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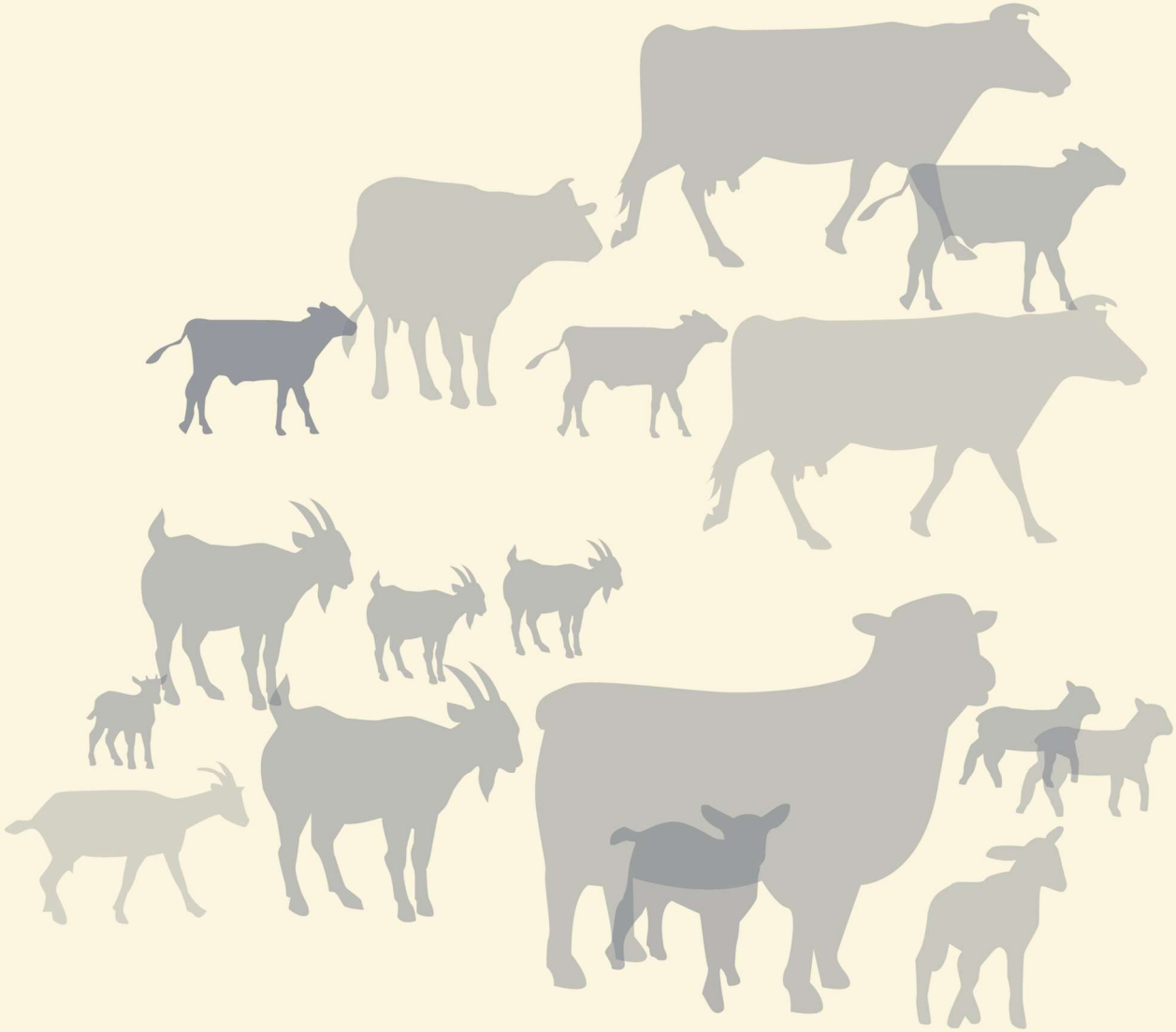
Milk recording results
Sheep
France - Year 2023



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Editor :
Gilles THOMAS - Xavier BOURRIGAN (Institut de l'Élevage)

Editorial team :
People who contributed to the development of this document:
Institut de l'Elevage:
Statistical analyses : Jean Michel Astruc jean-michel.astruc@idele.fr
Gilles Thomas gilles.thomas@idele.fr

Format and edition: Gilles Thomas gilles.thomas@idele.fr

Layout design :
Gilles THOMAS et Sandrine BAUDOUY (Institut de l'Élevage)

Photo credits :
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People who contributed to the development of this document:

Statistical analyses: Jean Michel Astruc **jean-michel.astruc@idele.fr**
Gilles Thomas **gilles.thomas@idele.fr**

Format and edition: Gilles Thomas **gilles.thomas@idele.fr**
Xavier Bourrigan **xavier.bourrigan@idele.fr**

Translation: Michèle Boussely **michele.boussely@idele.fr**
and Gilles Thomas **gilles.thomas@idele.fr**

Introduction

The research and development process in genetic improvement of dairy sheep successively dealt with productivity of ewes and herds (during the 70s and 80s), chemical milk composition and its suitability for cheese production (during the 80s and 90s), finally functional abilities such as resistance to subclinical mastitis and udder morphology (2000 decade). These functional characteristics enable the animals' functional longevity to be improved. This improvement matches with their ability to postpone their culling for other reasons than those linked with their milk yield level. In other words, functional longevity contributes to have flocks with a better cost-effectiveness, not by increasing takings, but by decreasing production costs through reduced early culling. Genomics has been fully involved during these last years in dairy sheep breeding schemes with, on one hand, the selection for resistance to scrapie thanks to the genetic typing of the PrP gene widely implemented right at the beginning of the 2000s, on the other hand genomic breeding prospects which are subject to Roquefort'in (Lacaune breed) and Genomia (Pyrenean dairy sheep breeds – Manech and Basco-Béarnaise) programmes. Since 2015 (choice of young rams at the end of 2014), Lacaune breed implemented a genomic selection with a new scheme design.

The genetic improvement of dairy sheep within the three French traditional breeding areas ("Rayon"de Roquefort, Pyrénées-Atlantiques, Corse) is based on the breeding of local breeds within their own production area and systems. This principle is strengthened by the French AOC label (which guarantees the origin of a product) of each area. This label requires the local breed as the genetic material to be used for the cheese production of Roquefort (Lacaune breed), of Issau-Iraty (Basco-Béarnaise and Manech breeds) and Brucciu (Corse breed). The implementation of dairy sheep breeding programmes is based on milk recording and progeny testing of animal insemination rams. It has systematically been well-reasoned in order to increase its efficiency-cost ratio

Pyramidal structure of the population

Breeds' population is organized on the basis of a pyramidal structure made up of breeders, creators of the genetic gain and farmers using genetic gain, in order to select the local breeds in population-wide terms. Selection tools are gathered in flocks of breeders who are registered at the official milk recording organizations. These tools include qualitative recording and breeding animals' qualification with possibly udder scoring. Breeding flocks serve as a testing medium and provide the breeding centers with young rams. Testing has been developed in order to maximize breeding schemes. The effort required for its implementation is considerable as (depending on the breeds) 50 to 60 % of the inseminated ewes within a flock under breeding are inseminated with tested rams. Breeders receive as compensation inseminations with the elite rams, i.e. the sires of the breed's rams. If they wish it, the breeders who use the genetic gain may receive a simplified milk recording. Its objective is firstly to get a within-flock ranking of the ewes, but also the technical monitoring of the dairy flock.

Rationalization and optimization over the time

Breeding objectives have been planned gradually. Official milk recording implemented in the 60s was at the beginning only a quantitative control (milk yield) due to the industry needs of milk on one hand, and because of the low initial productivity of the French local breeds on the other hand. The first objective was clearly to increase ewes' productivity. The breeding criteria taken in consideration was the milk yield during the milking period which steps up fat and protein contents quantities, and thereby cheese quantities.

Such an objective may be accepted during the start-up period of the breeding scheme. However, when this objective is fully operational and becomes completely effective (in the 80s for the Lacaune breed, in the 90s – 2000s for the Pyrenean breeds), the milk quality (fat and protein contents) deteriorates on a genetic level speaking. Thus, it is becoming essential to be interested in the chemical quality of the milk also in order to know about cheese yield and the fat/dry ratio of cheese in the framework of AOC cheese produced with raw milk and whole milk. That's why a qualitative recording was to be performed, although it is difficult and expensive to implement in dairy sheep because of the flocks' size and the rapid mechanical milking routines.

Finally, when the context of the industry was such as productivity was no longer directly looked for, breeders became then interested in functional characteristics which are going to enable to decrease production costs and to improve work conditions, especially milking conditions which represent the first work station of dairy ewes' breeding.

Today, farmers and stakeholders of selection schemes raise the question of hardiness and plasticity and evoke the wish to work on resistance to gastro intestinal parasitism, dairy persistency, ability to one-milking per day, feed efficiency, but also the ability to transhumance and at the valorization of rangelands.

Milk recording simplification

The official AC design (monthly recording of one of the two daily milkings, whatever the milking) has been widespread. The qualitative recording has been even more simplified. Only a part of the ewes is recorded: the primiparous (Pyrenean breeds) or the first two lactations (Lacaune breed). Only the middle of the lactation is controlled, because it is the most representative period from a genetic point of view. Thus, the objective is to carry out three samples at the first four test-days of the ewe during the morning milking. The morning milking enables a better milk sampling, especially of the fat content and somatic cells. The partial recording as described here above enables to save about 85% of the samplings and analyses in order to get an efficiency a bet lower (the loss of precision may easily be compensated for rams by increasing the testing daughters' number by about 10%), compared to the exhaustive A4 recording method (on a monthly rhythm for the two daily milkings and for all the ewes on milking). This process is also systematically used for functional characteristics.

Table 1 : Evolution of the main criteria related to breeding schemes for the 3 French breeding areas

		Official milk recording (OMR)				Simplified milk recording (SMR)
		Number of recorded ewes (% of the OMR population)	AI rate in the nucleus	Number of progeny-tested rams	Milk yield in liters (lactation duration)	Number of recorded ewes
1985	Nord-Occit	113 519 (17%)	70%	430	186 (162)	311 000
	Pyrénées	38 026 (12%)	30%	52	92 (127)	13 000
	Corse	7 300 (7%)			88 (151)	
2005	Nord-Occit	176 936 (21%)	81%	477	277 (163)	585 000
	Pyrénées	108 836 (23%)	55%	200	158 (146)	32 000
	Corse	20 408 (20%)	39%	40	124 (181)	
2020	Nord-Occit	189 147 (17%)	87%	319	339 (174)	505 457
	Pyrénées	121 136 (28%)	48%	278	231 (156)	38 026
	Corse	20 157 (24%)	36%	17	149 (189)	13 446
2021	Nord-Occit	192 923 (19%)	88%	297	346 (176)	483 869
	Pyrénées	123 388 (28%)	47%	262	239 (159)	38 532
	Corse	18 860 (22%)	35%	21	153 (188)	9 397
2022	Nord-Occit	197 817 (19%)	87%	309	346 (176)	480 299
	Pyrénées	124 878 (28%)	47%	284	234 (160)	37 580
	Corse	18 403 (22%)	38%	20	153 (189)	9 856
2023	Nord-Occit	200 700 (21%)	87%	326	357 (177)	476 653
	Pyrénées	120 920 (27%)	47%	254	230 (159)	32 730
	Corse	17 992 (21%)	38%	21	144 (187)	7 775

Data processing

Annual results of the sheep official milk recording are calculated from an extract of the French national dairy sheep database used for indexing and research, which is part of the SIEOL Information System. This extract was performed at the end of the dairy sheep year in December 2023. Thus, these results concern the year 2023. Regarding the seasonality of the dairy sheep production in France, all lactations are considered as finished and qualified if they are calculated.

The results are presented by breeding area, French local administrative area (=French "département"), Milk Recording Organization (MRO), Performance Testing organization and by breed. Here are the definitions of these terms:

Breeding areas: 1 = 'Rayon de Roquefort' ; 2 = 'Corse' ; 3 = 'Pyrénées-Atlantiques'.
French local administrative areas: 11, 12, 2A, 2B, 30, 34, 48, 64, 65, 81, 82.
Milk Recording Organizations (=MRO): 'CDEO', 'Confédération Générale de Roquefort', 'EDE 48', 'EDE 81', 'EDE 82', 'SCP 30-34', 'SUAE Corse du Sud', 'SUAE Haute-Corse', 'UNOTEC 12'.
Recognized Performance Recording Organizations (=RPRO): 'CDEO', 'OS Lacaune', 'EDE 82', 'SUAE Corse du Sud', 'SUAE Haute-Corse'.
Breeds: 'Lacaune', 'Manech tête rousse', 'Manech tête noire', 'Basco-Béarnaise', 'Corse'. Other breeds representing less than 50 ewes nationwide are not taken into account in these results.

NB : In paragraphs 2.2 to 2.6, maps only show French local administrative areas where at least 10 lactations haven been calculated for the corresponding breed.

Warning:
Results between breeds or populations (Basco-Béarnaise, Corse, Lacaune, Manech Tête Rousse, Manech Tête Noire) should not be compared, mainly for two reasons:
- Each breed is represented only in one breeding area. Therefore, genetic type and dominant farming system(s) of each French administrative region are closely linked.
- The calculation of milk yield at milking period varies from one region to another (and for breeds accordingly), in relation with the average suckling length, depending on the farming system:
  - 25 days in the area of Roquefort,
  - 35 days in the Pyreneans area and in Corsica.

Some definitions :

Total number of ewes: ewes present in the flock at the beginning of the lambing period.

Number of ewes in lactation: ewes for which calculating a lactation has been possible (so this total takes into account ewes that had at least one test-date with non-null milk production record).

Number of ewes that lambed: ewes with a date of lambing, non-pregnant ewes, aborted ewes without milk and not mated ewe in 1st lactation are therefore excluded from this total.

Lambing rate: number of ewes which lambed divided by the total number of ewes (expressed in %).

Lactation rate: number of ewes with calculation of lactation divided by the number of ewes which lambed (expressed in %).

Milk yield: it represents the milk yield at the milking-only period.
This milk yield is calculated only on the period of exclusive milking of the animal after the weaning of the lamb(s), and doesn't take into account the milk yield during the initial period of suckling or suckling x milking. So the **milking duration** matches only to this milking-only period. The milk yield is expressed in liters and the length in days.

The official milk recording is an AC milk recording protocol, i.e. a monthly control of one of the two daily milkings, without any obligation of rotation. However, the recording occurs mainly in the morning because the sampling for the qualitative control is more precise during the morning milking (more milk in the morning).
Results for fat and protein contents are not provided. The sheep qualitative control is indeed a very simplified control (partial qualitative recording). It is based on a sampling performed only at the milking of the morning, on 3 recordings during the middle of the lactation and it concerns only a part of the flock (the primiparous or the first 2 lactations, depending on the breed). The way of recording and calculating the fat and protein contents are relevant for genetics, but are not representative of current economic reality.

Trends for 2023

739 flocks were submitted to Official Milk Recording in 2023, showing a significant decrease compared to the previous year.
With 339,610 ewes, in 2023 the total number of ewes present at the lambing period is slightly decreasing by -1,371 ewes (-0,4%). At the same time the total number of ewes with lactation calculation decreased to 285,852 (-1,4%). This variation cancels the increase observed the previous year (+1,6%). Meanwhile, with 460 ewes, the average size of flock still progressed in 2023 (452 ewes in 2022 vs 447 ewes in 2021 and 441 ewes in 2020).

In 2023, at the national level, with an average of 304.6 liters (+6.8 liters) in 172 days of lactation during the milking period the milk yield is increasing. This national average hides contrasting variations across breeds. Indeed, in 2023 while the Lacaune breed saw its production increase by 11 liters per lactation the production decreased for all other breeds: Manech Tête Rousse -0.9 liter, Basco Béarnaise -11.7 liters, Corse -8.9 liters et Manech Tête Noire -7.2 liters.

A simplified milk recording, corresponding to the D recording method in the ICAR guidelines and not presented in this document, exists in addition to the Official Milk Recording AC design. It concerns commercial flocks out of the selection nucleus (while the Official Milk Recording is devoted only to breeders involved in the selection program). 1,110 flocks and 517,158 ewes present at the lambing period were submitted to D recording in 2023.

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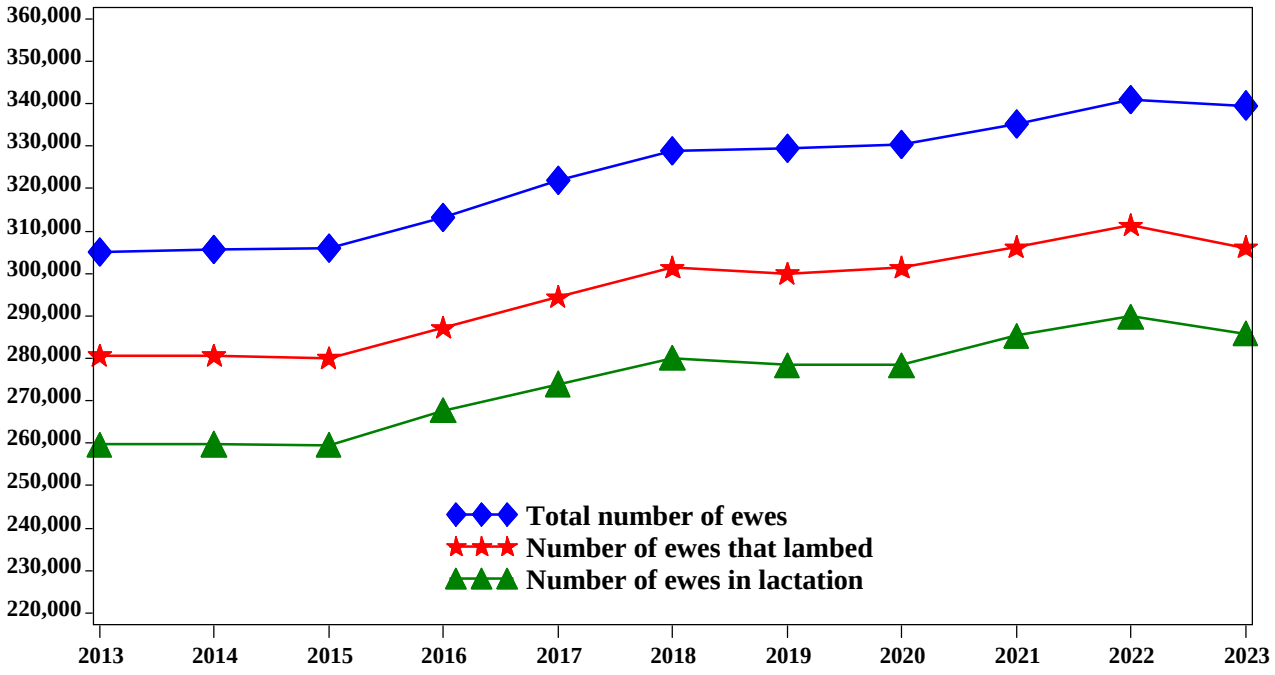
I - GLOBAL RESULTS

1.1 - Reminder of the previous years

Year	Total number of ewes	Number of ewes that lambed	Lambing rate	Number of ewes in lactation	Lactation rate	Milk yield *liters*	Lactation duration *days*
2013	**304,925**	280,581	*92.0*	259,666	*92.5*	247.5	164
2014	**305,619**	280,575	*91.8*	259,791	*92.6*	254.2	165
2015	**306,047**	280,001	*91.5*	259,589	*92.7*	256.9	166
2016	**313,291**	287,171	*91.7*	267,737	*93.2*	273.9	166
2017	**321,968**	294,415	*91.4*	274,003	*93.1*	278.6	167
2018	**328,980**	301,292	*91.6*	280,117	*93.0*	284.2	167
2019	**329,394**	299,938	*91.1*	278,423	*92.8*	286.3	169
2020	**330,431**	301,305	*91.1*	278,442	*92.4*	291.6	169
2021	**335,171**	306,167	*91.3*	285,321	*93.2*	299.2	171
2022	**340,981**	311,301	*91.3*	289,921	*93.1*	298.2	172
2023	**339,610**	306,040	*90.1*	285,852	*93.4*	304.6	172



1.2 - Results of the year

1.2.1 - Distribution by parity

Parity	Total number of ewes	Number of ewes that lambed	Lambing rate	Number of ewes in lactation	Lactation rate	Milk yield *liters*	Lactation duration *days*
1st lactation	**99,726**	80,117	*80.3*	74,370	*92.8*	268.6	159
2nd lactation and over	**239,884**	225,923	*94.2*	211,482	*93.6*	317.3	176
Overall total	**339,610**	**306,040**	**90.1**	**285,852**	**93.4**	**304.6**	**172**

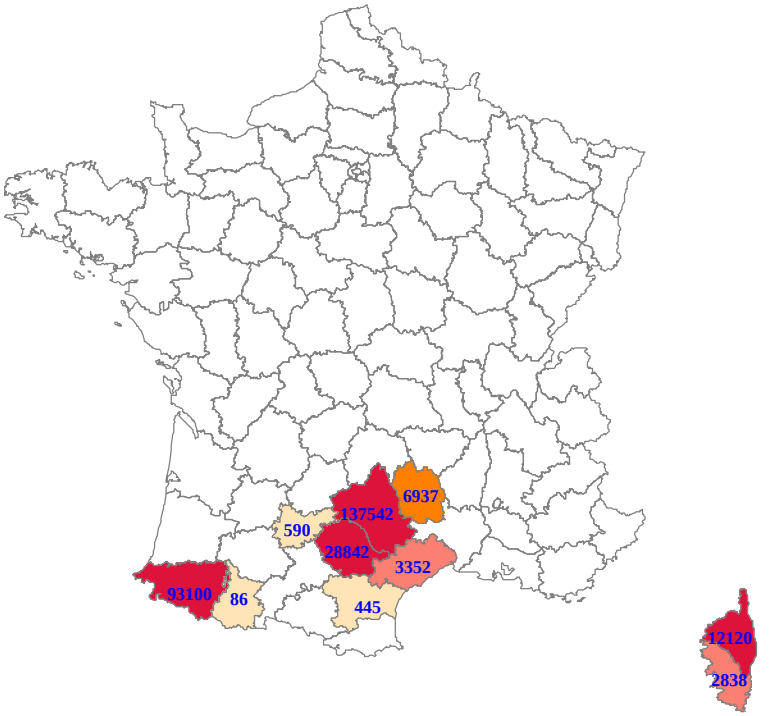
1.2.2 - Number of flocks and average number of ewes per flock

Total number of ewes in lactation	Total number of flocks	Average number of ewes per flock
285,852	739	386.8

1.2.3 - Results per local area

Local area	Number of flocks	Number of ewes in lactation	Milk yield *l*	Lactation duration *d*
Aude	**1**	445	327.4	184
Aveyron	**288**	137,542	357.8	177
Corse du Sud	**18**	2,838	153.8	173
Haute Corse	**33**	12,120	142.1	191
Hérault	**8**	3,352	329.9	179
Lozère	**16**	6,937	345.1	174
Pyrénées Atlantiques	**308**	93,100	230.4	159
Hautes Pyrénées	**1**	86	174.3	157
Tarn	**65**	28,842	361.0	178
Tarn & Garonne	**1**	590	305.6	169
Overall total	**739**	**285,852**	**304.6**	**172**

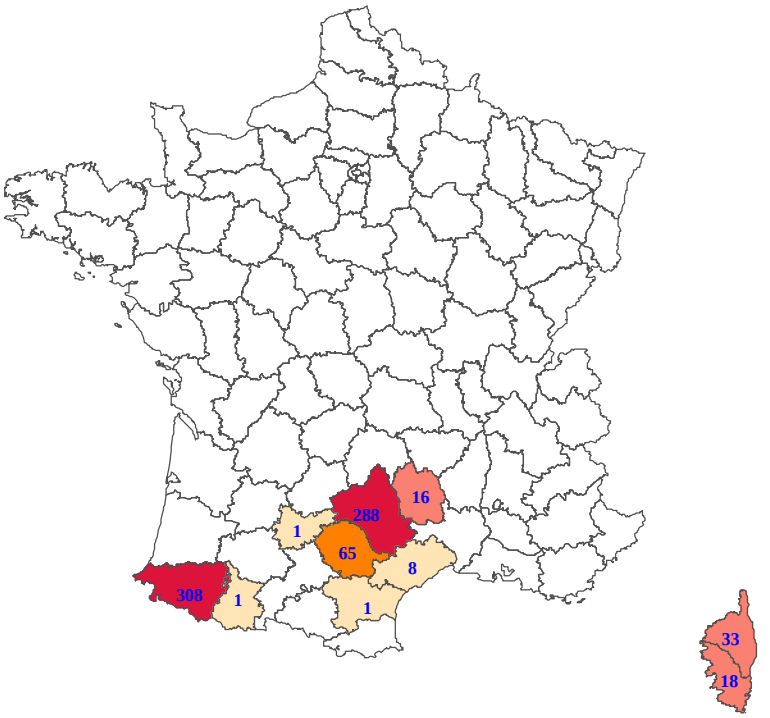
Distribution of lactations per local area (= French « département »)



Number of lactations

<1,000	>=1,000 & <5,000
>=5,000 & <10,000	>=10,000

Distribution of flocks per local area



Number of flocks

<10	>=10 & <50
>=50 & <100	>=100

1.2.4 - Results per breeding area and parity

Breeding area[1]	Parity	Number of ewes in lactation	Milk yield *liters*	Lactation duration *days*
01	1st lactation	48,806	306.2	164
	2nd lactation	39,334	379.1	183
	3rd lactation	30,865	394.1	186
	4th lactation	23,296	386.1	184
	5th lactation	16,130	371.6	182
	6th lactation	10,481	351.6	178
	7th lactation and over	8,486	314.2	170
	Unknown	310	301.3	166
Total breeding area		***177,708***	***357.1***	***177***
02	1st lactation	3,047	103.7	147
	2nd lactation	2,626	148.4	185
	3rd lactation	2,277	168.0	201
	4th lactation	1,780	173.0	208
	5th lactation	1,389	167.2	206
	6th lactation	1,147	158.6	205
	7th lactation and over	1,828	138.6	196
	Unknown	864	110.9	186
Total breeding area		***14,958***	***144.4***	***187***
03	1st lactation	22,517	209.3	150
	2nd lactation	19,989	238.3	158
	3rd lactation	16,286	252.4	166
	4th lactation	12,565	247.4	167
	5th lactation	8,732	235.5	164
	6th lactation	5,913	218.5	159
	7th lactation and over	5,524	197.4	151
	Unknown	1,660	198.2	152
Total breeding area		***93,186***	***230.3***	***159***
Overall total		**285,852**	**304.6**	**172**

[1]Refer to the Introduction paragraph for details.

1.2.5 - Results per breeding area, parity and month of lambing

Breeding area	Parity	Month of lambing	Number of ewes in lactation	Milk yield *liters*	Lactation duration *days*
01	1st lactation	January	8,969	282.0	151
		February	5,765	258.8	140
		March	2,396	242.1	129
		April	399	176.6	94
		May	54	114.6	71
		June	29	145.9	73
		July	233	274.2	181
		August	1,331	375.4	200
		September	3,434	363.2	194
		October	8,119	343.7	184
		November	11,747	326.2	174
		December	6,330	288.9	155
	2nd lactation and over	January	18,082	359.2	172
		February	8,635	336.6	155
		March	2,219	269.4	122
		April	534	192.5	91
		May	114	152.1	76
		June	199	219.6	190
		July	1,251	340.6	195
		August	6,438	391.5	196
		September	16,217	390.7	195
		October	36,409	393.4	192
		November	27,661	383.0	184
		December	11,143	372.0	174
Total breeding area			***177,708***	***357.1***	***177***
02	1st lactation	January	686	93.8	121
		February	454	75.8	94
		March	112	53.5	70
		April	28	17.6	31
		May			
		June			
		July			
		August	1	269.1	262
		September	178	133.7	226
		October	493	133.5	196
		November	549	118.2	175
		December	546	102.3	147
	2nd lactation and over	January	592	113.6	119
		February	416	88.2	94
		March	137	69.7	71
		April	15	18.7	31
		May	1	9.9	27
		June			
		July			
		August	108	184.4	247
		September	4,340	165.9	223
		October	4,904	160.7	204
		November	1,160	148.0	179
		December	238	125.6	149

[1]Refer to the Introduction paragraph for details.

1.2.5 - Results per breeding area, parity and month of lambing

Breeding area	Parity	Month of lambing	Number of ewes in lactation	Milk yield *liters*	Lactation duration *days*
Total breeding area			***14,958***	***144.4***	***187***
03	1st lactation	January	2,747	183.9	130
		February	2,670	144.1	98
		March	2,179	107.4	72
		April	401	79.3	50
		May	17	45.3	32
		June			
		July			
		August			
		September	13	207.0	176
		October	2,496	263.6	195
		November	7,785	254.8	183
		December	4,209	216.5	161
	2nd lactation and over	January	3,526	217.8	133
		February	3,849	176.7	99
		March	3,336	133.2	73
		April	604	94.5	51
		May	62	50.0	27
		June	1	53.5	20
		July			
		August			
		September	71	223.0	191
		October	12,619	251.9	185
		November	35,678	250.0	173
		December	10,923	245.8	160
Total breeding area			***93,186***	***230.3***	***159***
Overall total			**285,852**	**304.6**	**172**

[1]Refer to the Introduction paragraph for details.

1.2.6 - Results per breeding area and flock size

Breeding area	Flock size	Number of flocks	Number of ewes in lactation	Milk yield *liters*	Lactation duration *days*
01	< 200	**3**	528	376.8	168
	>=200 & <250	**12**	2,747	363.2	181
	>=250 & <300	**30**	8,380	359.4	179
	>=300 & <350	**42**	13,824	345.1	179
	>=350 & <400	**59**	22,034	359.5	177
	>=400 & <450	**46**	19,728	363.6	178
	>=450 & <500	**49**	23,133	355.1	178
	>=500 & <550	**41**	21,535	351.8	181
	>=550 & <600	**25**	14,418	355.7	176
	>= 600	**72**	51,381	359.3	176
Total breeding area		***379***	***177,708***	***357.1***	***177***
02	< 200	**27**	3,658	142.7	178
	>=200 & <250	**5**	1,054	137.5	184
	>=250 & <300	**2**	517	127.6	175
	>=300 & <350	**6**	1,900	157.0	203
	>=350 & <400	**3**	1,106	166.4	178
	>=400 & <450	**2**	807	128.3	183
	>=550 & <600	**2**	1,162	138.6	192
	>= 600	**4**	4,754	142.9	193
Total breeding area		***51***	***14,958***	***144.4***	***187***
03	< 200	**56**	9,496	195.5	151
	>=200 & <250	**57**	12,793	224.9	159
	>=250 & <300	**64**	17,566	228.1	160
	>=300 & <350	**51**	16,650	236.6	163
	>=350 & <400	**33**	12,265	241.8	162
	>=400 & <450	**18**	7,569	214.4	153
	>=450 & <500	**13**	6,099	234.6	154
	>=500 & <550	**5**	2,641	283.4	165
	>=550 & <600	**5**	2,911	263.5	162
	>= 600	**7**	5,196	240.4	158
Total breeding area		***309***	***93,186***	***230.3***	***159***
Overall total		**739**	**285,852**	**304.6**	**172**

[1]Refer to the Introduction paragraph for details.

1.2.7 - Results per milk recording organization (MRO)

MRO	Number of flocks	Number of ewes in lactation	Milk yield *liters*	Lactation duration *days*
CDEO	**309**	93,186	230.3	159
Confédération Générale de Roquefort	**188**	86,188	351.9	178
EDE 48	**7**	3,871	331.2	169
EDE 81	**27**	12,446	364.9	183
SUAE CORSE DU SUD	**18**	2,838	153.8	173
SUAE HAUTE-CORSE	**33**	12,120	142.1	191
UNOTEC 12	**157**	75,203	363.0	177
Overall total	**739**	**285,852**	**304.6**	**172**

[1]Refer to the Introduction paragraph for details.

1.2.8 - Results per milk recording organization (MRO) and local area

MRO	Local area	Number of flocks	Number of ewes in lactation	Milk yield *liters*	Lactation duration *days*
CDEO	Pyrénées Atlantiques	**308**	93,100	230.4	159
	Hautes Pyrénées	**1**	86	174.3	157
Total MRO		***309***	***93,186***	***230.3***	***159***
Confédération Générale de Roquefort	Aude	**1**	445	327.4	184
	Aveyron	**136**	63,939	351.0	178
	Hérault	**3**	1,752	328.1	191
	Lozère	**9**	3,066	362.6	180
	Tarn	**38**	16,396	358.1	175
	Tarn & Garonne	**1**	590	305.6	169
Total MRO		***188***	***86,188***	***351.9***	***178***
EDE 48	Lozère	**7**	3,871	331.2	169
Total MRO		*7*	***3,871***	***331.2***	***169***
EDE 81	Tarn	**27**	12,446	364.9	183
Total MRO		*27*	***12,446***	***364.9***	***183***
SUAE CORSE DU SUD	Corse du Sud	**18**	2,838	153.8	173
Total MRO		*18*	***2,838***	***153.8***	***173***
SUAE HAUTE-CORSE	Haute Corse	**33**	12,120	142.1	191
Total MRO		*33*	***12,120***	***142.1***	***191***
UNOTEC 12	Aveyron	**152**	73,603	363.7	177
	Hérault	**5**	1,600	331.8	166
Total MRO		*157*	***75,203***	***363.0***	***177***
Overall total		**739**	**285,852**	**304.6**	**172**

[1]Refer to the Introduction paragraph for details.

1.2.9 - Results per recognized performance recording organization (RPRO)

RPRO	Number of flocks	Number of ewes in lactation	Milk yield *liters*	Lactation duration *days*
CDEO	**309**	93,186	230.3	159
OS Lacaune	**379**	177,708	357.1	177
SUAE CORSE DU SUD	**18**	2,838	153.8	173
SUAE HAUTE-CORSE	**33**	12,120	142.1	191
Overall total	**739**	**285,852**	**304.6**	**172**

1.2.10 - Results per recognized performance recording organization (RPRO) and local area

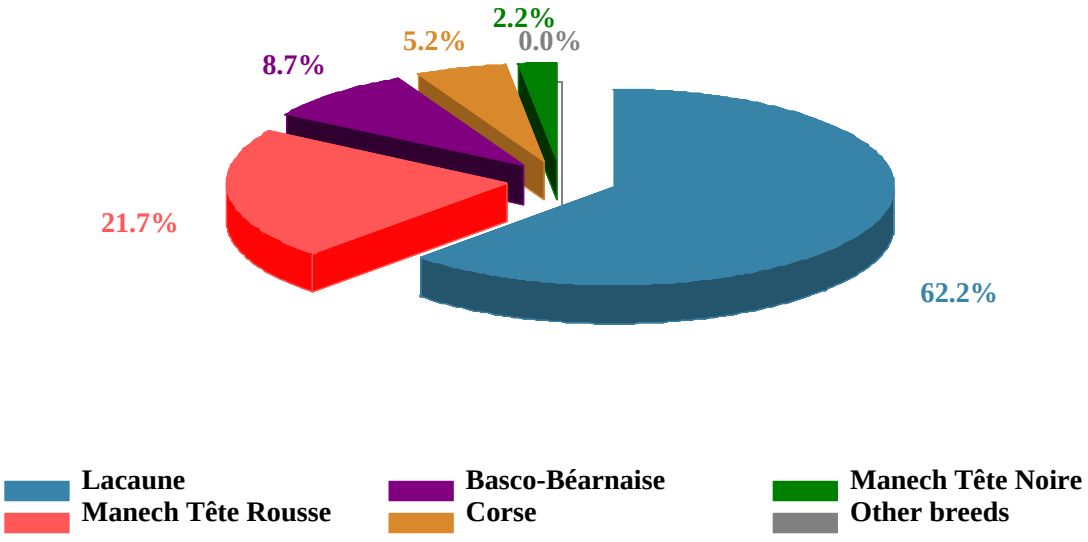
RPRO	Local area	Number of flocks	Number of ewes in lactation	Milk yield *liters*	Lactation duration *days*
CDEO	Pyrénées Atlantiques	**308**	93,100	230.4	159
	Hautes Pyrénées	**1**	86	174.3	157
Total RPRO		***309***	***93,186***	***230.3***	***159***
OS Lacaune	Aude	**1**	445	327.4	184
	Aveyron	**288**	137,542	357.8	177
	Hérault	**8**	3,352	329.9	179
	Lozère	**16**	6,937	345.1	174
	Tarn	**65**	28,842	361.0	178
	Tarn & Garonne	**1**	590	305.6	169
Total RPRO		***379***	***177,708***	***357.1***	***177***
SUAE CORSE DU SUD	Corse du Sud	**18**	2,838	153.8	173
Total RPRO		***18***	***2,838***	***153.8***	***173***
SUAE HAUTE-CORSE	Haute Corse	**33**	12,120	142.1	191
Total RPRO		***33***	***12,120***	***142.1***	***191***
Overall total		**739**	**285,852**	**304.6**	**172**

[1]Refer to the Introduction paragraph for details.

II - RESULTS PER BREED

2.1 - Results for all breeds

Breed	Number of flocks	Number of ewes in lactation	Milk yield *liters*	Milk yield standard deviation *liters*	Lactation duration *days*	Lactation duration standard deviation *days*
Lacaune	379	177,695	**357.1**	*108.3*	177	*40*
Manech Tête Rousse	221	62,151	**243.7**	*92.7*	164	*47*
Basco-Béarnaise	106	24,745	**210.6**	*79.7*	147	*49*
Corse	51	14,958	**144.4**	*66.4*	187	*57*
Manech Tête Noire	59	6,232	**176.0**	*74.6*	152	*46*
Other breeds	40	71	**147.3**	*119.6*	111	*57*

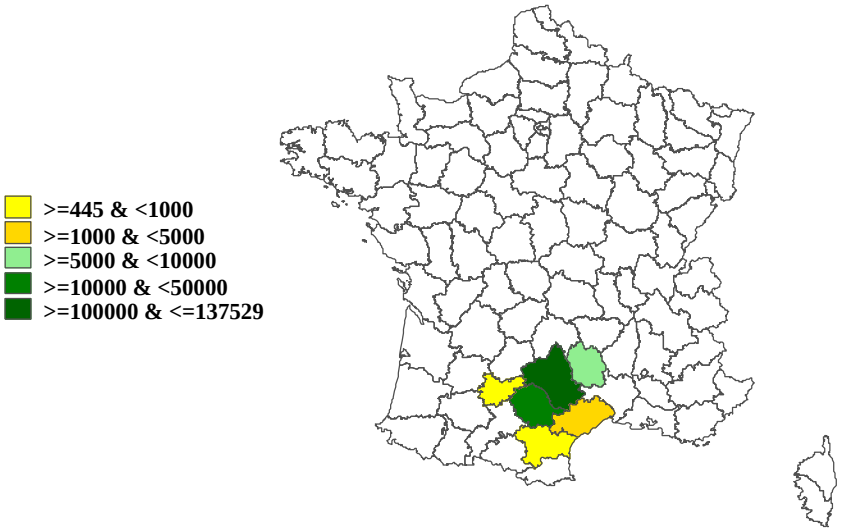


[1]Refer to the Introduction paragraph for details.

2.2 - Breed LACAUNE

(French breed code: 010)

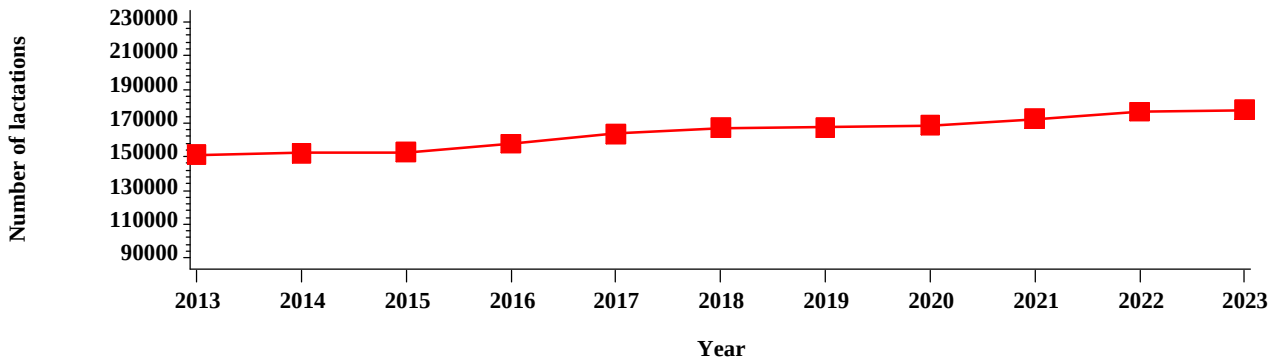
Geographical distribution of ewes with lactations of Lacaune breed



Distribution by parity for Lacaune breed

Parity	Number of ewes in lactation	Milk yield *liters*	Milk yield standard deviation *liters*	Lactation duration *days*	Lactation duration standard deviation *days*
1st lactation	48,800	306.2	*96.9*	164.1	*40*
2nd lactation	39,328	379.1	*104.4*	183.0	*39*
3rd lactation	30,864	394.1	*103.9*	185.8	*37*
4th lactation	23,296	386.1	*103.9*	184.3	*37*
5th lactation	16,130	371.6	*103.7*	182.0	*38*
6th lactation	10,481	351.6	*104.4*	178.2	*40*
7th lactation and over	8,486	314.2	*106.2*	169.8	*45*
Unknown	310	301.3	*110.2*	165.6	*45*
Overall total	**177,695**	**357.1**	**108.3**	**177.4**	**40**

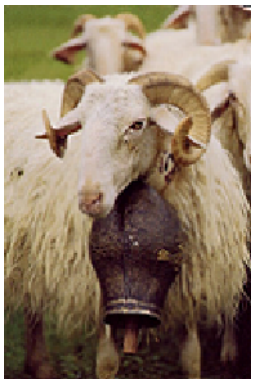
Evolution of the number of lactations for Lacaune breed

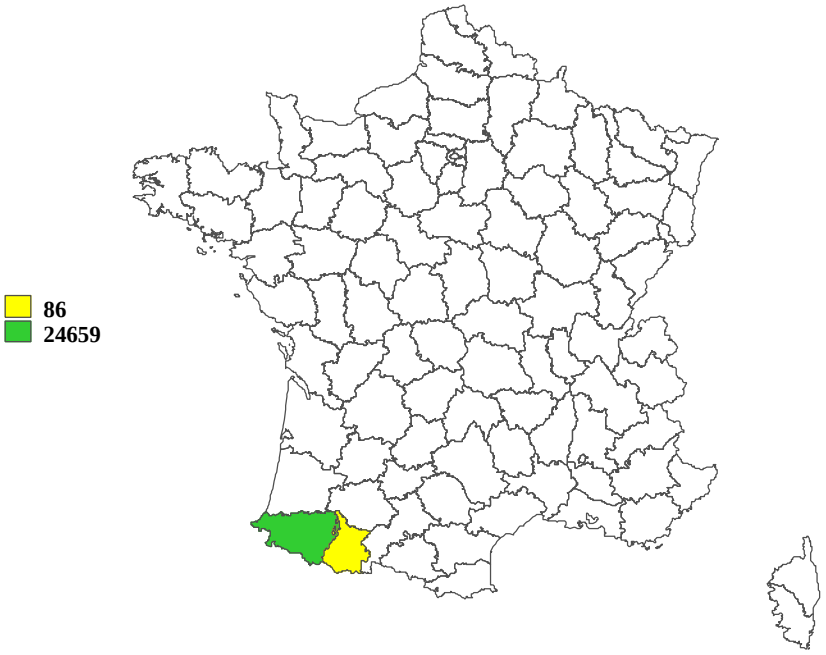


2.3 - Breed BASCO BEARNAISE

(French breed code: 030)

Geographical distribution of ewes with lactations of Basco Bearnaise breed

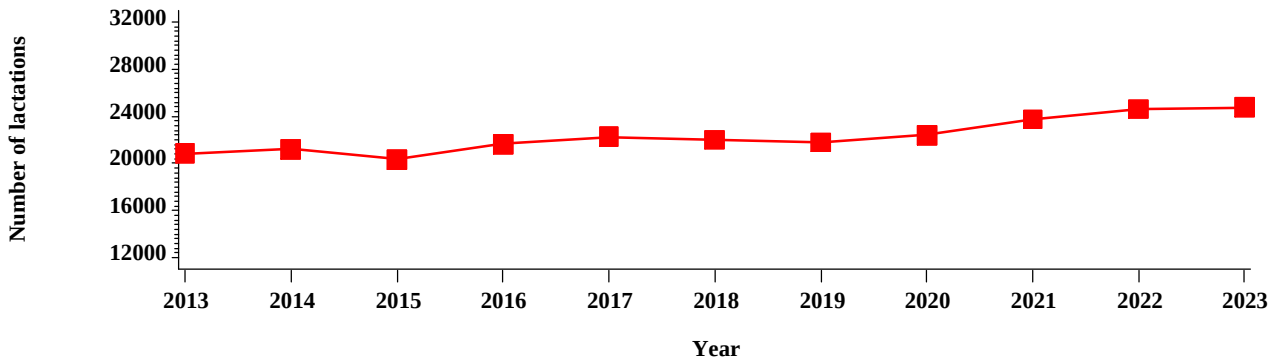




Distribution by parity for Basco Bearnaise breed

Parity	Number of ewes in lactation	Milk yield *liters*	Milk yield standard deviation *liters*	Lactation duration *days*	Lactation duration standard deviation *days*
1st lactation	5,675	166.2	*67.7*	118.9	*47*
2nd lactation	5,026	213.3	*72.9*	143.9	*47*
3rd lactation	4,170	234.2	*75.7*	158.8	*44*
4th lactation	3,369	238.8	*77.6*	164.2	*42*
5th lactation	2,436	231.8	*80.8*	162.3	*43*
6th lactation	1,757	218.9	*80.7*	159.2	*45*
7th lactation and over	1,598	200.9	*80.3*	151.9	*46*
Unknown	714	202.7	*82.8*	154.5	*49*
Overall total	**24,745**	**210.6**	**79.7**	**147.2**	**49**

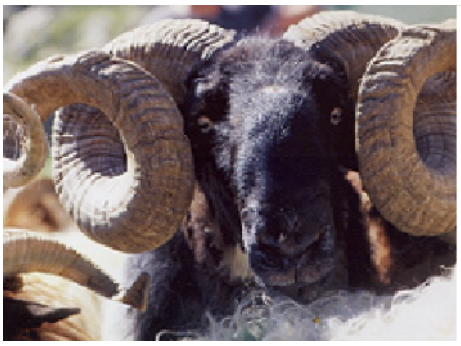
Evolution of the number of lactations for Basco Bearnaise breed

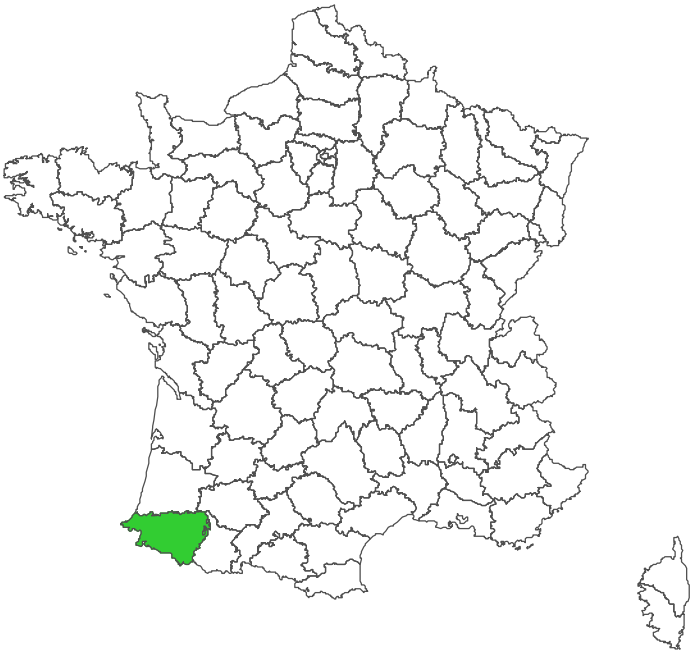


2.4 - Breed MANECH TETE NOIRE

(French breed code: 052)

Geographical distribution of ewes with lactations of Manech Tete Noire breed

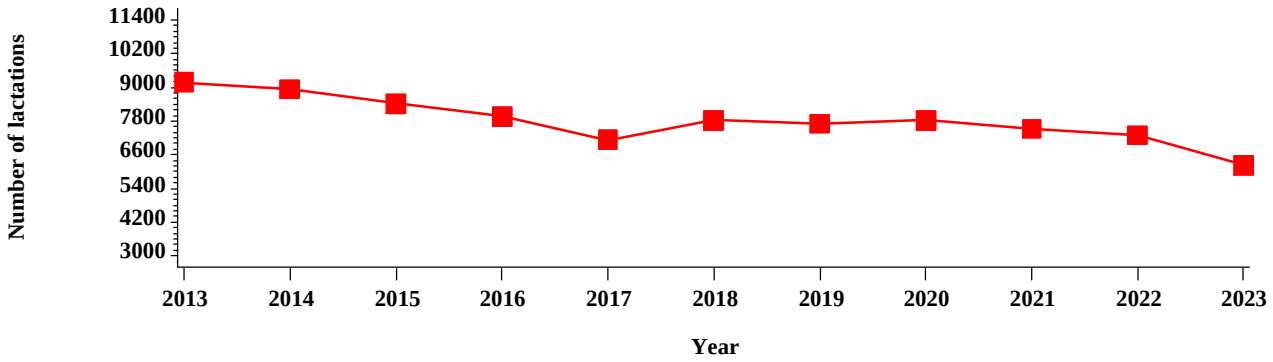




Distribution by parity for Manech Tete Noire breed

Parity	Number of ewes in lactation	Milk yield *liters*	Milk yield standard deviation *liters*	Lactation duration *days*	Lactation duration standard deviation *days*
1st lactation	1,396	163.2	*69.8*	150.4	*50*
2nd lactation	1,353	182.9	*73.2*	153.7	*44*
3rd lactation	1,086	196.7	*75.7*	157.8	*43*
4th lactation	920	189.5	*77.2*	155.3	*45*
5th lactation	585	175.1	*72.7*	151.9	*43*
6th lactation	415	158.4	*71.3*	144.7	*44*
7th lactation and over	341	134.5	*63.9*	139.8	*46*
Unknown	136	142.6	*64.0*	138.1	*39*
Overall total	**6,232**	**176.0**	**74.6**	**152.0**	**46**

Evolution of the number of lactations for Manech Tete Noire breed



2.5 - Breed MANECH TETE ROUSSE

(French breed code: 053)

Geographical distribution of ewes with lactations of Manech Tete Rousse breed

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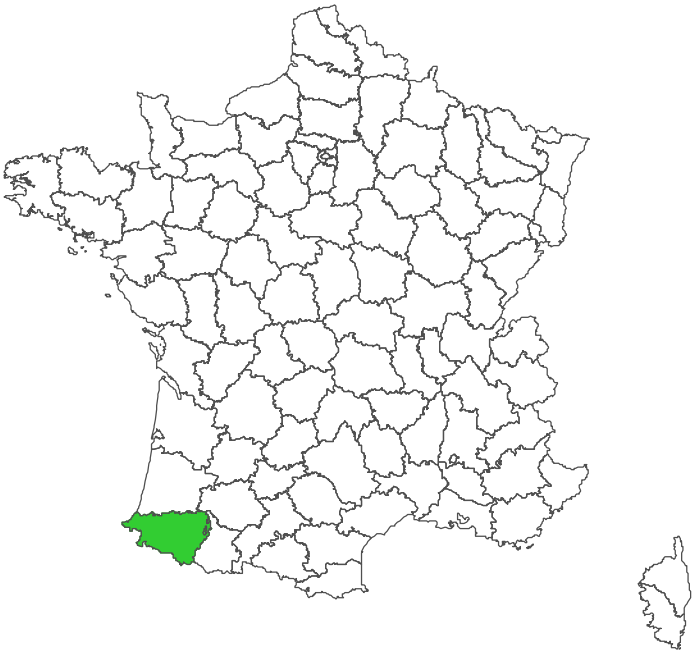
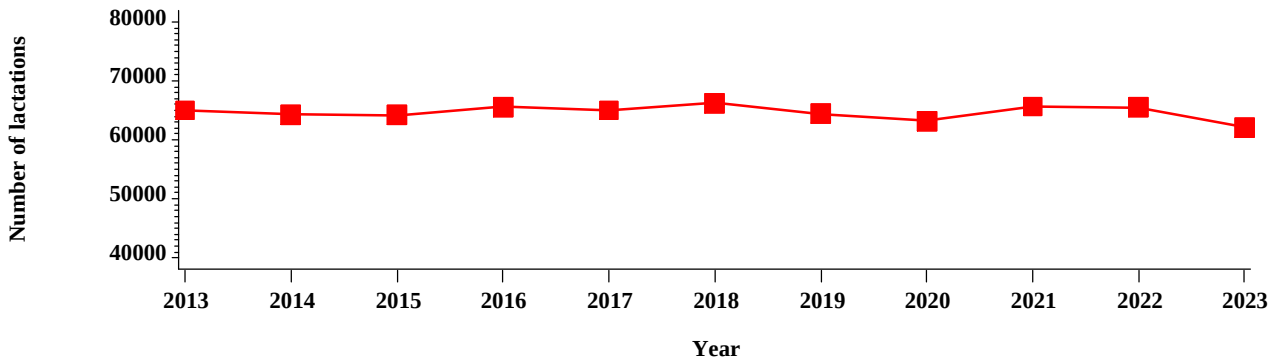


Distribution by parity for Manech Tete Rousse breed

Parity	Number of ewes in lactation	Milk yield *liters*	Milk yield standard deviation *liters*	Lactation duration *days*	Lactation duration standard deviation *days*
1st lactation	15,427	229.4	*89.8*	162.0	*47*
2nd lactation	13,599	253.1	*90.4*	164.3	*49*
3rd lactation	11,020	264.8	*92.0*	169.1	*46*
4th lactation	8,268	257.5	*92.4*	168.9	*45*
5th lactation	5,710	243.3	*93.0*	165.3	*47*
6th lactation	3,738	225.0	*92.3*	159.7	*49*
7th lactation and over	3,582	201.9	*87.9*	151.5	*50*
Unknown	807	204.2	*85.2*	153.0	*47*
Overall total	**62,151**	**243.7**	**92.7**	**164.1**	**47**

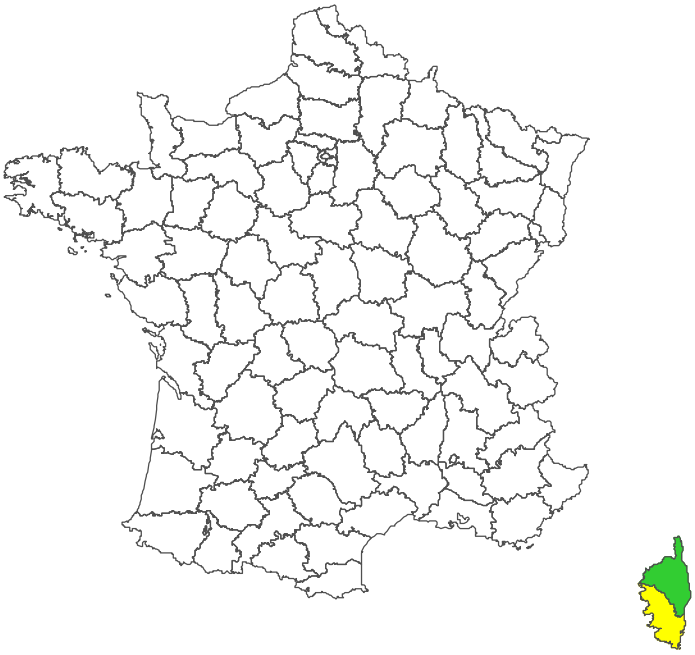
Evolution of the number of lactations for Manech Tete Rousse breed



2.6 - Breed CORSE

(French breed code: 046)

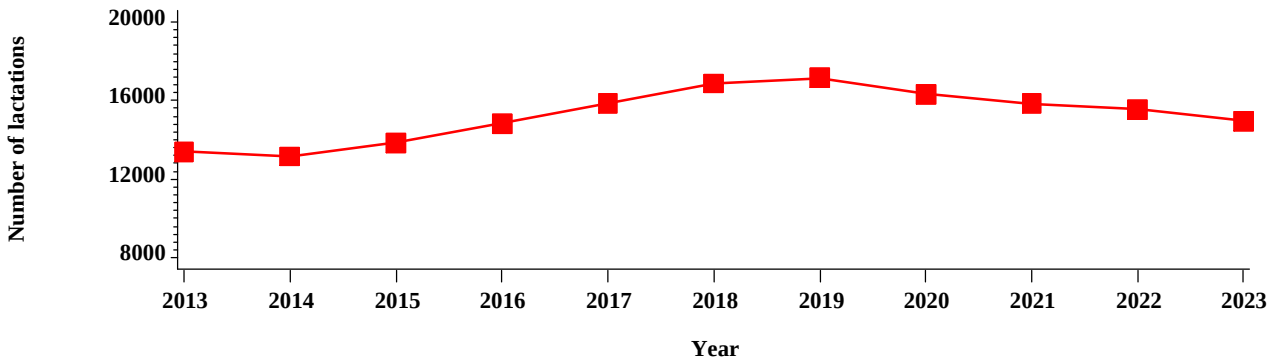
Geographical distribution of ewes with lactations of Corse breed



Distribution by parity for Corse breed

Parity	Number of ewes in lactation	Milk yield *liters*	Milk yield standard deviation *liters*	Lactation duration *days*	Lactation duration standard deviation *days*
1st lactation	3,047	103.7	*46.1*	147.0	*51*
2nd lactation	2,626	148.4	*62.5*	184.7	*58*
3rd lactation	2,277	168.0	*65.0*	201.1	*52*
4th lactation	1,780	173.0	*65.6*	208.2	*48*
5th lactation	1,389	167.2	*69.4*	206.3	*48*
6th lactation	1,147	158.6	*68.8*	205.0	*52*
7th lactation and over	1,828	138.6	*63.5*	196.1	*54*
Unknown	864	110.9	*56.5*	186.4	*53*
Overall total	**14,958**	**144.4**	**66.4**	**187.4**	**57**

Evolution of the number of lactations for Corse breed



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Résultats

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l'Institut de l'Élevage
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75595 Paris Cedex 12
www.idele.fr
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COLLECTION RESULTATS

Milk recording results

France - Year 2023

Abstract :

SHEEP: 739 flocks were submitted to Official Milk Recording in 2023, showing a significant decrease compared to the previous year. With 339,610 ewes, in 2023 the total number of ewes present at the lambing period is slightly decreasing by -1,371 ewes (-0,4%). At the same time the total number of ewes with lactation calculation decreased to 285,852 (-1,4%). This variation cancels the increase observed the previous year (+1,6%). Meanwhile, with 460 ewes, the average size of flock still progressed in 2023 (452 ewes in 2022 vs 447 ewes in 2021 and 441 ewes in 2020). In 2023, at the national level, with an average of 304.6 liters (+6.8 liters) in 172 days of lactation during the milking period the milk yield is increasing. This national average hides contrasting variations across breeds. Indeed, in 2023 while the Lacaune breed saw its production increase by 11 liters per lactation the production decreased for all other breeds: Manech Tête Rousse -0.9 liter, Basco Béarnaise -11.7 liters, Corse -8.9 liters et Manech Tête Noire -7.2 liters. A simplified milk recording, corresponding to the D recording method in the ICAR guidelines and not presented in this document, exists in addition to the Official Milk Recording AC design. It concerns commercial flocks out of the selection nucleus (while the Official Milk Recording is devoted only to breeders involved in the selection program). 1,110 flocks and 517,158 ewes present at the lambing period were submitted to D recording in 2023.

Contact :
gilles.thomas@idele.fr

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