

About Cows Before the Invention of Milk

A History of Cattle Breeding in la Manche

**Association franco-britannique du Cotentin et de la Côte des Isles
April 10, 2018**

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A recent specialization in cattle breeding

- **Today in la Manche:**

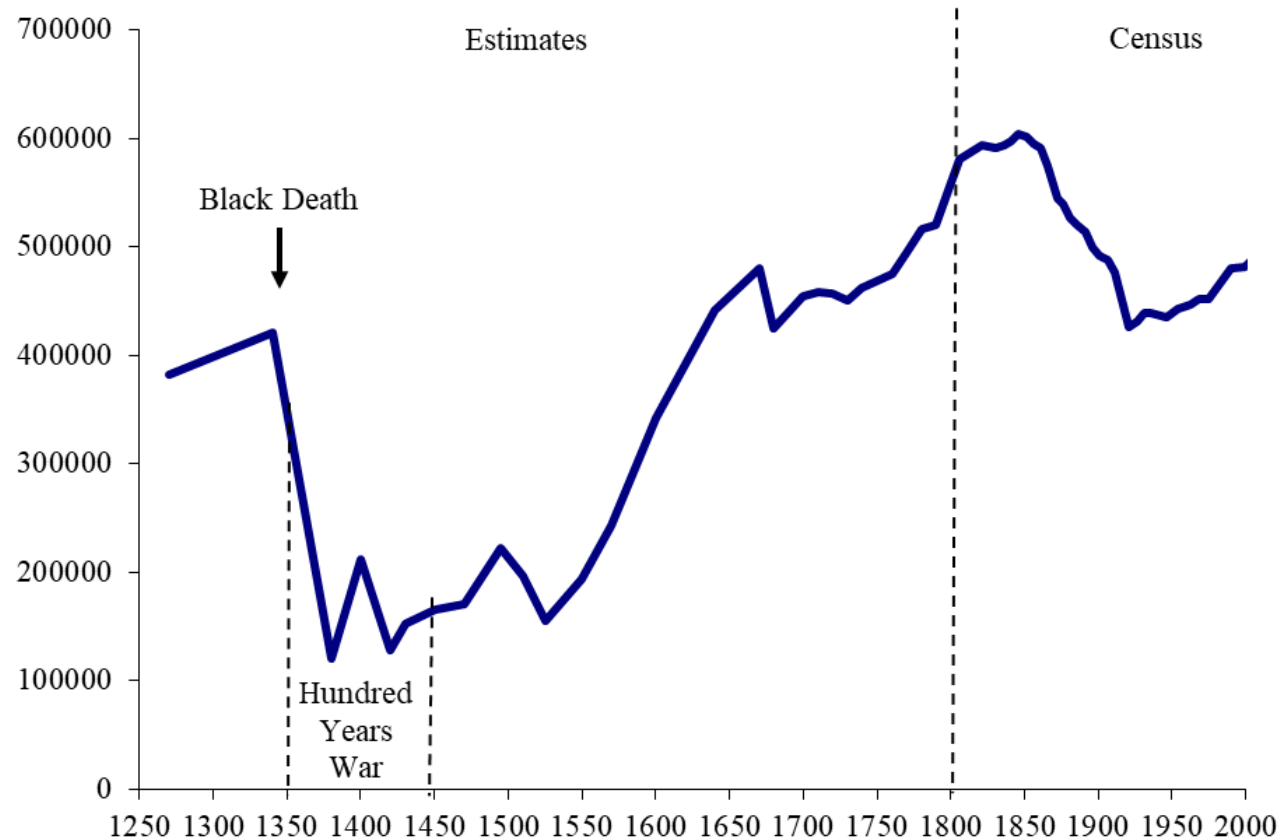
- Meadows: 63% of arable land
- 760 000 cattle, of which 241 000 milk cows
- 1,4 billion litres of milk per year
- 150 000 oxen/cows, 700 000 pigs sold to butchery each year

- **Before mid 19th century:**

- Cereals-based subsistence agriculture (difficult transportation of goods)
- A very marginal room left for cattle breeding

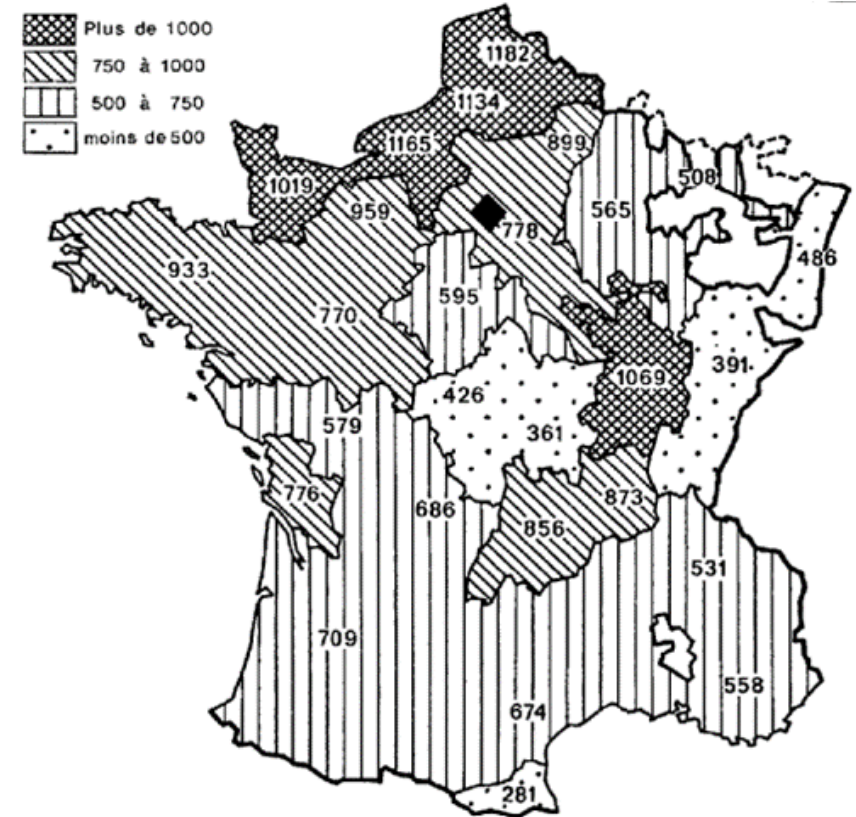
Competition for land (1)

- **Man**: approx. 1 ha/head (yield: 90%); **Cattle**: approx. 0,5 ha/head (yield: 10%)
- **Evolution of population in la Manche**



Densities c. 1700

Inhabitants per square league



	1600	1700
England	610	750
Manche	760	1019

Competition for land (2)

- **Low population:** extension of uncultivated land
- **High population:**
 - Land clearing
 - Decrease of fallows (18th century)
- **In all cases,** only what could not be cultivated was left to cattle
 - Commons : moors, marshes
 - Forests
 - Stubble fields
 - Fallows
 - Meadows : approx. 5% of land in the 15th century, 13% in the 18th

Land of Picauville, 1581

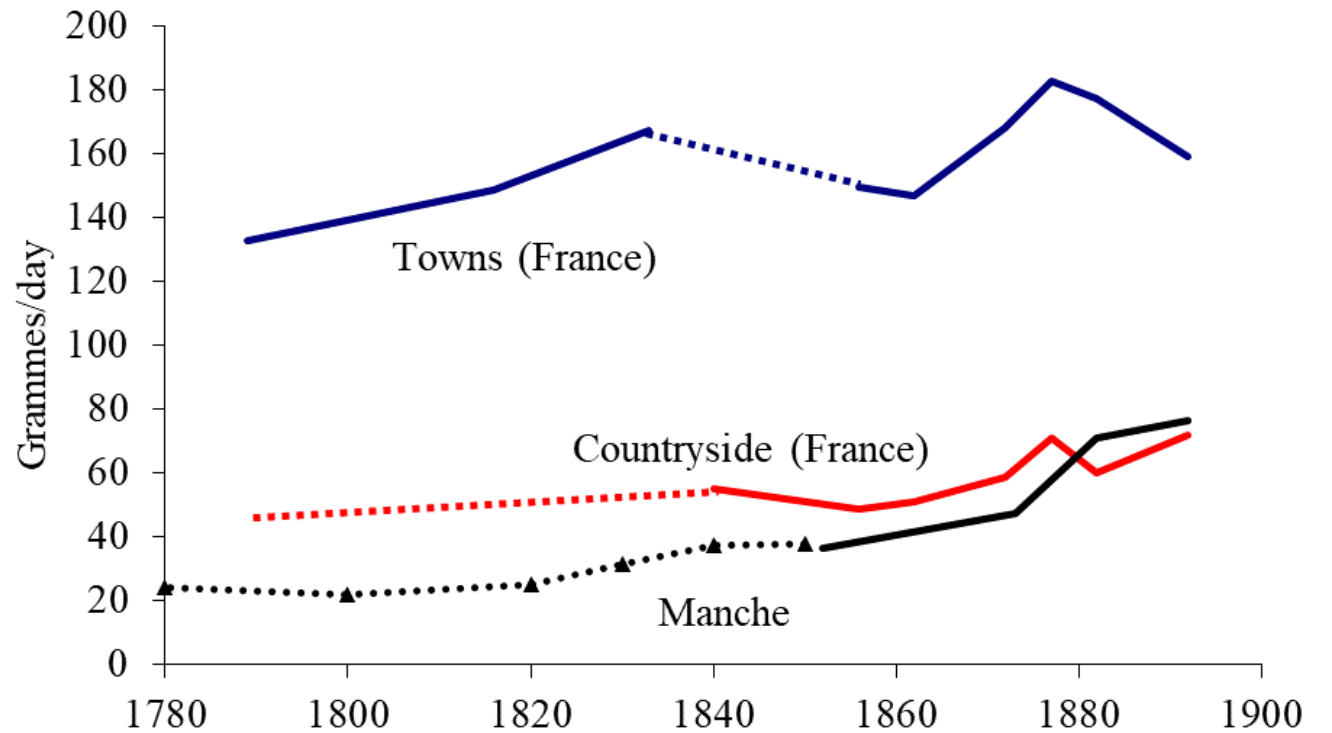


An incidental trade (1)

- **Very low consumption of meat in the countryside**

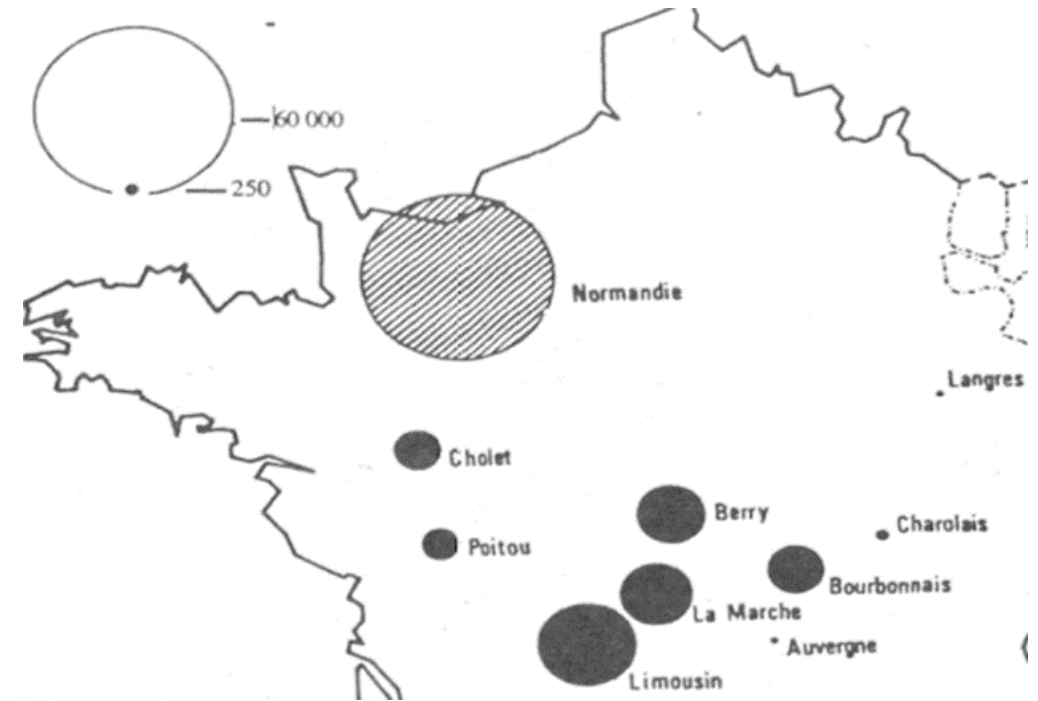
Expenses of a day-labourers family c. 1780 (Lavoisier)

	Total	Food
Food	71%	100%
Bread	47%	67%
Vegetables	4%	6%
Meat	7%	10%
Milk, butter	3%	5%
Cider, wine	7%	10%
Others	2%	3%
Rent, heating	9%	
Clothing	16%	
Others	4%	
Total	100%	



An incidental trade (2)

- **Few opportunities to sell fresh milk** (small towns)
- **Some salted butter (Isigny)**
- **Oxen for Paris** (Sceaux and Poissy markets)



- **Except for ploughing...**

Arthur Young (1788) : *“In 18/20th of France, there would be, so to speak, no cattle at all without the habit of ploughing with it”*

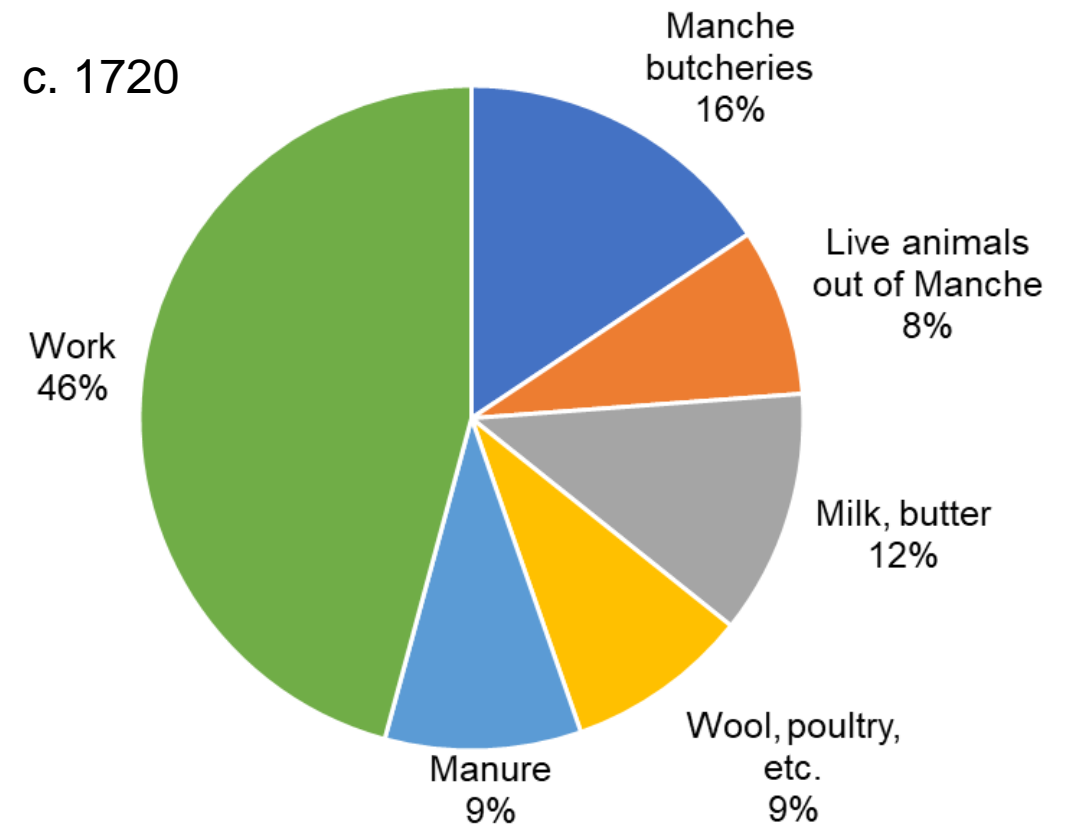
- **Manure**

An incidental trade (3)

- **Over 200 tanneries in la Manche c. 1750**
- **Fairly important wool weaving « factories »**

High quality wool of Cotentin sheep

- **Valognes (Monks/nuns habits)**
 - **Saint-Lô (*serges*)**
 - **Cherbourg (Troops)**
 - **Coutances (< 16th century)**
 - **Home weaving**
- **Total production:**
55% work + manure
 - **Traded production:**
c. 1/4th of agriculture



18th to mid 19th: small and poorly fed cattle

- **Stables and sheepfolds cleaned once or twice a year**

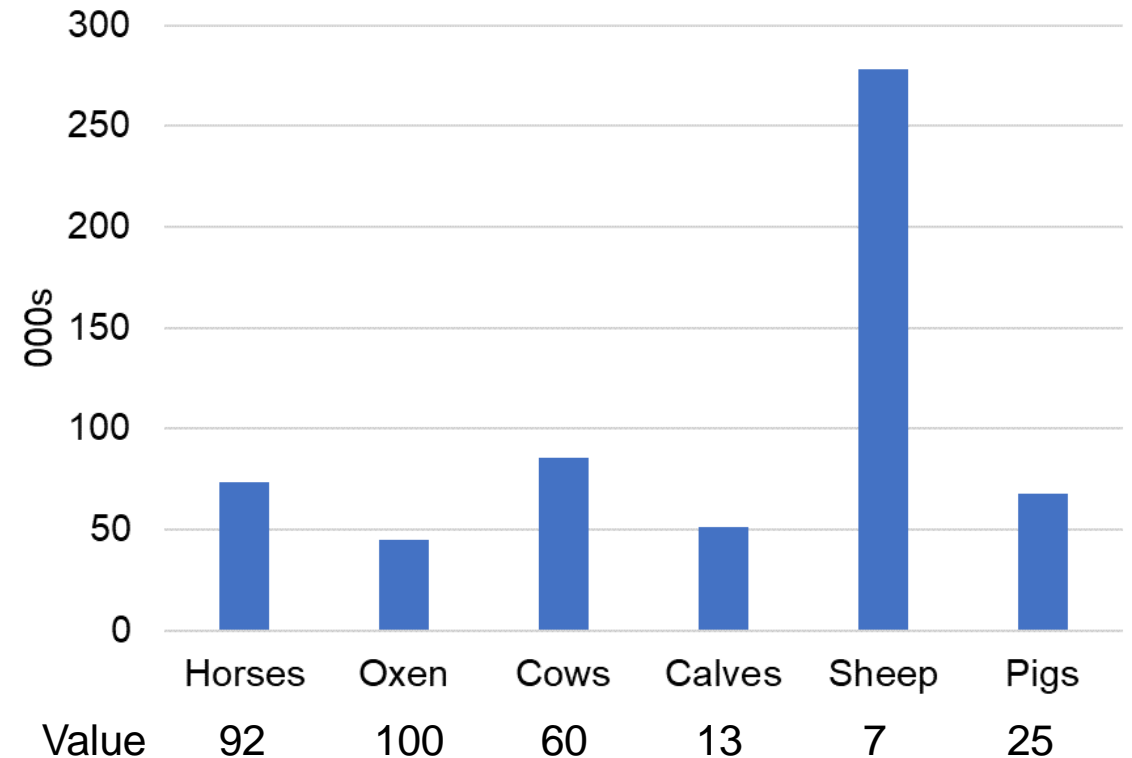
G. de Gouberville (nov. 1554) fit « *vuyder l'estable aux moutons qui n'avoit vuydé depuis le mois d'apvril* »

- **Low value food**

- **Small sized animals**

Weight in kg	1736	Today
Oxen	130 to 200 (exceptionnally 400)	800
Cows	75 to 150	750
Calves	12 to 20	200 at 4 months
Sheep	25 to 35	30 at 12-18 months (40 to 90 adults)
Pigs	50 to 100	95 to 110 at 6 months (250 à 350 adultes)

Poorly balanced livestock (1700)



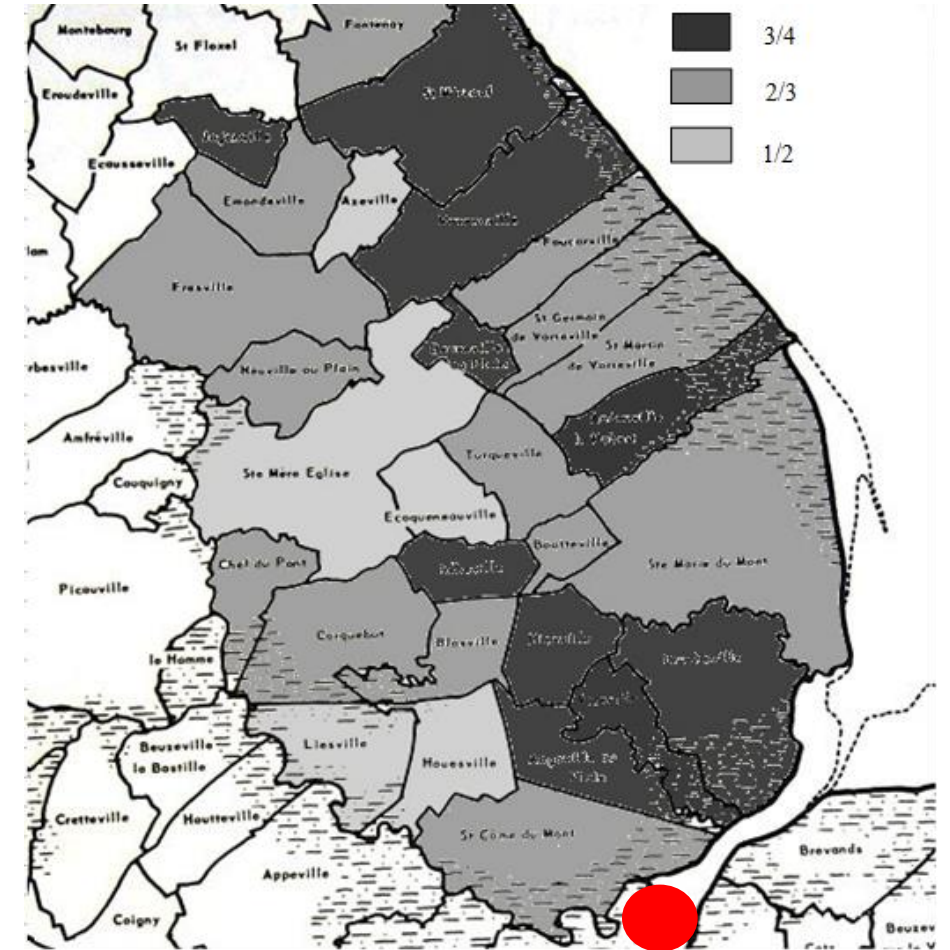
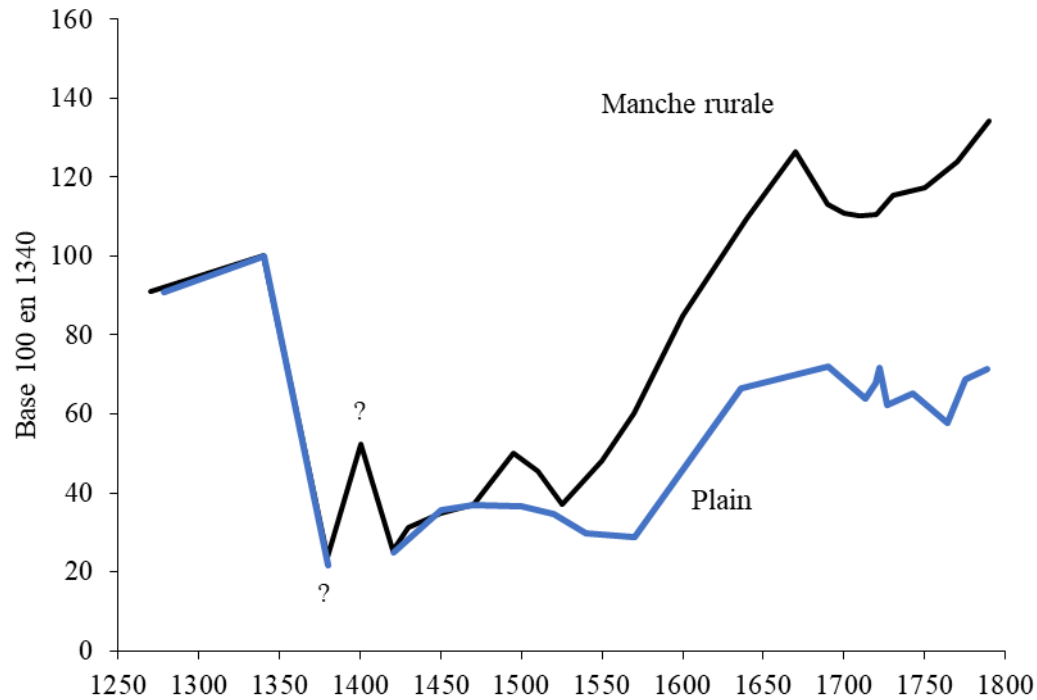
18th to mid 19th: small and poorly fed cattle



Land of Picauville, 1581

First take-off of cattle breeding: le Plain

- **50 to 75% of meadows in the 17th cent.**
- **Population growth restrained**

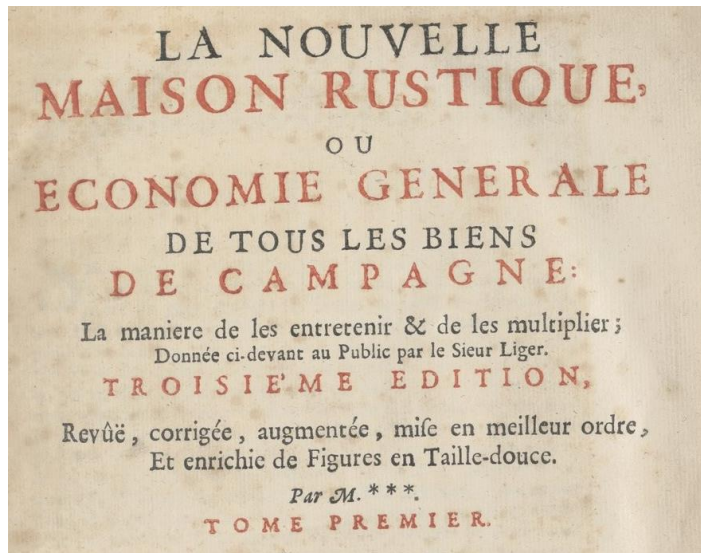


- **Communities sued by the Church on tithes c. 1660**

Carentan

Reasons for change (1)

- **Foreign trade unbalances**
 - 17th century (Colbert): horses
 - 18th: wool
 - 19th: meat
- **Development of agronomics**



1721

ENCYCLOPÉDIE MÉTHODIQUE.

AGRICULTURE,

Par M. l'Abbé TESSIER, Docteur-Régent de la Faculté de Médecine, de l'Académie Royale des Sciences, de la Société Royale de Médecine, M. THOUIN & M. FOUGEROUX DE BONDAROU, de l'Académie Royale des Sciences.

TOME PREMIER.



A PARIS,

1787

MAISON RUSTIQUE

DU XIX^e SIÈCLE.

Encyclopédie d'Agriculture pratique,

CONTENANT

LES MEILLEURES MÉTHODES DE CULTURE USITÉES PARTICULIÈREMENT EN FRANCE, EN ANGLETERRE, EN ALLEMAGNE ET EN FLANDRE; — TOUTES LES BONNES PROCÉDÉS PRATIQUES PROPRES À GUIDER LE PETIT CULTIVATEUR, LE FERMIER, LE RÉGÉNÉREUR ET LE PROPRIÉTAIRE, DANS L'EXPLOITATION D'UN DOMAINE RURAL; — LES PRINCIPES GÉNÉRAUX D'AGRICULTURE, LA CULTURE DE TOUTES LES PLANTES UTILES; — L'ÉDUCATION DES ANIMAUX DOMESTIQUES, L'ART VÉTÉRINAIRE; — LA DESCRIPTION DE TOUTES LES ARTS AGRICOLES; — LES INSTRUMENTS ET BÂTIMENS RURAUX; — L'ENTRETIEN ET L'EXPLOITATION DES VIGNES, DES ARBRES FRUITIERS, DES BOIS ET FORÊTS, DES ÉTANGS, ETC.; — L'ÉCONOMIE, L'ORGANISATION ET LA DIRECTION D'UNE ADMINISTRATION RURALE; ENFIN LA LÉGISLATION APPLIQUÉE À L'AGRICULTURE;

TRADUITES

PAR DES TABLES MÉTHODIQUES ET ALPHABÉTIQUES,

PAR LA LISTE DES FIGURES ET CELLES DES ABRÉVIATIONS ET OUVRAGES CITÉS;

COURS ÉLÉMENTAIRE, COMPLET ET MÉTHODIQUE

D'ÉCONOMIE RURALE,

AVEC PLUS DE 2000 FIGURES REPRÉSENTANT TOUTES LES INSTRUMENTS, MACHINES, APPAREILS, RACES D'ANIMAUX, ARBRES, ARBUSTES ET PLANTES, BÂTIMENS RURAUX, ETC.,

Rédigé et gravé

Par une réunion d'Agronomes et de Praticiens appartenant aux Sociétés agricoles de France,

SOUS LA DIRECTION

De M. C. GAILLY DE MERCIER,

De la Société centrale d'Agriculture, Secrétaire de celle d'horticulture, etc.,
Directeur du *Mémorial encyclopédique*, Auteur de plusieurs ouvrages.

1835

- **Creation of *Association normande* (1832)**

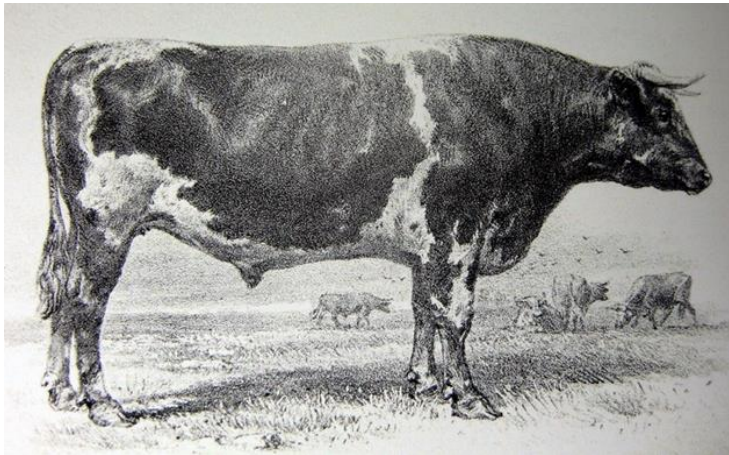
Reasons for change (2)

- **Development of the road network**
 - “Departmental” roads: 1811-1850
 - “Grande communication” roads: 1836-1870
- **Development of the railroad network** (Paris-Cherbourg : 1858)
- **Development of ports** (Cherbourg : 1813 ; Carentan : 1850)
- **Selection or improvement of cattle breeds**
 - 750 à 1100 litre/cow/year c. 1750
 - 1600 c. 1850
 - 2500 c. 1970
 - 6770 in 2014
- **Development of dairy coops** (c. 1910)
- **Decrease of population** (-30% from 1860 to 1914)

Improving animals breeds

Cattle

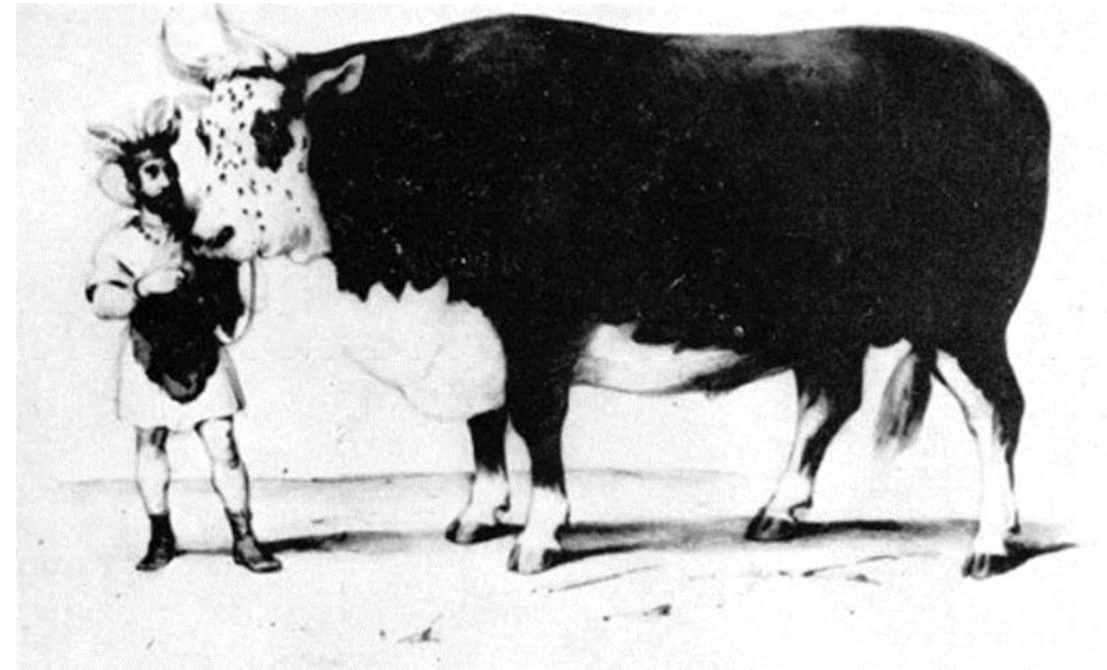
- **Small local breeds:** Avranches, Coutances, Mortain, « hard at work »
- **Cotentine breed**



c. 1850
H : 1,2 à 1,4 m
W : 300 to 500 kg



1856



H : up to 2,46 m
W : up to 1900 kg

Improving animals breeds

Cattle (cont'd)

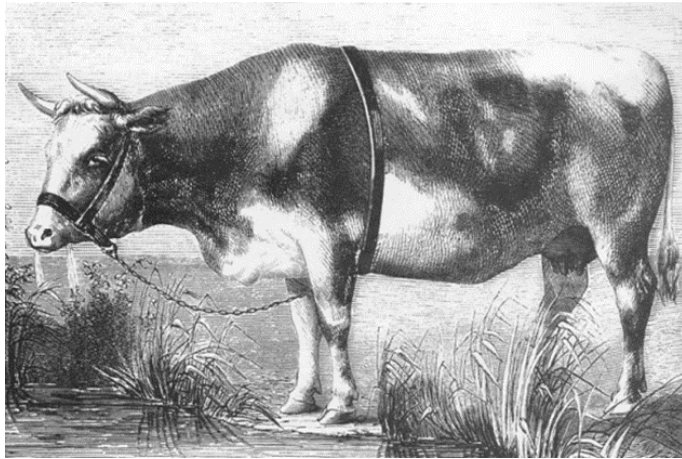
- **Progressive improvement of the Cotentine**

Average weight of oxen: 1736 : 130 to 200 kg ; 1812 : 190 ; 1836 : 320 ; 1852 : 330 to 500

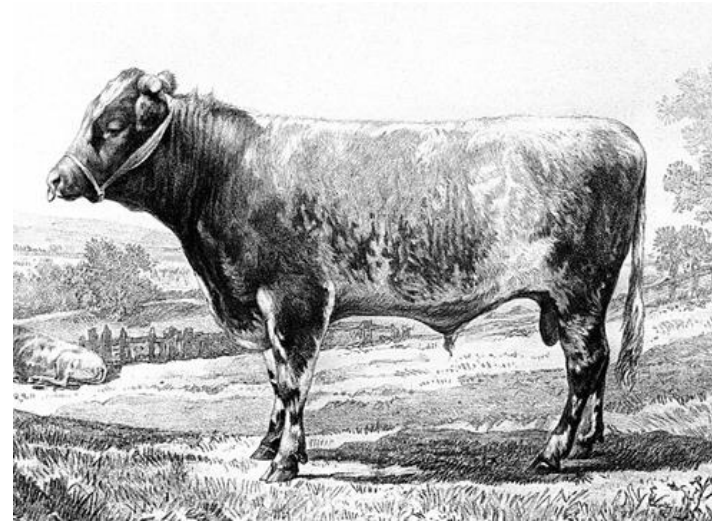
- **Agricultural meetings, prizes of the *Association Normande***

- **No interest in crossbreeding with Durham...**

Augeronne



Durham



- **Melting with the Augeronne breed to get the Normande**

- **Herd book for the Normande breed in 1883**

Improving animals breeds

Horses

- **Small French breeds in the 18th century**
- **Massive imports of horses for the army (100 M livres ?)**
- **At Colbert's initiative (1666), purchase of foreign stallions**
 - Danish: carriage horses
 - « Barbs »: saddle horses
 - Frise and Holstein: draught horses

} Entrusted to stallion-guards

Elections	Lieux des dépôts	Nombre d'étalons
Carentan	Carentan (3), Ecoquenéauville, Liesville, Saint-Fromond, Sainte-Marie-du-Mont, Sainte-Mère-Eglise, Varengebec	8
Avranches	Saint-Denis-le-Gast	1
Valognes	Valognes (4), Amfreville, Gatteville, Néhou, Pierreville, Picauville, Quettehou, Régnerville, Ste-Colombe, Saint-Floxel, St-Sauveur-de-Pierrepont	14

- Stopped in 1707, progressively restarted; cancelled in 1790, rebuilt in 1806
- **Nice success of coach horses, later saddle horses**

Improving animals breeds

Sheep

- **Wool of Cotentin sheep highly regarded for weaving**
- **Other breeds second-rate**
- **In the 18th century, growing interest of consumers in high-quality wool from Spain and England and light cotton fabric**
- **In 1786, 400 Merinos imported (Rambouillet), + 1000 c. 1800**
- **In 1811, 200 000 pure-breed Merinos, 2 million half-breed (France)**

Groin wool imports

- **Manche: cross-breeding with Dishleys**
- **In 1852, only 5% of sheep was « improved »**

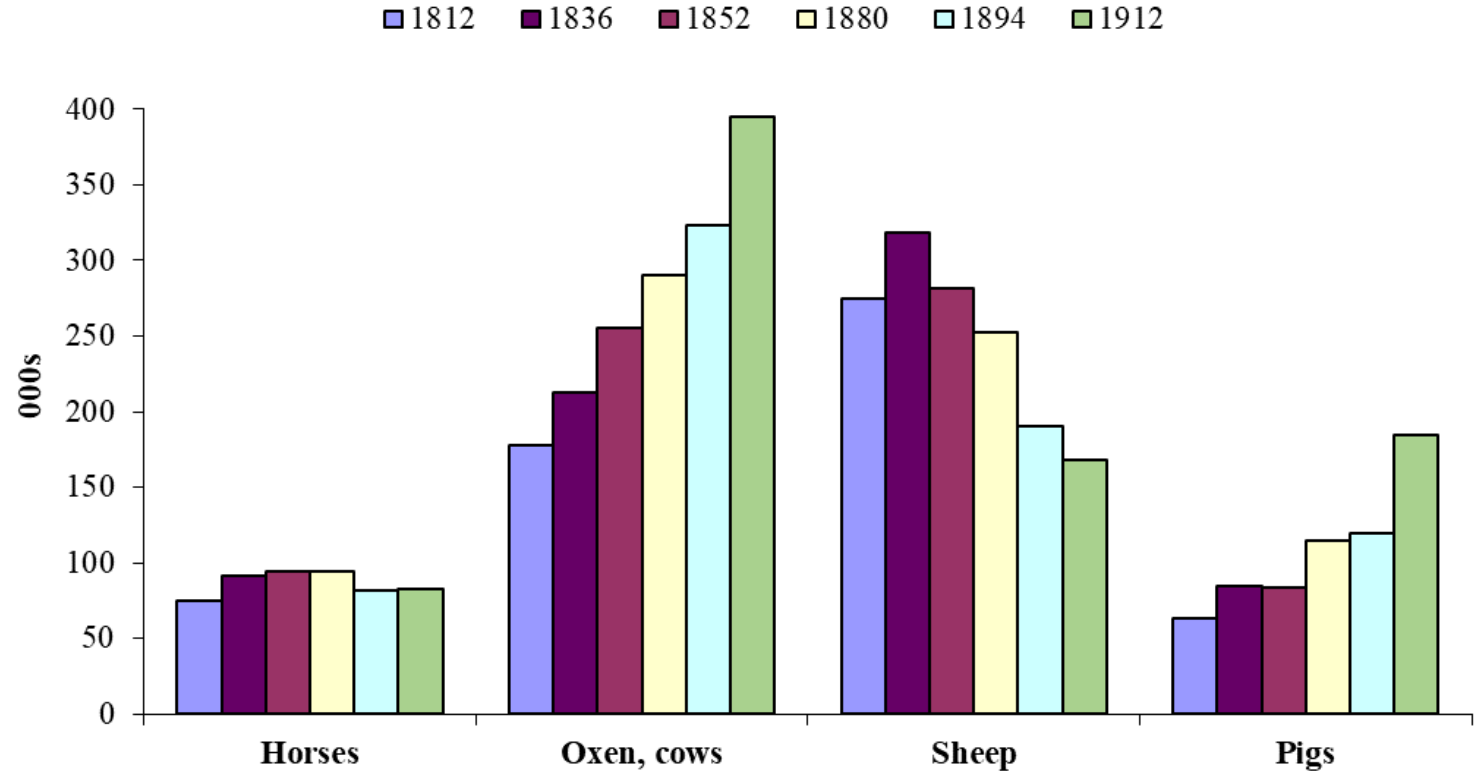
The textile industry had already vanished



Dishley

Conclusion

- **Evolution of livestock**



- **New early 19th century exports (Cherbourg region)**

- **Mules** (Caribbean)
- **Eggs** (England : 30 M/year)

Manche and England compared

