Minipig** – from Germany; white, only to 34kg and 35cm
- **Grice** – from UK
- **Guinea Hog** - from USA
- **Hampshire*** - originated in UK; fourth most popular breed in USA
- **Hereford** – originated from Midwestern America
- **Iberian** – originated on Iberian peninsula
- **Italian Landrace** – from Italy
- **Iron Age** – crossbreed of the Tamworth and Wild Boar, popular in UK
- **Jeju Black Pig** – from Jeju Island in South Korea
- **Juliana** – from Europe; a small breed also known as the Miniature Painted Pig
- **Korean Native Pig** – indigenous to Korea; black with darker red meat than many other breeds
- **Kunekune** - from New Zealand
- **Lacombe** - from Canada
- **Landrace*** - fifth most popular USA breed
- **Large Black*** - originated in UK
- **Large White*** - originated in UK
- **Latvian White** - from Latvia
- **Limousin** - Iberian pig
- **Lithuanian White** – from Lithuania
- **Lincolnshire Curly Coated Pig** - one of the oldest UK breeds; also known as Baston pig, became extinct after World War II
- **Mangalitza** – from Hungary, has a curly coat
- **Meishan** - from China
- **Middle White** - from UK
- **Mora Romagnola** - from Italy