

Landes de Bretagne and Belle Ile breeds - a wool project.

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Landes de Bretagne and Belle Ile, two local sheep breeds in Brittany.

In Brittany there are three local breeds of sheep, the Ouessant, that are probably the best known, the Landes de Bretagne and the Belle Ile (Figure 1). The fleeces of these breeds can vary in colour. In the actual population of the Landes de Bretagne sheep about 40% are coloured with a range from grey and light brown to a dark brown almost black (see Figure 2). The proportion of coloured sheep in the Belle Ile population tends to be less but the colours are similar.

The Landes de Bretagne and Belle Ile sheep are not large animals, for ewes the height at the shoulders is 50-60 cm for the Landes de Bretagne and 60 cm for the Belle Ile. In the 19th and early 20th centuries Landes de Bretagne sheep were common in the west of France. These sheep are hardy and can be raised on the open-range all the year. The Belle Ile breed originated in the 18th century by a cross between the local sheep in Brittany and sheep from Holland and were largely restricted to the Morbihan area of southern Brittany. They have the characteristic of being prolific (2 to 3 or more lambs per year). The populations of both of these breeds decreased in the middle of the 20th century to be almost extinct in the 1980's.

In the mid-1980's, due to an initiative taken by the Professors B. Denis and X. Malher of the Veterinary School in Nantes, and the technical support of the CRAPAL (Conservatoire Régional des Animaux des Pays de la Loire), a conservation programme was started for both of these breeds. From about 60 Landes de Bretagne sheep identified in 1986 the population attained nearly 2000 in 2013, The increase for the Belle Ile breed has been less important, possibly due to the difficulty of dealing with their high prolificity : 1988 – 17 animals; 2013 – 400 animals. At present these animals are raised by both professional (at least 22) and non-professional sheep breeders and can be found in several parks.

The sheep breeders association and a pilot wool project.

The association Deñved ar vro, (founded in 2004) federates the owners of Landes de Bretagne and Belle Ile sheep. In 2013 there were about 90 members, about half of all the owners of these breeds, but a majority of the professional sheep breeders. For most of the professionals the major source of income is the meat market. In addition, due to the hardy nature of the Landes de Bretagne sheep they are also used for landscape conservation in natural parks or gardens and for the upkeep of private gardens. The Belle Ile ewes can be milked to make dairy products.

Historically, Brittany was not a region dedicated to large scale sheep farming and most were probably raised for the local market. Hence, little appears to have been done to select for wool quality or specific colours although coloured sheep may have been maintained so as to economise on dyeing the wool. In any event, at the beginning of the 21st century the wool was not being used locally and the non-white fleece was more of a financial burden than an asset.

In 2010 the association Deñved ar vro decided to conduct a pilot project to test the possibility of commercialising the wool from these sheep; this idea had been in discussion for several years. The first event in this project was the presence of the Landes de Bretagne breed in the exhibition "Wools of Europe" inaugurated in Rambouillet in May 2010. The next month the association invited N. Singeot to teach a one day course on the characteristics of wool fibres. After which fleeces were collected from several farms, skirted and sorted before being sent to be scoured (Laurent Laine, Saugues, France) and spun into yarn (Filature Terrade, Felletin, France). In 2011 it was decided test what the maximum possible tonnage could be so the collect was made from as

many farms as possible (see table below).

During 2012 it was realised that this wool project showed certain possibilities. The association then decided that the continued commercialisation should be done by an out-side company so as not to diverge from the main objectives of the association which are to promote and assist sheep breeding as an agricultural activity. It was to continue and further build on the pilot project that the "Toisons Bretonnes" company was set-up in June 2012. This company pays the sheep breeders association for a licence to use the trade name for the wool "*Gloan Breiz – Laine de Bretagne – Brittany Wool*".

The table below gives information on the production over 4 years.

Wool production for commercialisation 2010 to 2013.					
	Year	Dispatched for scouring	Production		Observations
			Yarn	Carded	
Deñved ar vro	2010	335 kg	153 kg	39 kg	Only white and mixed all colours
	2011	1134 kg	544 kg	67 kg	Light and dark colour fleeces separated. White wool dyed in 9 colours
Les Toisons Bretonnes	2012	668 kg	350 kg	-	Addition of 5 new colours of dyed wool
	2013	585 kg of which 162 kg for mattresses	264 kg	15 kg	Light and dark colour fleeces separated, mix of dark and white wool to make shades of grey.

Les Toisons Bretonnes – from sheep to clothes with wool from Brittany.

The work of this company starts at the farms on shearing day. While still warm the fleeces are skirted and sorted according to colour and quality, only the best are retained for yarn or carded wool. A second lot may be retained for making mattresses. Sorting the fleeces according to quality is a very important step. In these breeds the quality of the fleece is quite variable with some sheep having very hairy and course fleeces whereas for others the wool will be softer with a staple length of at least 10 cm. The quality of the wool is not directly related to colour but to some extent it is related to the origin (farm). The fibre heterogeneity is illustrated by the analyses of random samples taken in 2011. For the Landes de Bretagne the micron count for the white wool was $34 \pm 9 \mu\text{m}$ (n=8) and for the coloured fibres $35 \pm 11 \mu\text{m}$ (n= 4). For one sample of Belle Ile fibre the micron count was $33 \pm 9 \mu\text{m}$. This means that by the rigorous selection of the fleeces now operated we should tend towards a micron count of 30 μm or less.

The processing of the wool uses the original circuit, scouring at Laurent Laine (Saugues) and the spinning by the Terrade spinning mill (Felletin). A part of the white wool is dyed at the Terrade spinning mill with the colours chosen by us and with dyes that conform to the Oekotex 100 standard. Another part of the white wool is dyed with natural products, by us or by "Couleurs Sauvage" (56 Peillac). The yarn is commercialised in three series: "Origine" -the original colours of the wool (white, grey, dark brown or black) ; "Teinte" - the wool dyed at the spinning mill (23 colours) ; and "Nature" - wool dyed with natural products. We also carry carded wool in the original colours of white, 3 shades of grey and dark brown or black.

In addition to commercialising the wool we are also weavers. On our manual looms we make woollen cloth that is used to make a number of different garments. When required we work

with a local stylist. The knitted clothes are made for us by local self-employed persons. Due to the characteristics of the wool the garments are for top wear : ponchos, caps, jumpers, waistcoats, cardigans or shawls (Figure 3). Furthermore, to promote this wool, and wool as a textile fibre in general, we participate in exhibitions and fairs with hands-on workshops of spinning and weaving for children and adults and information posters about wool.

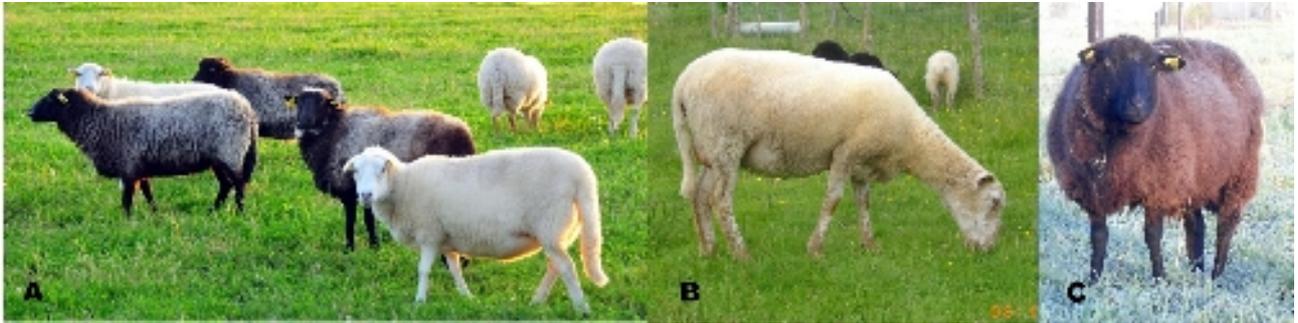


Figure 1 : Sheep of the Lande de Bretagne (A) and Belle Ile (B and C) breeds. The most notable differences between the Lande de Bretagne and Belle Ile sheep is their size and tail length. The Belle Ile are higher and have shorter tails.



Figure2 : Samples of Lande de Bretagne wool showing the range of colours. The undercoat of adults and the lambs wool can be much darker.



Figure 3. A selection of the products made by Les Toisons Bretonnes. Left, details of some of the cloth woven with wool of original colour or mixed dyed and un-dyed. **A** : cap, cloth woven with mixed dyed and un-dyed wool. **B** : un-dyed wool, Origin series. **C** : Ruana, cloth woven in black and white two tone wool. **D** : shawl. **E** : knitted jacket in un-dyed wool. **F** : waistcoat in cloth woven with dark grey wool, Origin series, the decorative band is dyed wool.