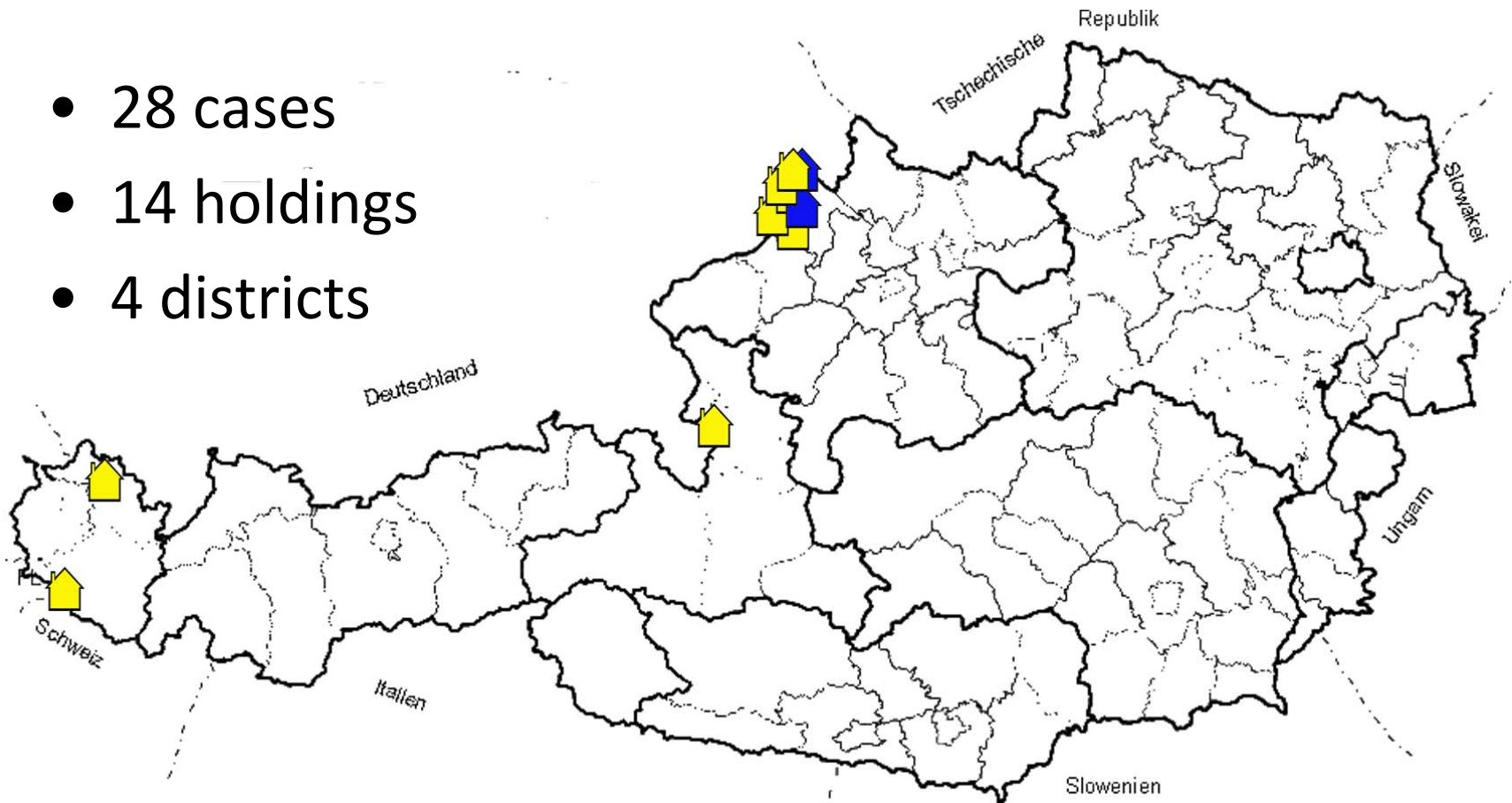


Eradication of BTV-8 in Austria and lifting Restriction Zones



Cases

- 28 cases
- 14 holdings
- 4 districts



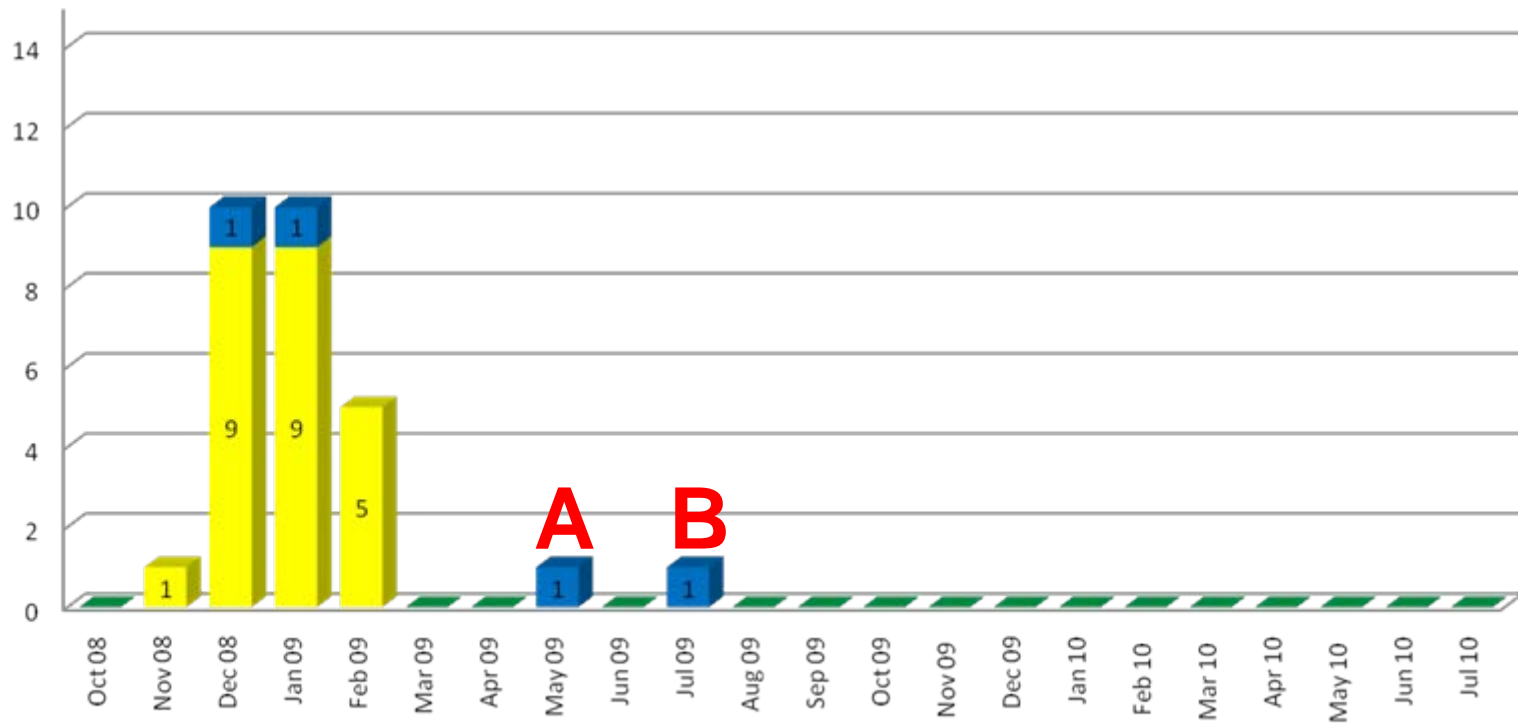
 holding with Ag + Ab pos. cows

 holding with Ab pos. cows

Cases

BT Cases Austria

■ PCR & ELISA positive
 ■ only ELISA positive
 ■ no case

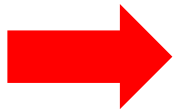


all cases detected within surveillance programme;
 last detection of Bluetongue virus in Austria: 25. February 2009 (ADNS 2009/10)

Cases

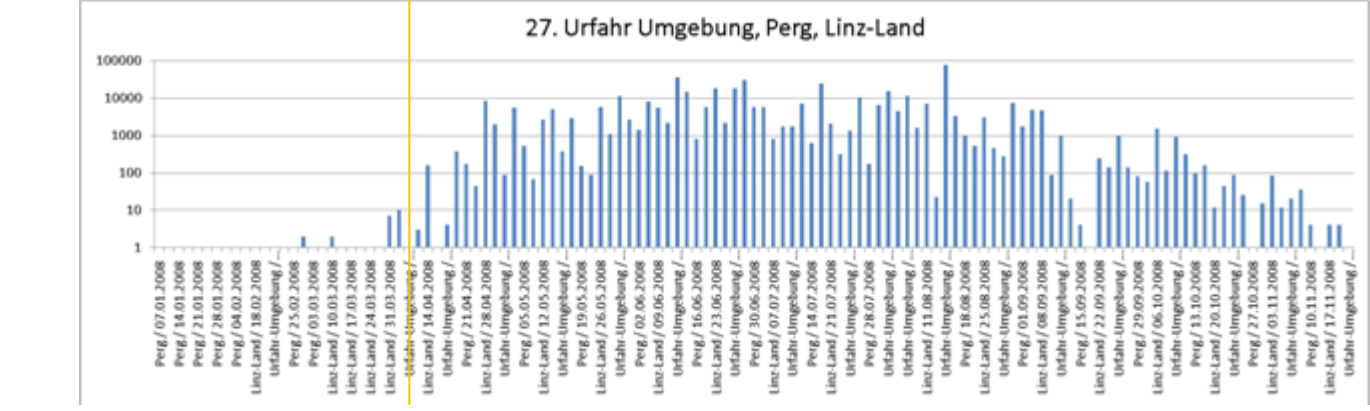
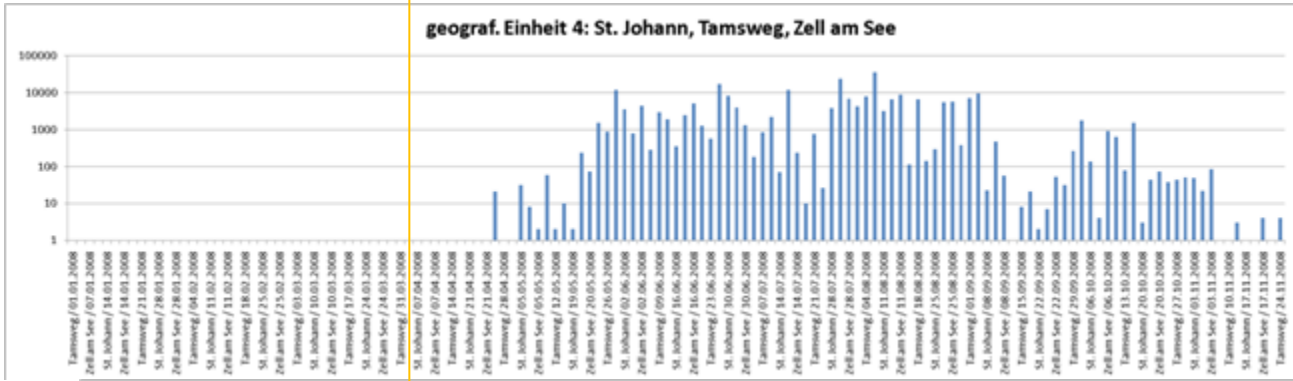
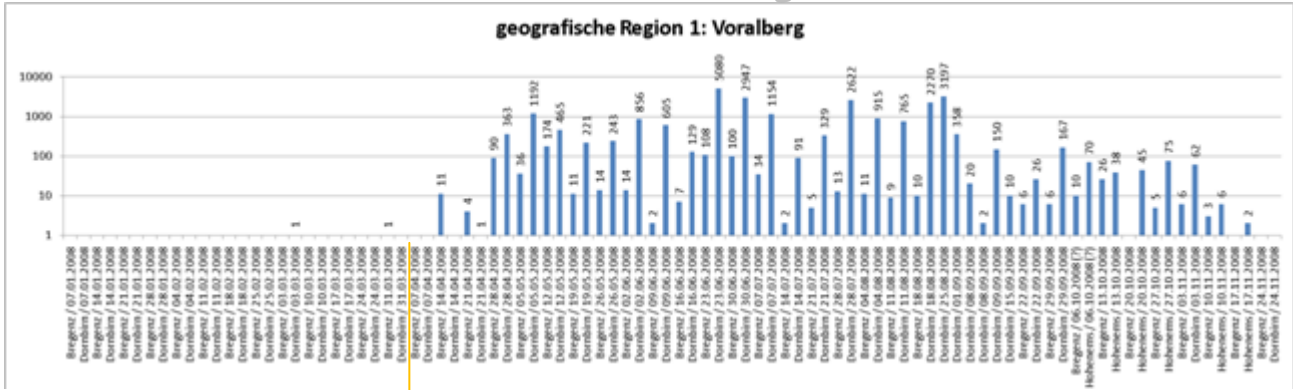
case **A**: cattle *18.3.2008, detection within surveillance programme;
ELISA positive, but no virus detection; no clinical signs;
ADNS Nr. 2009/11

case **B**: cattle *13.4.2008, detection within surveillance programme;
ELISA positive, but no virus detection; no clinical signs;
ADNS Nr. 2009/12



positive ELISA (antibody test) but negative RT-PCR (virus detection) indicate natural infection months prior to test

Vector Activity



results of the
culicoides monitoring
programme 2008
3 sample regions in
BT affected areas

➔ period of vector
activity excludes
virus circulation
during winter

➔ virus circulation in
Austria during
autumn 2008

Vaccination

target: compulsory vaccination of cattle, sheep and goats

vaccine: BTV PUR AISap8 (Merial)

vaccination period:



start: Jul. 2009

Nov. 2009

Dec. 2009

end: Mar. 2010, voluntary vaccination ongoing

immunisation coverage:



3.095.455

77,4 %



403.345

81,3 %

Surveillance

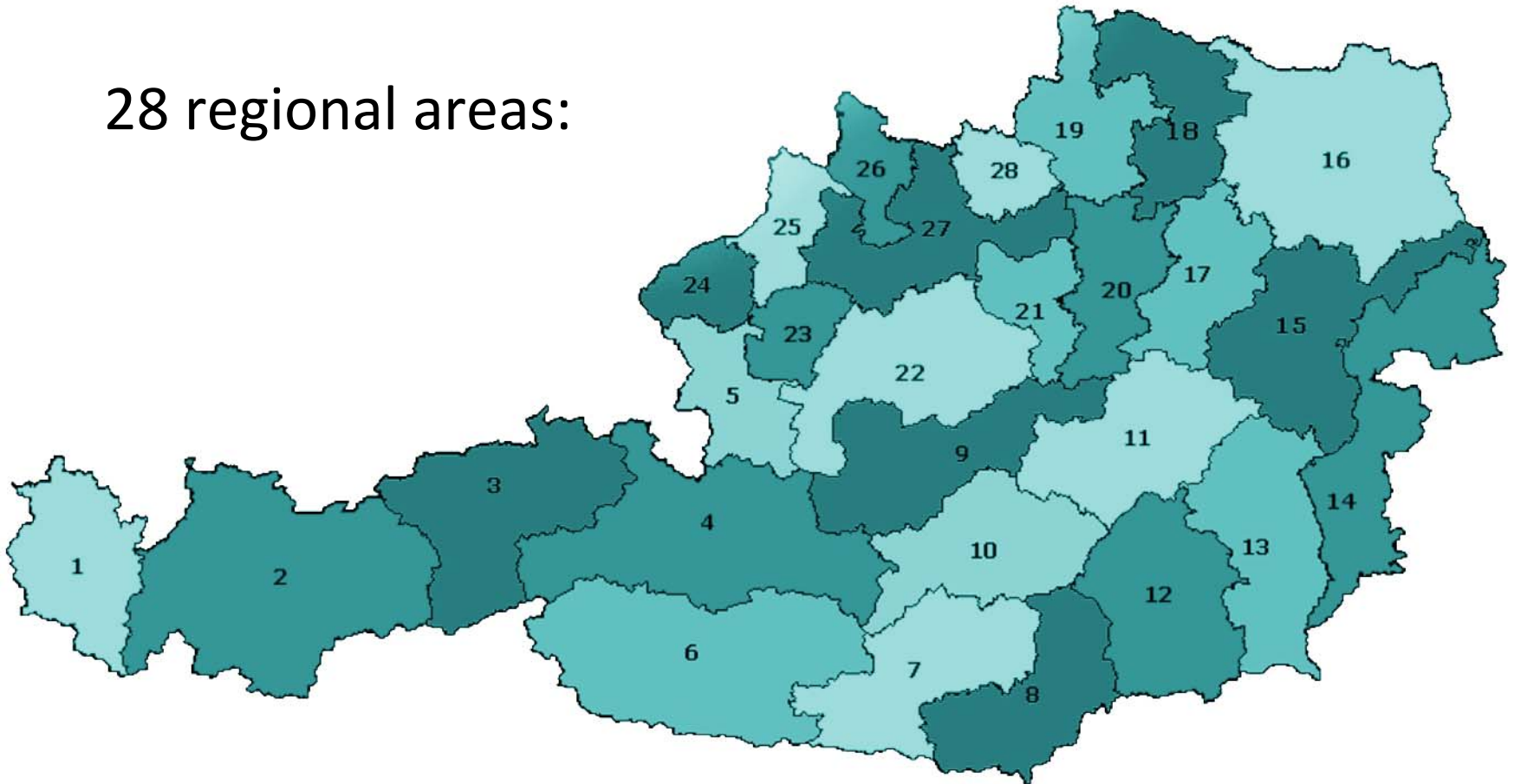
- according to Commission Regulation (EC) No 1266/2007
- year round programme
- consists of passive surveillance, active surveillance and routine tests
- 28 defined regional areas
- objectives:
 - early detection of circulation of BTV 8
 - detection of introduction of new bluetongue serotypes
 - demonstrate the absence of certain bluetongue serotypes
 - demonstrate of the absence of bluetongue virus circulation

Surveillance

passive	active – serological virological surveys	routine
<p>carried out in Austria since 1995;</p> <p>all clinical symptoms that are suggestive of BT have to be notified to CCA and further investigations have to be done;</p> <p>since occurrence of BT in Europa vigilance was growing;</p> <p>~60 clinical suspicions since march 2008 – all turned out negative</p>	<p>target:</p> <ul style="list-style-type: none"> - nonvaccinated cattle - older than 6 months - at least since 14 d in the regional area where sample is taken - maximum 10 cattle from the same farm / month - evenly spread over whole regional area <p>if there is no sufficient number of non vaccinated animals available → virological tests were allowed to compensate, the same rules apply as listed above*</p> <p><i>* results are not included in statistics concerning Freedom from Disease</i></p>	<p>before demarcation of BT restriction zones all samples of susceptible animals had to be tested also for BT in NRL</p> <p>tests of animals to be exported</p>

Active Surveillance

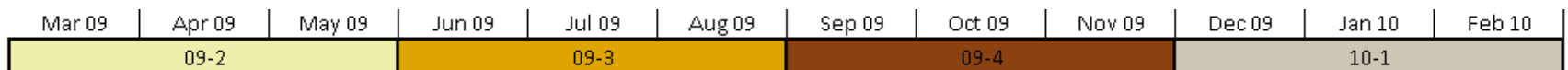
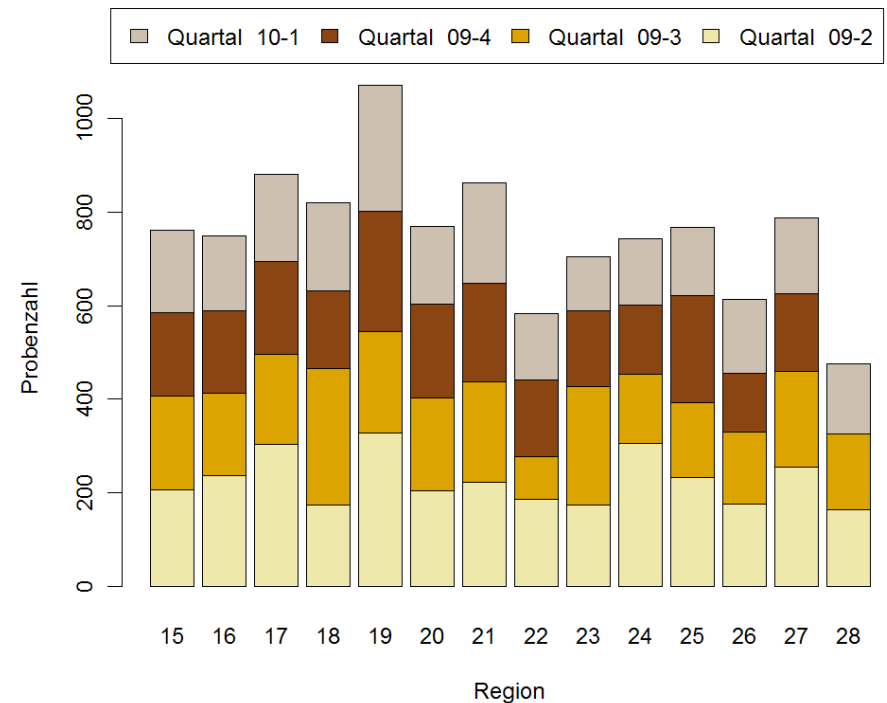
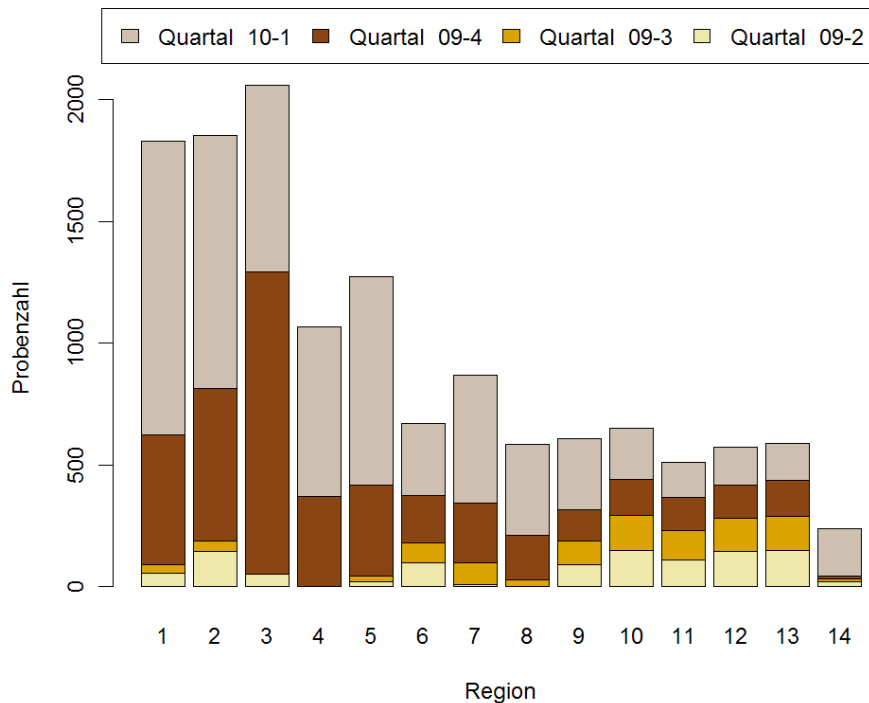
28 regional areas:



Active Surveillance

total number of BT tests

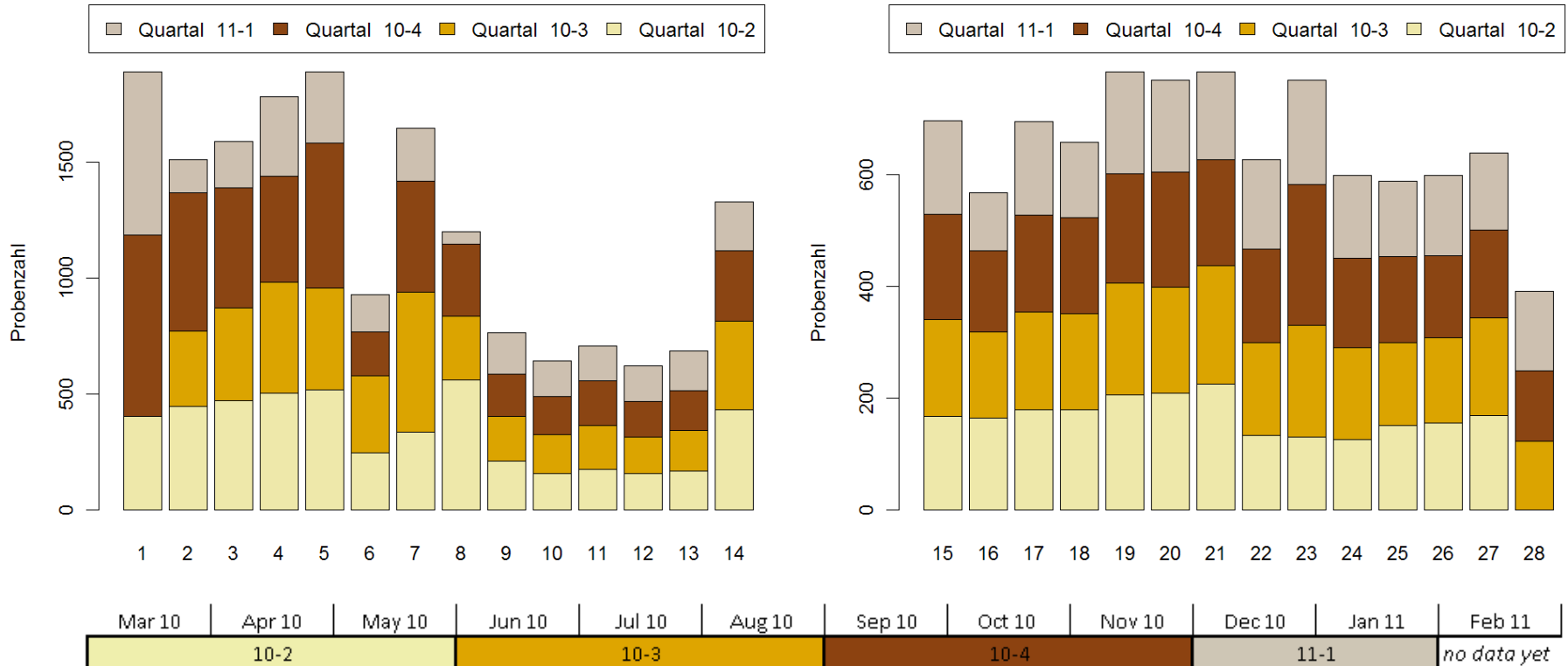
carried out between **01.03.2009** and **01.03.2010** per regional area



Active Surveillance

total number of BT tests

carried out between **01.03.2010** and **01.03.2011** per regional area



Surveillance

serological tests	
2008	46.500
2009	35.314
2010	32.209
total	114.023

virological tests	
2008	8.338
2009	25.226
2010	39.471
total	73.035

total number of BT test carried out since 1.01.2008: **187.058**

total outbreaks of BT detected: **28**

Freedom from Disease

Commission Regulation (EC) No 1266/2007

“Monitoring in order to provide the Commission with substantiated information demonstrating the absence of bluetongue virus circulation in an epidemiological relevant geographical area during a period of two years”

using (Annex I , 1.3.)

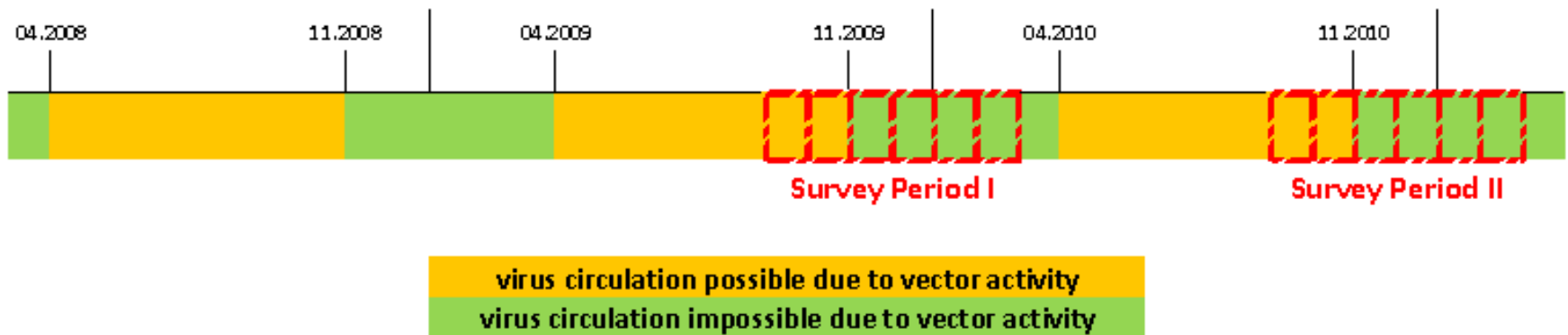
- at least one, or a combination of, serological monitoring with sentinel animals, serological/virological surveys and targeted risk-based monitoring, as set out in points 1.1.2.1, 1.1.2.2 and 1.1.2.3;

*- [...] sample size has been calculated to detect a prevalence of **10 %** with 95 % confidence in the susceptible species population of that epidemiologically relevant geographical area if mass vaccination has been implemented.*

- [...] if there is evidence that the annual rate of seroconversion in the epidemiologically relevant vaccinated geographical area is lower than 10 % the sample size has to be calculated to detect the lower estimated prevalence.

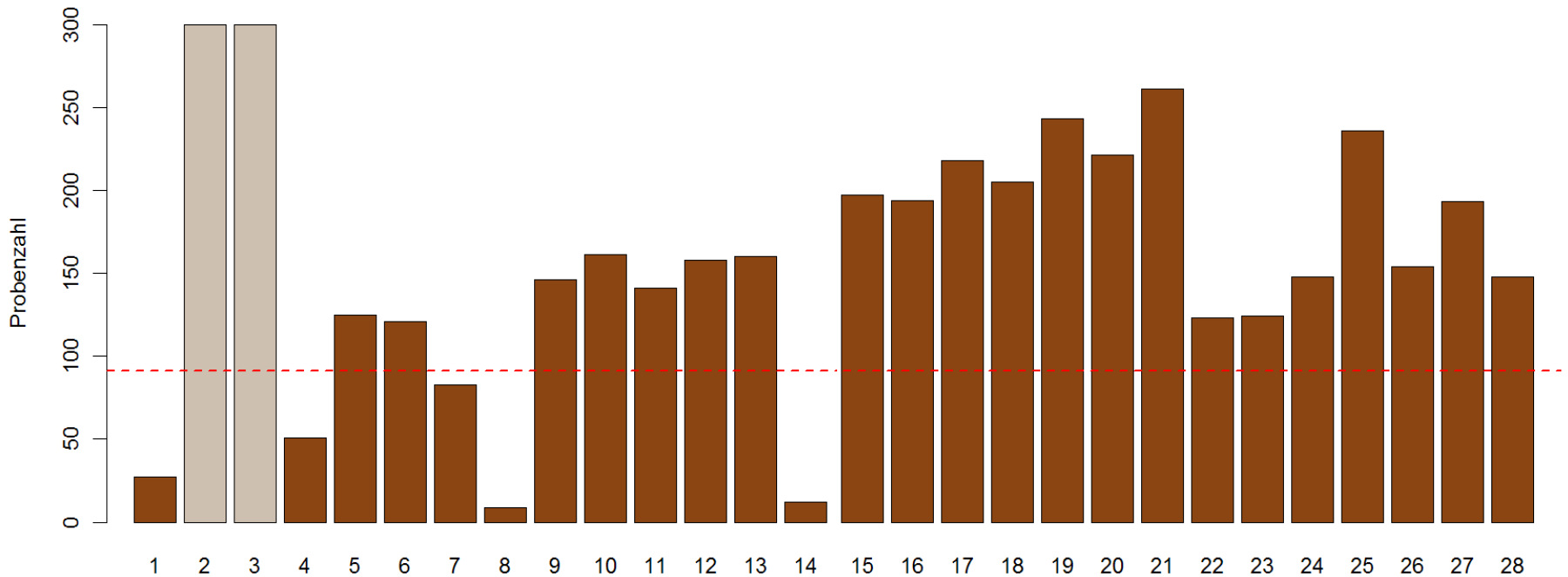
Freedom from Disease

- ➔ based on results of the active surveillance programme – excluding tests of vaccinated animals
- ➔ two surveillance periods in the period of the year when infection or seroconversion is more likely to be detected (= September to February)
- ➔ Prevalence of BT in Austria (3.28%) was lower than assumed in the Regulation (10%). Therefore the required sample size had to be calculated higher: 91 tests of animals per survey period per region prove with 95 % confidence that prevalence of BT, if present, would be below **3,28 %**¹



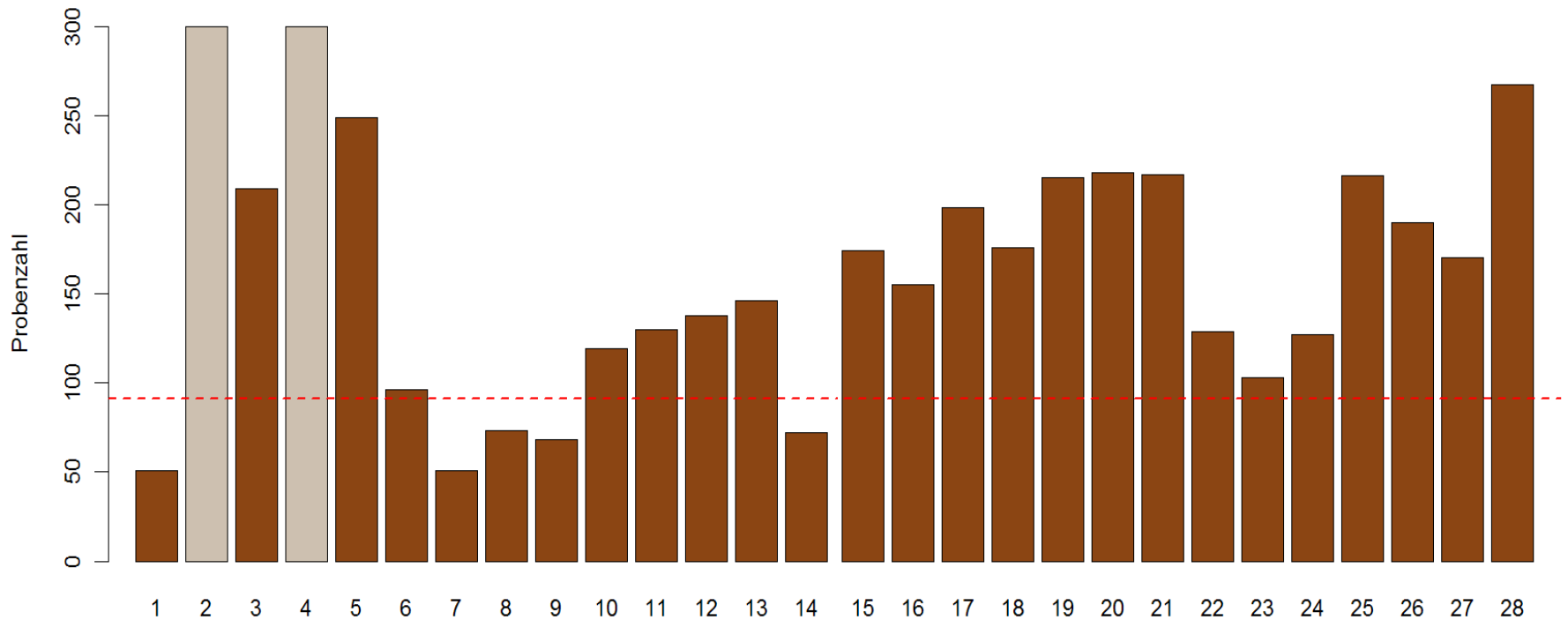
¹ Cameron, A.R., Baldock, F.C., 1998 A new probability formula for surveys to substantiate freedom from disease. Prev. Vet. Med. 34, 1-17.

Freedom from Disease



survey period I - results per region

Freedom from Disease



survey period II - results per region

Conclusion

- no virus circulation since autumn 2008 proved by results of surveillance programme
 - intensive surveillance was carried out in accordance with Commission Regulation 1266/2007 proving with 95 % confidence that prevalence of BT, if present, would be below 3,28 % in the susceptible species population
- Austria intends to lift the restriction Zones and to regain the status „free from Bluetongue Disease“ by 3rd of March 2011**