

Bluetongue in the Federal Republic of Germany

final report



SCOFCAH, Brussels, 11 - 12 January 2012

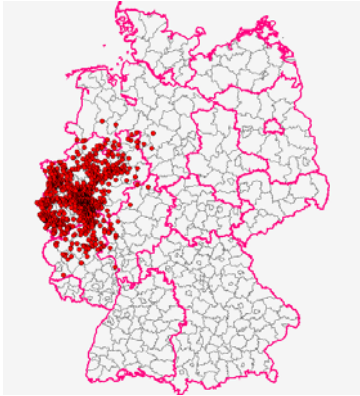
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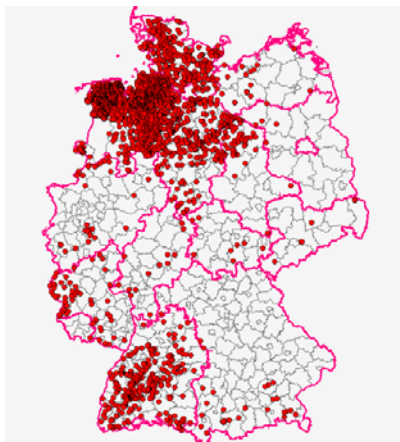
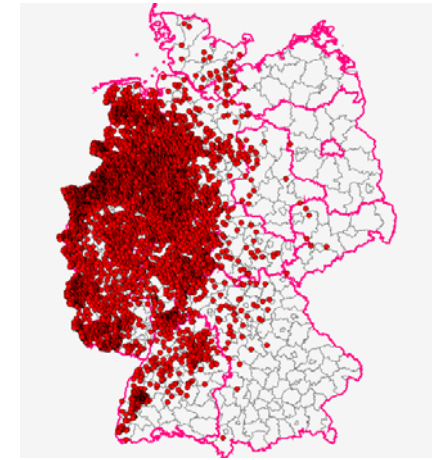
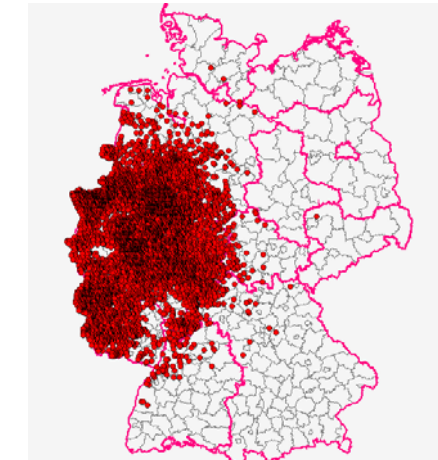
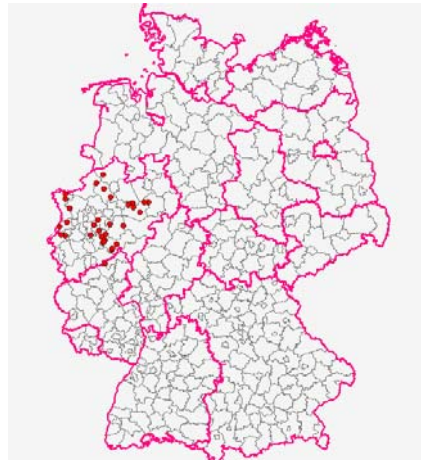
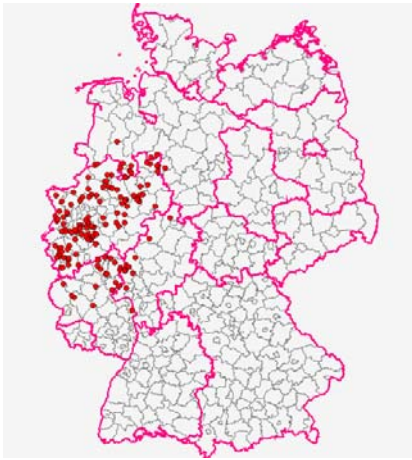
1. Epidemiological situation

(BTV between 2006 and 2011)

2006:
since 21.08.



2007 – first to fourth quarter



2008



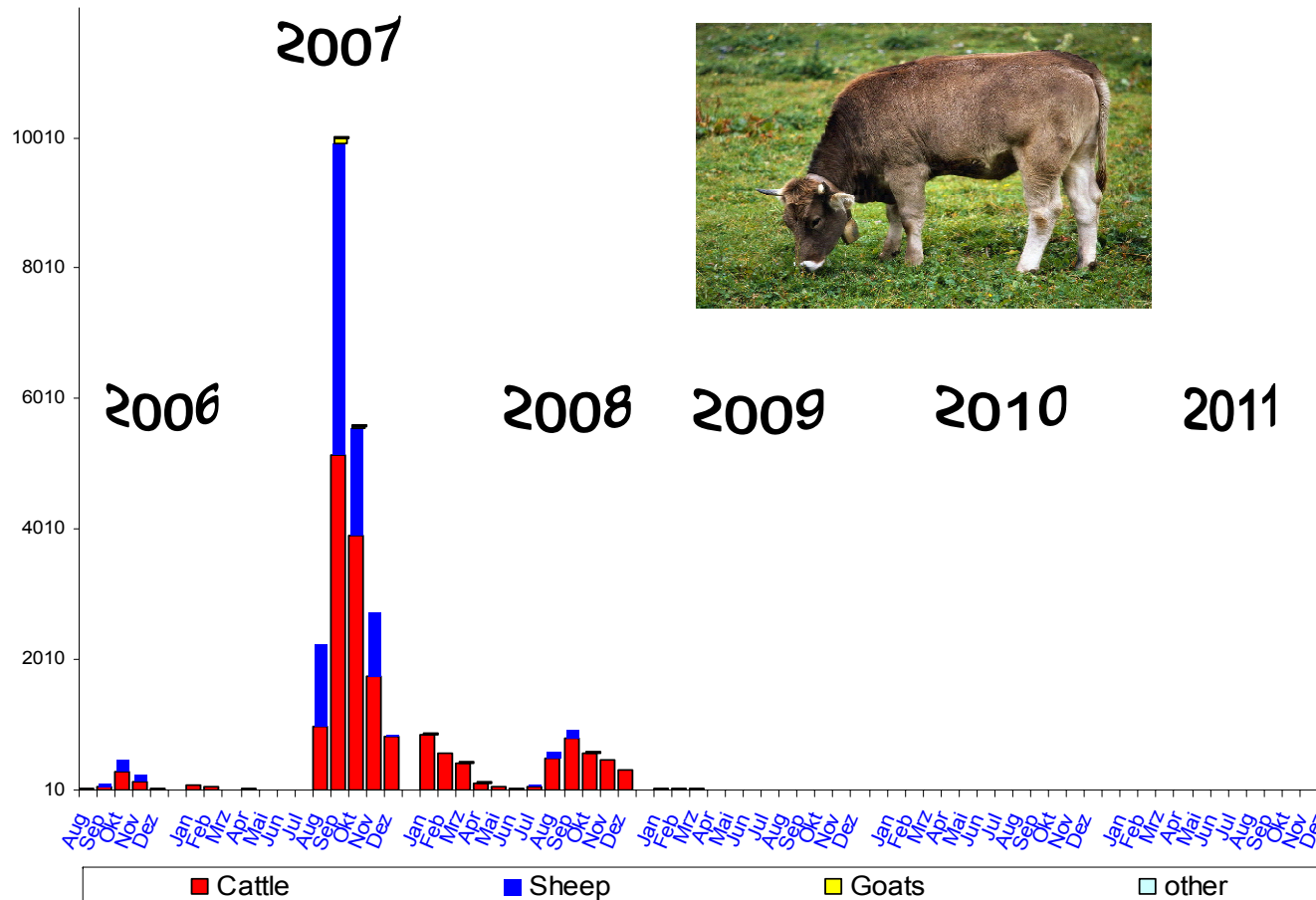
2009

last case:
17.11.

2010 and 2011:
no cases

development of BTV-8-infections 2006 - 2011

(as of 10.01.2012)



2. Vaccination against BTV-8

only inactivated vaccines used

2008 and 2009: mandatory for cattle, sheep and goats

(exceptions under certain circumstances following
official authorisation and under supervision)

voluntary for farmed game

since 01.01.2010: voluntary vaccination for cattle, sheep, goats and
farmed game

3.1 Monitoring – Bovine Methods for BTV-Freedom

COM-Regulation (EC) No 1266/2007
(Art. 6 (2) and Annex I No 1.3 and 1.1.2.2)

Objective: substantiated information demonstrating the absence of BTV-circulation in an epidemiological relevant area during a period of two years

means:

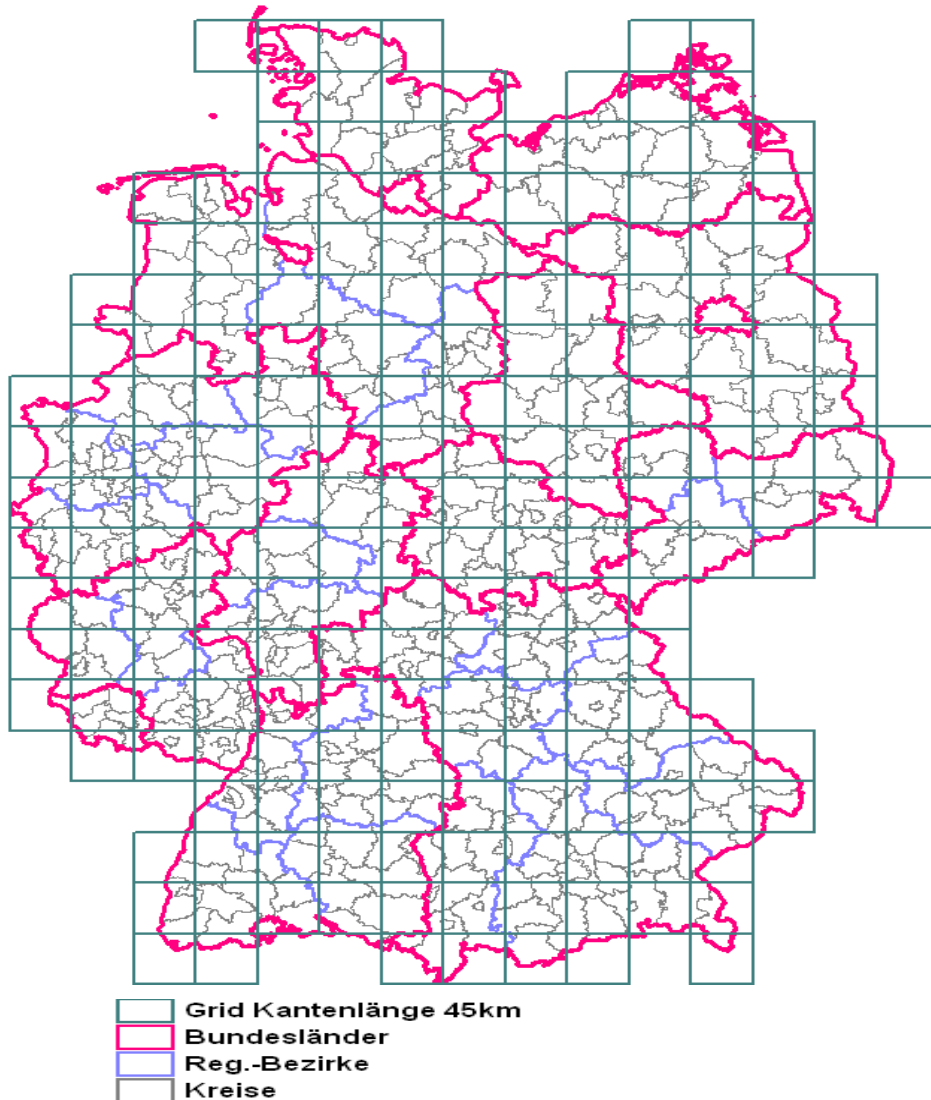
- early detection of circulation of BTV,
- detection of introduction of new bluetongue serotypes and demonstrate the absence of certain bluetongue serotypes,
- demonstrate of the absence of bluetongue virus circulation.

-sample size:

prevalence of 10% with 95% confidence in the susceptible species population of that epidemiological relevant area if mass vaccination has been implemented

3.1 Monitoring – Bovine

Epidemiological relevant areas (source: FLI)



one epidemiological relevant area (gE): around 2.000 km²

29 samples/gE

→ *FLI-recommendation:*

- at least 5.200 samples in 2010
- at least 5.200 samples in 2011,
- preferably non-vaccinated animals.

Tests have been carried out in laboratories of *the Federal States*.

3.1 Monitoring – Bovine

Results 2010 (all ages, non-vacc./vacc. animals)

57.857 samples	ELISA-tests	PCR-tests
<i>Results</i>	17.126	46.797
negative	88,7%	99,9%
positive	7,8%	0
false positive	1%	0
cannot be analysed	2,5%	0,04%

•**57.857 samples:** 19.881 Monitoring and 37.976 for trade purposes.

•6.066 samples have been tested with ELISA and PCR.

•**All positive ELISA-tests** (vaccinated animals/colostral antibody) and false positive ELISA-tests were retested with PCR. **All tests were negative.**

3.1 Monitoring – Bovine

Results 2011 (all ages, non-vacc./vacc. animals)

43.939 samples	ELISA-tests	PCR-tests
<i>Results</i>	13.135	35.102
negative	92,4%	99,9%
positive	6,8%	0,0%
false positive	0,8%	0,05%
cannot be analysed	0,0%	0,05%

•**43.939 samples:** 9.997 Monitoring and 33.942 Trade purposes.

•4.298 samples have been tested with ELISA and PCR.

•**All positive ELISA-tests** (vaccinated animals/colostral antibody) and false positive ELISA-tests were retested with PCR.
All tests were negative.

3.1 Monitoring – Bovine

Results – passive monitoring

(1266/2007: Annex I No 1.1.1)

Investigations for BT due to clinical suspicion:

2010 and 2011: 180 samples (out of all)

Only one test: ELISA-pos., PCR-neg.

3.2 Additional monitoring – sheep and goats

Results 2010 and 2011

1.896 samples	ELISA-tests	PCR-tests
<i>Results</i>	904	1.544
negative	75%	99,3%
positive	24,2%	0%
false positive	2,8%	0%
cannot be analysed	0	0,7%

• 1.896 samples: 1.191 Monitoring and 705 for trade purposes.

• 552 samples have been tested with ELISA and PCR.

• **All positive ELISA-tests** and false positive ELISA-tests have been retested with PCR. **All tests were negative.**

3.3 Additional monitoring - wild population



fallow deer (*Dama dama*), moufflon (*Ovis orient. musimon*), roe deer (*Capreolus capreolus*), red deer (*Cervus elaphus*), cervidae (no specific species)

(fotos: Wikipedia)

Performed in the following hunting seasons:

2008/2009 (1 Federal State)

2009/2010 (10 Federal States)

2010/2011 (5 Federal States)

2011/2012 (3 Federal States)

3.3 Additional monitoring – wild population

Results 2008 - 2011

Hunting season/ 3.023 samples	2.787 ELISA-tests		1.796 PCR-tests	
	neg.	pos.	neg.	pos.
2008/2009 <i>30 samples</i>	100%	0%	100%	0%
2009/2010 <i>2.501 samples</i>	96,5%	3,3%	99,8%	0%
2010/2011 <i>179 samples</i>	87,7%	10,7%	100%	0%
2011/2012 <i>313 samples</i>	95,5%	4,1%*	100%	0%
<i>false positive or cannot be analysed</i>	<i>other %</i>		0,2%	

•1.560 samples have been tested with ELISA and PCR.

•**ELISA-positive:**

Predominantly: **Red deer**

season 2009/2010: 2%

season 2010/2011: 10,7%

*Cervidae (no specific species)

4. Summary

Monitoring 2010 and 2011

101.796 samples of bovine:

- 30.261 ELISA-tests
- 81.899 PCR-tests

covering the whole territory of Germany

in addition:

- 1.896 samples of sheep and goats (904 ELISA, 1.544 PCR-tests)
- 3.023 samples of wild population (2.787 ELISA, 1.796 PCR-tests)

→ **only a few tests ELISA-pos.; retested with PCR: neg.**

all PCR-tests: negative

→ **no evidence for BT-virus circulation**

5. Conclusion

Germany requests the free status of bluetongue from xy.01.2012 (to be agreed with BE, NL, LU) and will lift the restriction zone.

Thank you for your attention!