

# State Food and Veterinary Service of the Republic of Lithuania



## Implementation of the rabies eradication program in Lithuania 2014

# **Oral rabies vaccination of wild animals**

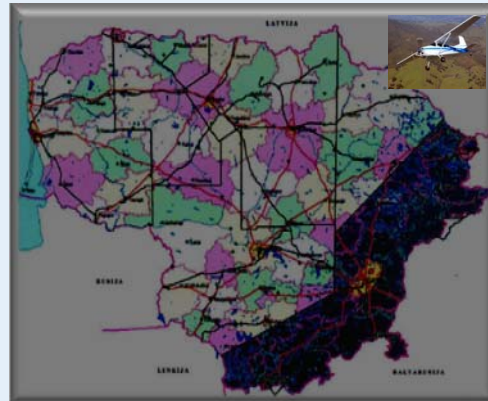
- **Oral rabies vaccination performed twice a year;**
- **Optimal number of baits was not less than 20 per sq. km;**
- **Vaccine distributed in parallel lines separated by 500 m at the border with Belarus and in other territory by 1000 m;**
- **Rabies eradication campaign will be performed two years after the year when no cases of rabies was detected.**

# Vaccines

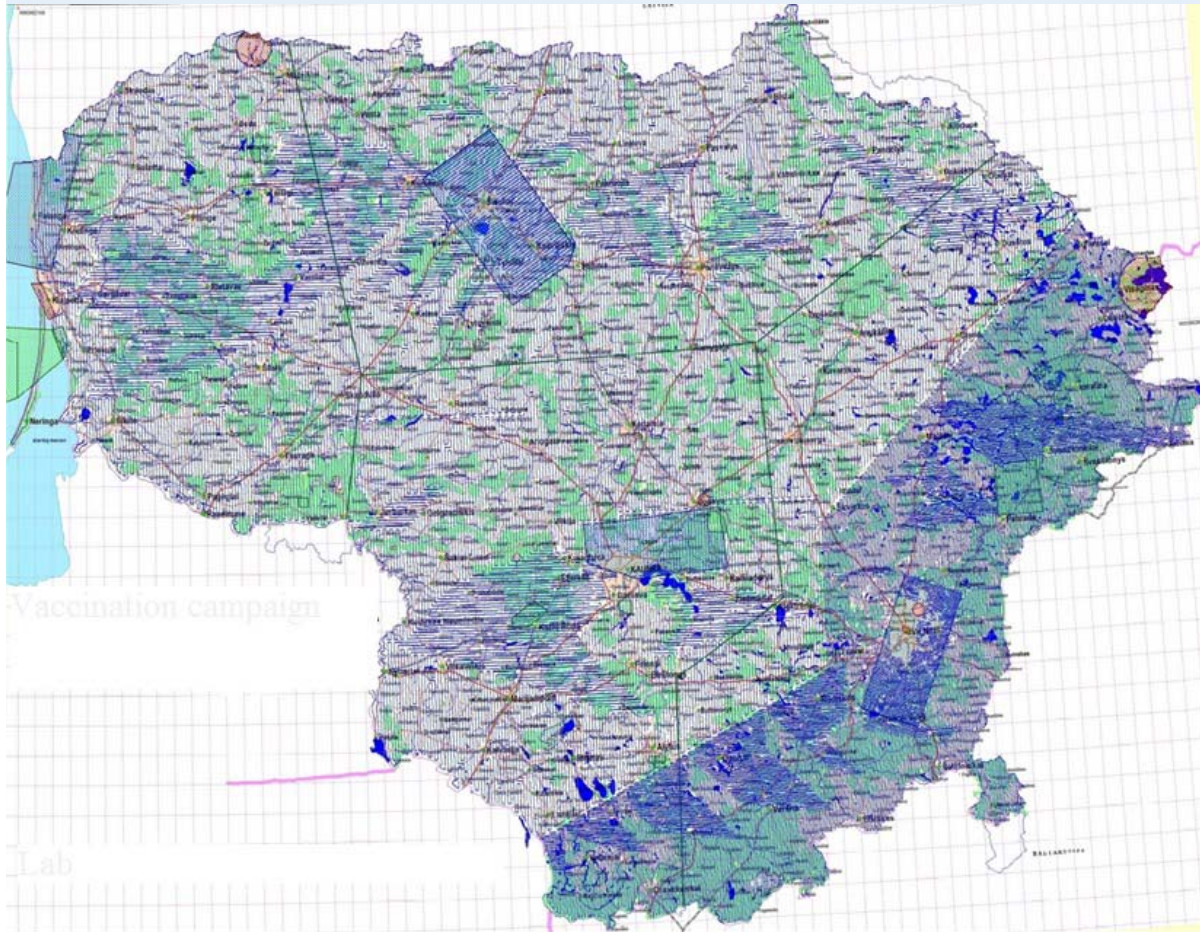


□ **FUCHSORAL** vaccine (2011-2012)

□ **LYSVULPEN** vaccine since 2013.



# Oral rabies vaccination of wildlife



➤ **Territory of 63 000 sq/km**

➤ **1.300.000 baits per campaign**

➤ **2.600.000 baits per year**

# Evaluation of the oral vaccination

- - testing for the occurrence of a biomarker (tetracycline);
- - examining sera from the target species for rabies virus neutralizing antibody;
- - analyzing the incidence of rabies in animals before and during the oral vaccination programme.

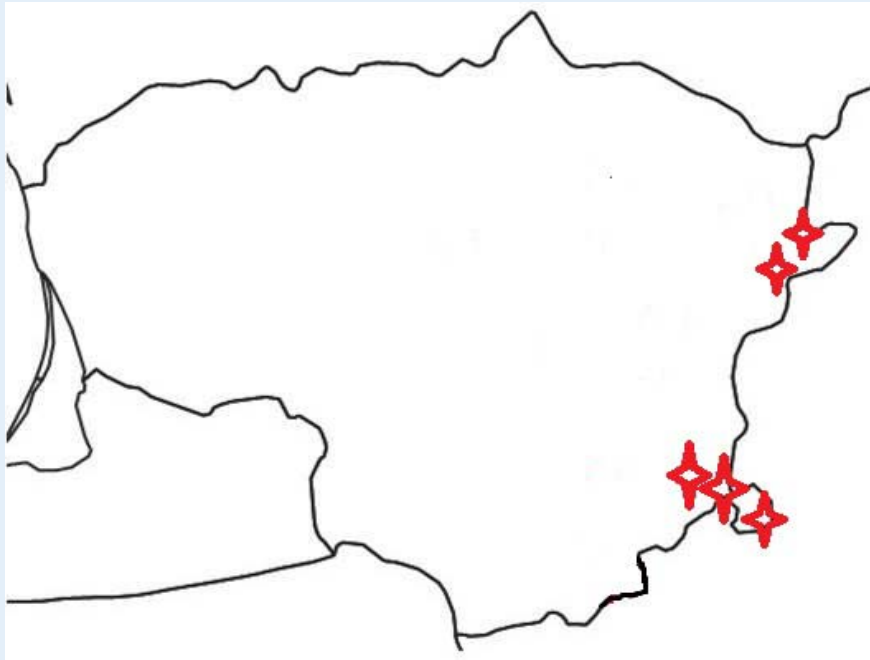
## Bait uptake

- Vaccine with biomarker – tetracycline (life-long marking of bones and teeth that is easily detected);
- Bait envelope should contain 150 mg of tetracycline;
- Targeted species: red foxes and raccoon dogs;
- Not less than 4 samples of targeted species per 100 km<sup>2</sup> for monitoring purposes.

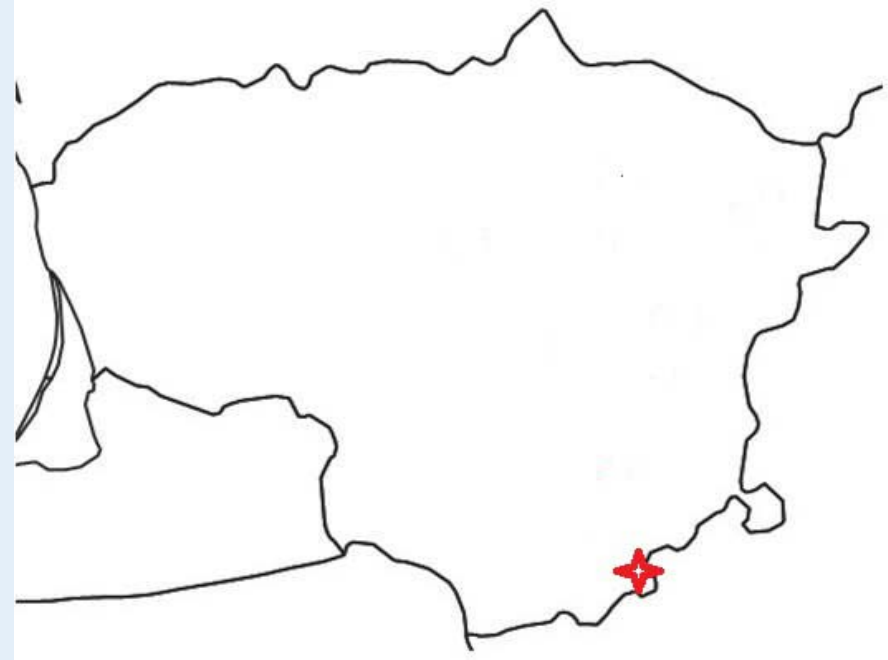
# Rabies incidence

- Examination of at least 4 foxes (or raccoon dogs) /100 km<sup>2</sup> for rabies each year;
- Showing abnormal behavior;
- Animals found dead (road-kills);
- Examination of other suspect animals of rabies.

## Situation of rabies in 2012 and 2013



(POSITIVE-5)



(POSITIVE-1)



# Data of 2014



No cases of rabies have been detected so far!

# Effectiveness of ORV in 2014

**Tetracycline 2122 samples (1563 foxes and 559 raccoon dogs)**

Foxes:

young – 84,89 %

adult – 97,26 %

Raccoon dogs:

young – 72,42 %

adult – 84,52 %

**Serology 1336 samples (1010 foxes and 326 raccoon dogs)**

Foxes:

young – 56,86 %

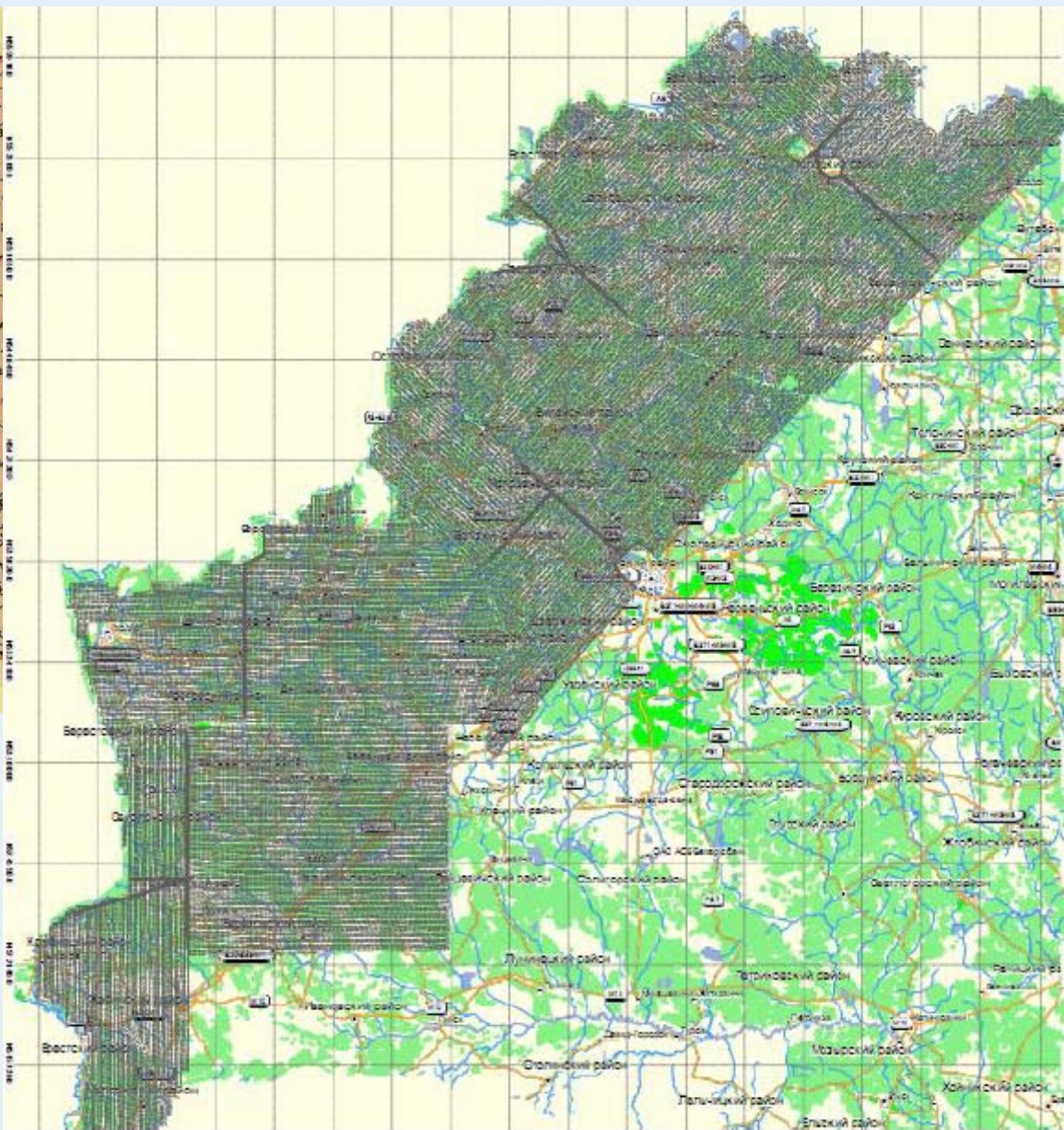
adult – 74,97 %

Raccoon dogs:

young – 64 %

adult – 76,41 %

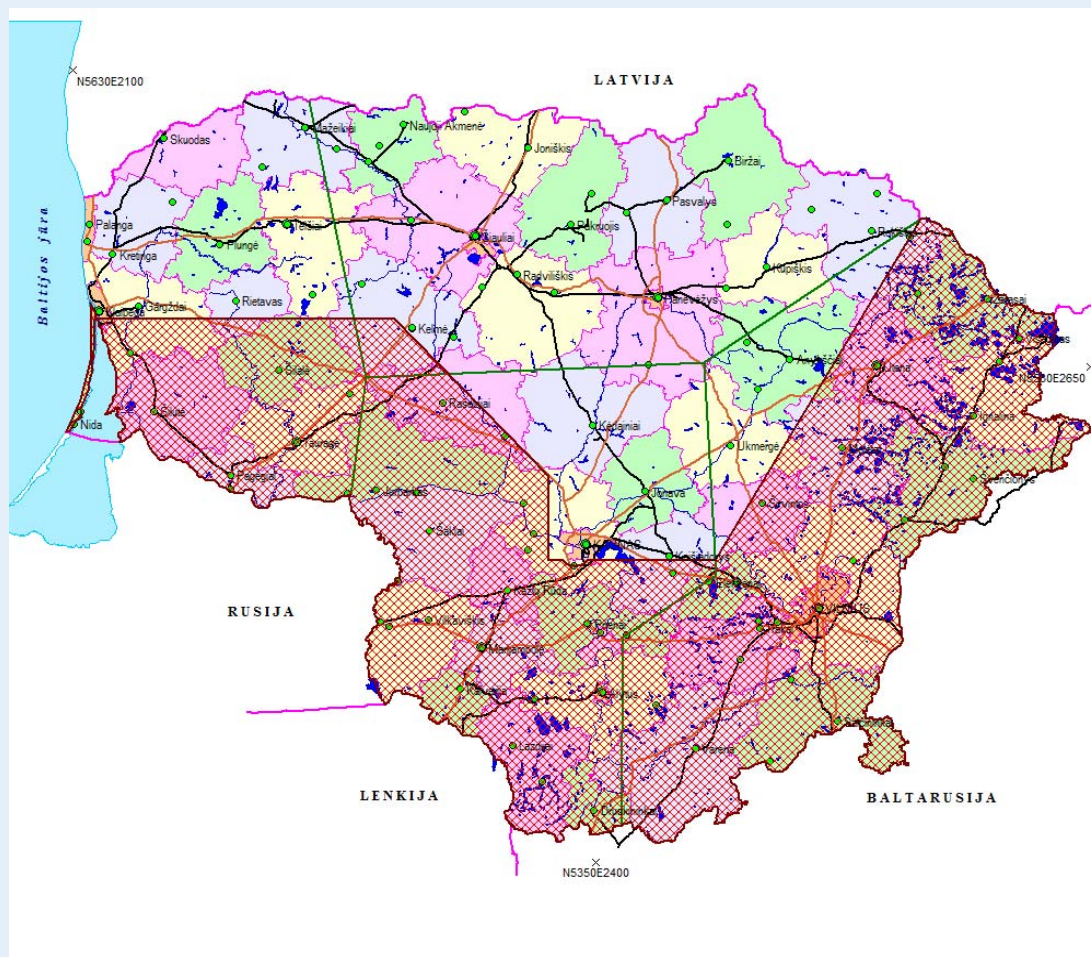
# Oral rabies vaccination in Belarus since 2011



# Oral rabies vaccination strategy in Belarus

- The number of baits for the buffer zone in Belarus 1.452.500 baits per year.
- Since 2011 (spring and autumn campaigns) oral vaccination of rabies was performed in Belarus, in 50 km buffer zone.
- Average number of baits used – 22 baits per square kilometer.

# Further ORV strategy



**2015-2017**

**Buffer zone of 50 km, 34300 sq. km;**

**Not less than 25 baits per square km;**

**Parallel lines separated by 500m;**

**857500 baits per campaign.**



*Thank you for your  
attention!*