

# THE EFFECTS OF BLUE TONGUE IN A SHETLAND FLOCK IN THE NETHERLANDS

A personal report from Betty Stickers

It is becoming clear that there is hardly any farm small or big in the Netherlands that is not suffering from Blue Tongue Variant 8 (BTV8). At this moment there are about 2000 official registered cases in our country. In August the LTO, the Dutch Farmers Union, rang the alarm-bell in a letter to the Minister of Agriculture, Gerda Verburg. *"A disaster is unfolding in the sheep sector, but at the LNV (Ministry of Agriculture, Nature & Food Quality) there are people who are not fully grasping the gravity of this development", says Van Beek.*

*"Sheep are falling ill in bunches. In the entire southern Netherlands, sheep farms that were not affected last year [2006] are now stricken. It will not surprise me if it becomes evident that not a single holding in Brabant and Limburg will remain unaffected by bluetongue."*

And it just got worse. At this moment there are 14.000 affected registered farms in Europe.

Some flocks are hardly affected whilst others have lost up to 1/3 of their animals. In the dairy industry milk production is said to have decreased by 25%. Even goats are becoming infected which is very rare. And just recently BTV1 entered Spain.

## Symptoms and treatment

Here at Oijen we have a flock of 47 adult Shetland sheep and 22 lambs. 70% of our flock was affected since the middle of July, resulting in 3 dead lambs and one breeding ram with a chronic inflamed coronet. (see photo). It seems that the primitive breeds around us are more affected than the Texel, Blue du Main or Swifter breed, but in other parts of our country it's the Texel breed that is suffering very badly.



Photo Wim Wisman

When we spot a sick animal we immediately treat them with an anti-inflammatory and painkiller. This also reduces the fever and it suppresses the secondary inflammations such as pneumonia, enteritis and inflamed coronets. Normally the sheep recover but can be sick again within 4-5 days or even longer with secondary inflammations. We then move to an antibiotic. If the mucosa is swollen we use corticosteroids or you can try to put salt in the muzzle. Some sheep are so sick you think they will be lost, but once over a certain point they recover very quickly, on the other hand supposedly much fitter animals can suddenly die. We also noticed that all affected animals have a changed voice and we had at least 5 different symptoms in our flock.

Sometimes sheep choke on sticky mucus and you just leave them and don't force them to eat. If we notice inflamed mucosa we give them soft food like beet pulp.

Some breeders noticed that sheep started to eat chickweed and plantain when suffering from inflamed mucosa.



photo b.stickers

We look for a stiff gait with swollen coronets, not been able to get up, salivating at the mouth, fever, sudden weight loss, a swollen mouth and eyes scouring (although the vet keeps telling us that this is not a sign, but 50% of the animals are showing this).

**The stiff gait, like they are walking on eggs, and animals that seem distracted are the very first signs something is wrong.**

It is important to inform your vet at the first signs to rule out another disease



Photo Betty Stickers

## Situation 2006-2007

In 2006 there were 460 infected farms in the Netherlands, in Europe 2122. In 2007 to this date 2000 registered farms in the Netherlands, an increase of 335%. In Europe 14.000 registered farms an increase of 559%.

## BTV8

There are 24 different types of BT and the variant in northern Europe is BTV-8.

In Southern Europe types BTV 1-2-4-9-16 are active. Every type is 'behaving' differently. Until now BTV8 was only found in Pakistan, India, Malaysia, the Republic of Dominica and in the South of Africa. They still have no idea how this type travelled all the way to the north of Europe. This type can stay unnoticed or cause severe problems in sheep. There is still a lot unknown and to learn about it. BTV8 is a 'flying disease' and the virus is spread by *Culicoides Dewulfi*.

The Dewulfi is a family of the *Culicoides Obsoletus*. Perhaps surprisingly only 1% of the Dewulfi is carrier of BTV8! (information CIDC) The *Culicoides* is active during day and night can fly 1-2 kilometres either way on a day. Caught in the wind they can travel hundreds of kilometres.

Last year Central Institute for Animal Disease Control (CIDC-Lelystad), Part of the Wageningen University and Research Centre, developed a fast and reliable PCR (Polymerase Chain Reaction) test to demonstrate the virus.

***Incubation time is 5-20 days and it takes up to 2 weeks for the virus to replicate in the midge to reach the level to infect an animal.***

The virus can survive for over 60 days after infection in red blood cells. (in cattle longer than sheep).

BT is only transmitted by the *Culicoides* and not by direct contact with animals. Once the animals are infected and recovered they are resistant and will stay so for a long period. The milk contains high levels of antibodies and lambs and calves are protected for a period.

*It is a very far-reaching disease, for large scale sheep breeders it's a matter of cost-benefit analysis if they are to treat animals intensively, for us having only about 70 sheep it's a hobby and a challenge to save as many animals as possible. There is absolutely nothing you can do to protect your animals.*

*One of the most significant factors for special sheep breeds is the potential loss of important animals and bloodlines. And another interesting observation is that BTV8 and FMD show a resemblance in clinical symptoms.*

## Vaccination

Our minister of Agriculture, Gerda Verburg, is now supported by Germany, Belgium and France to start the discussion on vaccination. General thought is that there will be a vaccine Spring 2008.

According to Dr. Paul Suttmoller, chair of the Animal Health and Welfare Committee of the European Livestock Association, the disease is now endemic and the only way to eradicate the disease is to start vaccination.

LTO expects that there will be no significant trade problems in the case of voluntary vaccination.

However, in the case of compulsory vaccination of all ruminants in the afflicted countries, this may be quite a different matter. They will await a life study by the University of Wageningen for careful consideration and consultation between LTO together with the trade and industry.



Photo: Simon Carpenter,  
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