

Greek Rabies Eradication Program 2014

**Directorate General of Sustainable Animal
Production & Veterinary Services
Animal Health Directorate**

Department of Zoonoses

Brussels 9-10 September 2015

Epidemiological situation

- 9 May 2014:** Detection of the last rabies case in a fox in the Regional Unit of Pella
- No further cases have been identified

Rabies Cases 2012–today

**FAT & PCR
Positive : 48**



40



5



1



2

2014

Regional Unit	Animal Rabies Cases
Kilkis**F	18
Pella*F	10
Serres*	1
Thessaloniki*F	10
Kozani ^F	2
Trikala*F	5
Larisa*	1
Kastoria*	1

* Domestic animal
** Livestock
^F fox(es)

Rabies Cases Greece - 2014



<http://www.who-rabies-bulletin.org/Queries/Maps.aspx>

Passive Surveillance data 2012–June 2015

Year	Number of Samples
2012	237
2013	587
2014	410
2015 (first semester)	138

Annual
target :
1100

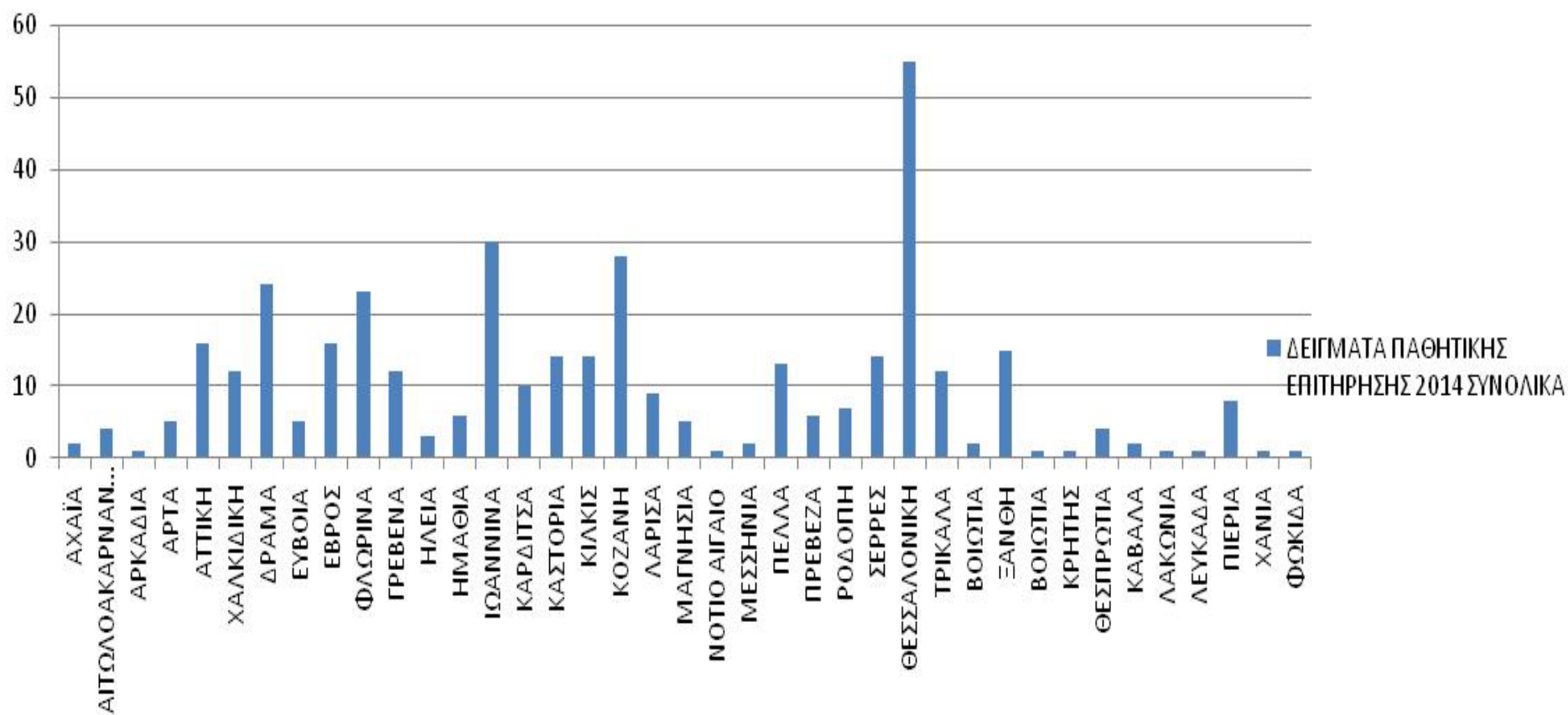
Passive Surveillance (total) – 2014



Passive Surveillance (domestic-wild-bats) - 2014



Passive Surveillance samples collected per Regional Unit (2014)



Passive Surveillance - 2014

340 out of 410 animal samples (nervous tissue samples) belonged to **indicators**

- clinical signs
- abnormal behaviour suspect of rabies
- found dead
- road kills
- animals involved in human exposure

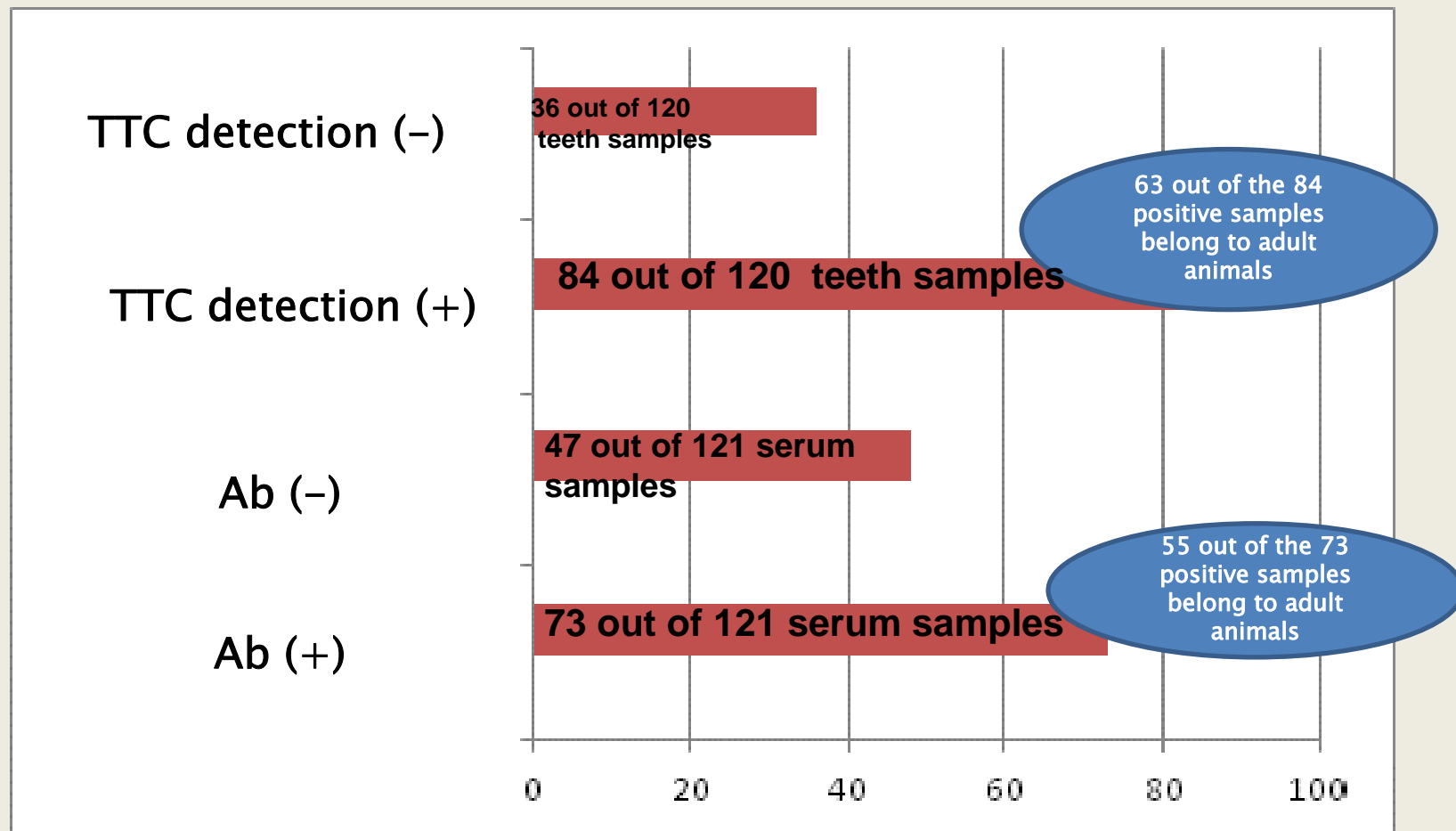
In the remaining animals the cause of sampling was not mentioned or it was mentioned that the animal had been found poisoned

Oral Red Foxes Vaccination campaigns

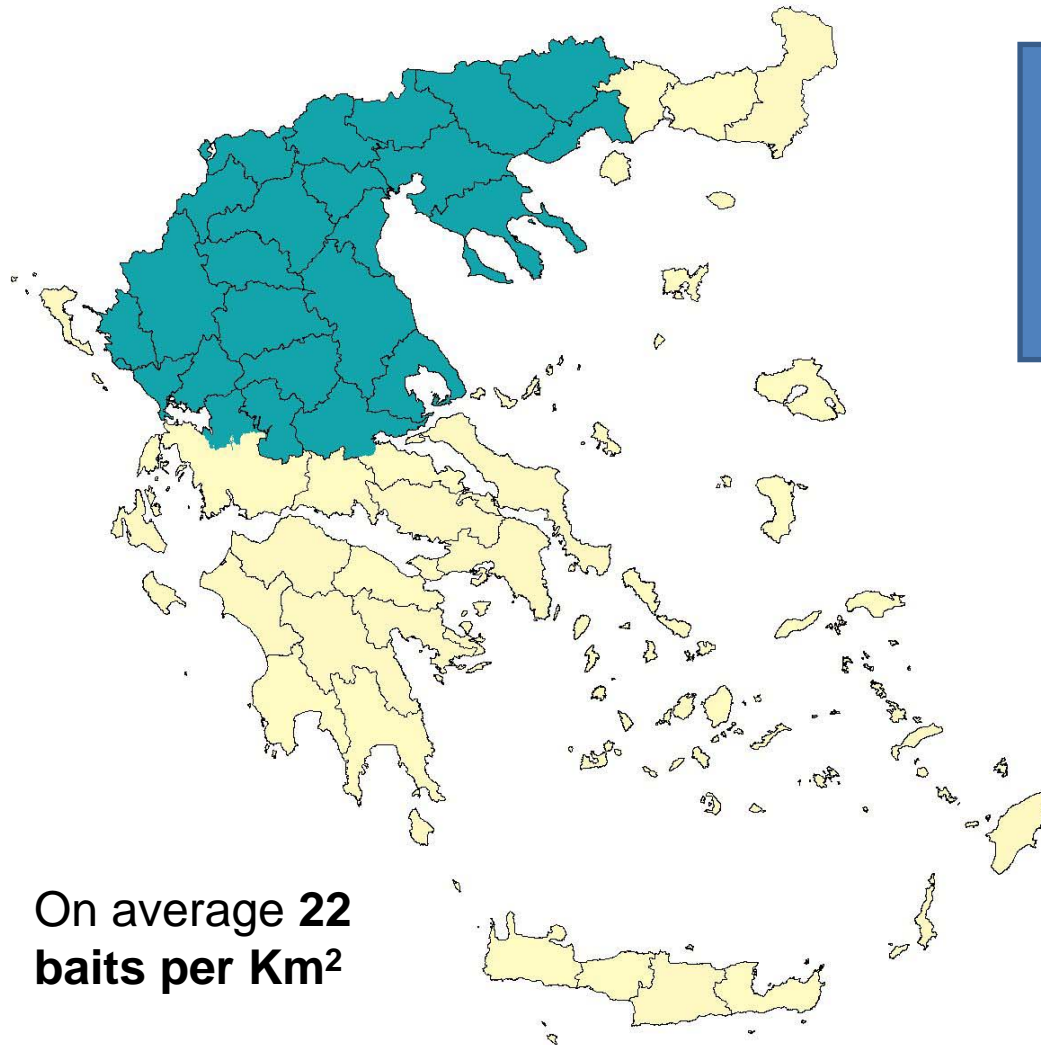
- 1st: October 2013–December 2013
- 2nd: November 2014 – January 2015
- Delays: administrative constraints in the tendering and procurement procedures
- The spring vaccination campaign of 2014 was not implemented – the financial offer of the company was higher in comparison to the budget of the project

1st Campaign (2013)

Monitoring the effectiveness of ORV
(samples analyzed in the NRL early in 2014)



Second ORV Vaccination area – 2014



24
Regional
Units

On average **22**
baits per Km²

Vaccine

Modified live attenuated rabies virus vaccine (RABIGEN® SAG2)

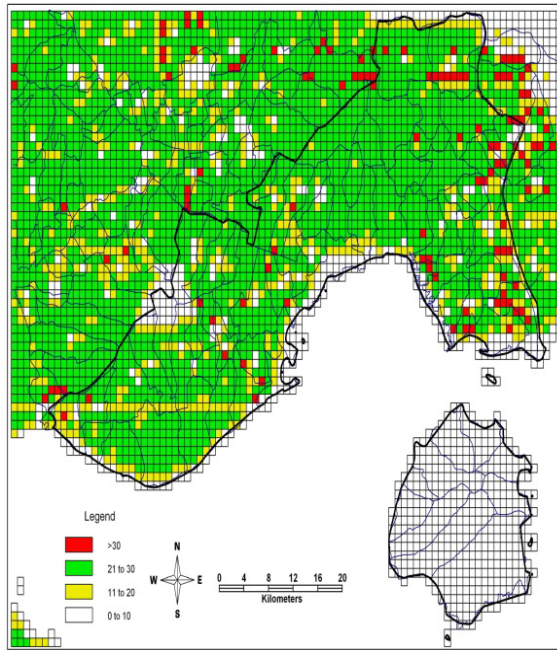


Regional Unit	Size of vaccination area in Km²
Serres	3757,7
Kilkis	2453,3
Thessaloniki	3339
Pieria	1397
Imathia	1667,3
Pella	2423,4
Kozani	3386
Grevena	2251
Florina	1774,3
Kastoria	1686,7
Ioannina	4980
Thesprotia	1524,5
Arta	1580,1
Preveza	988,6
Karditsa	2457,6
Trikala	3244,2
Larisa	5343,4
Chalkidiki	3195,2
Drama	3377,2
Kavala	1628,4
Magnisia	2250
Fthiotida (1/2)	2123,35
Evritania	1782,9
Aetolia and Acarnania (1/4)	992,36

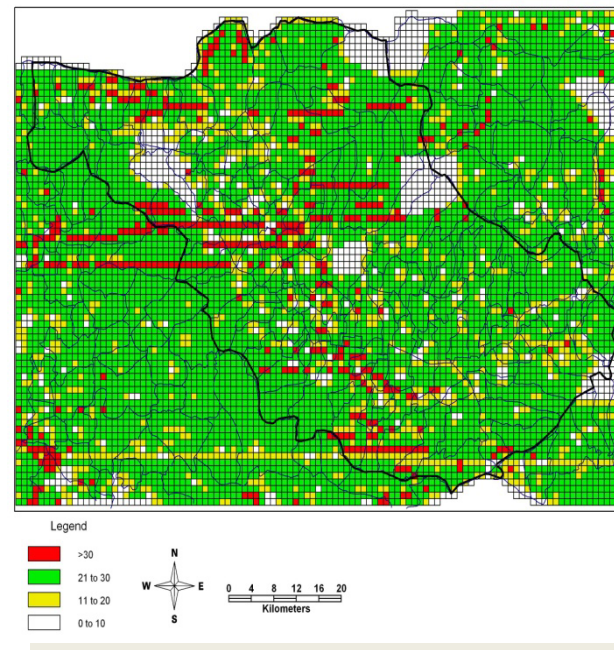
**Size of
Vaccination area
59.603,51 km²**

**1.317.983
baits/vaccines
distributed**

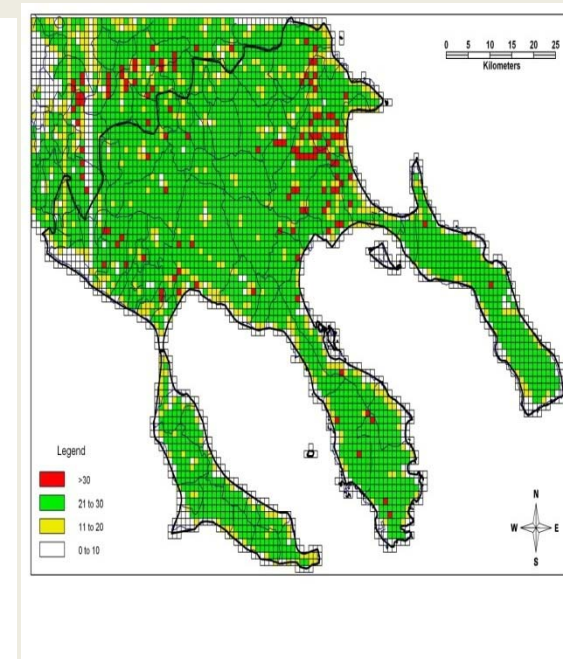
Baits distribution per Regional Unit



Kavala



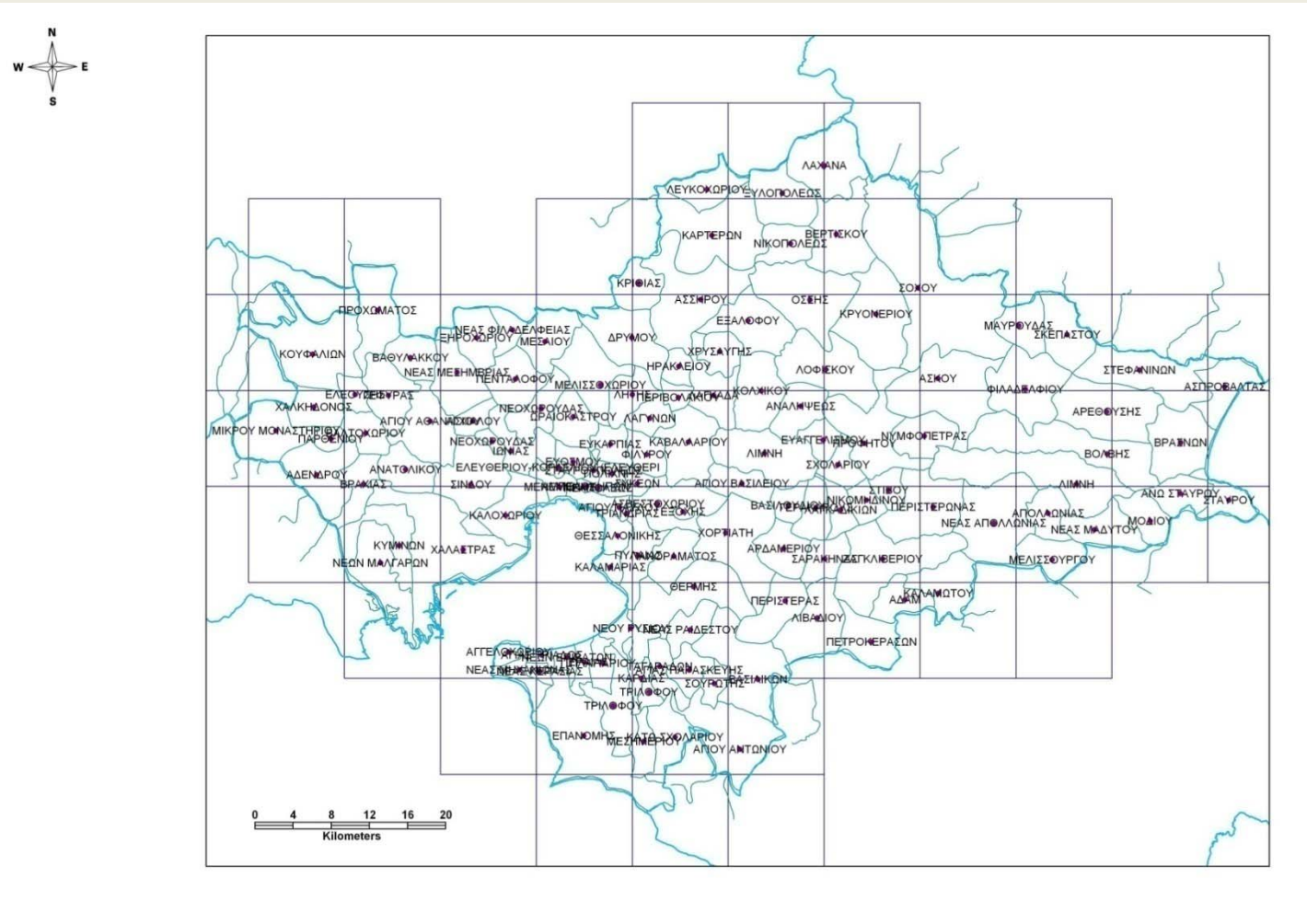
Serres



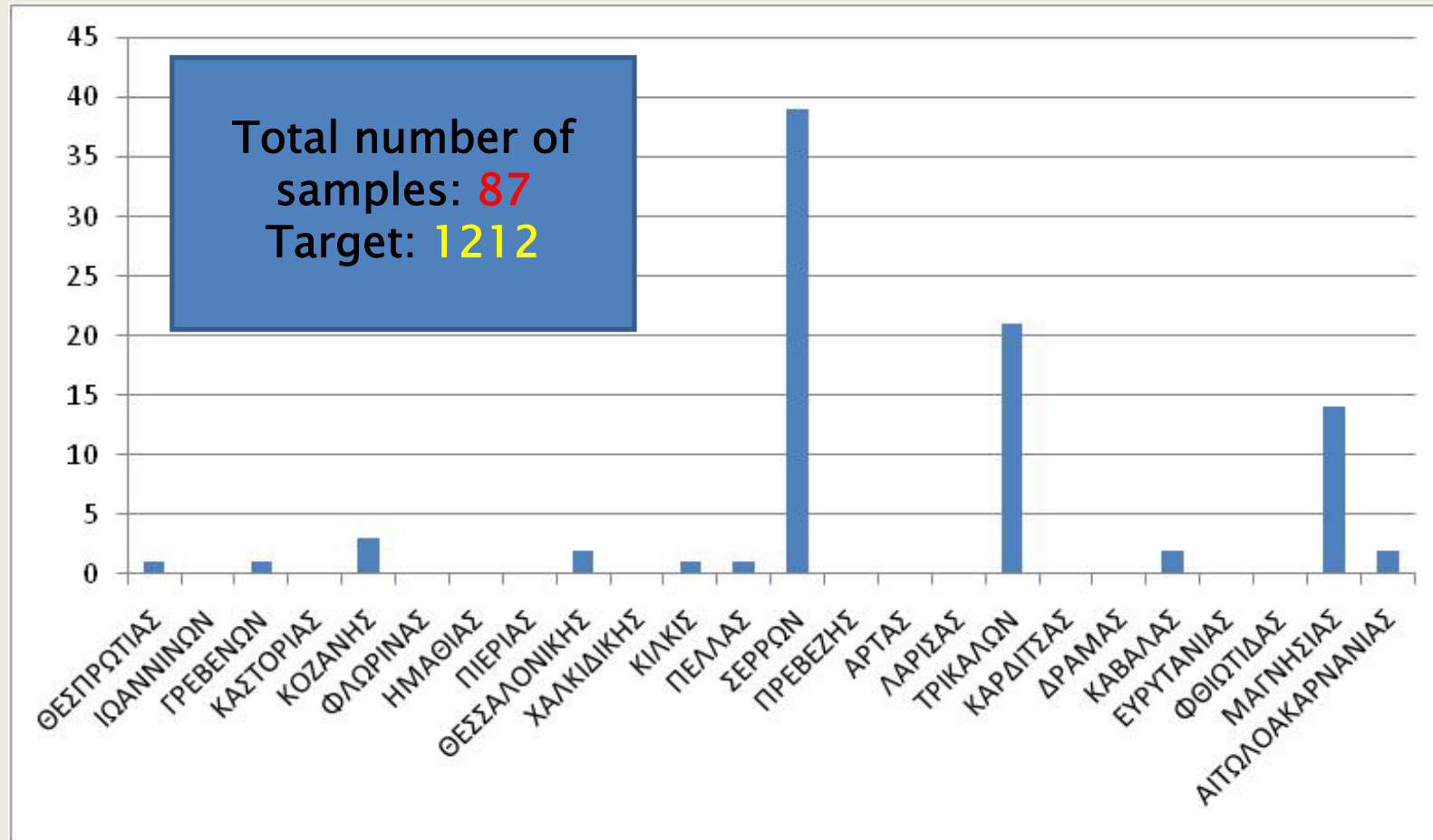
Chalkidiki

Monitoring the effectiveness of ORV – guidelines

10 km squares
Target = 2 foxes
sampled per square

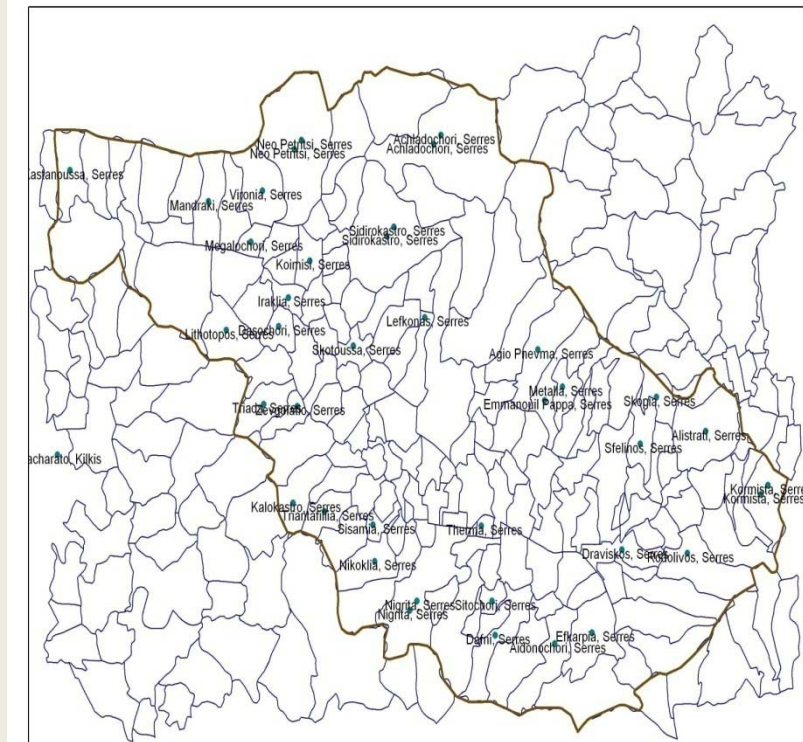


Samples of red foxes – Monitoring the effectiveness of ORV 2014



Monitoring the effectiveness of ORV 2014

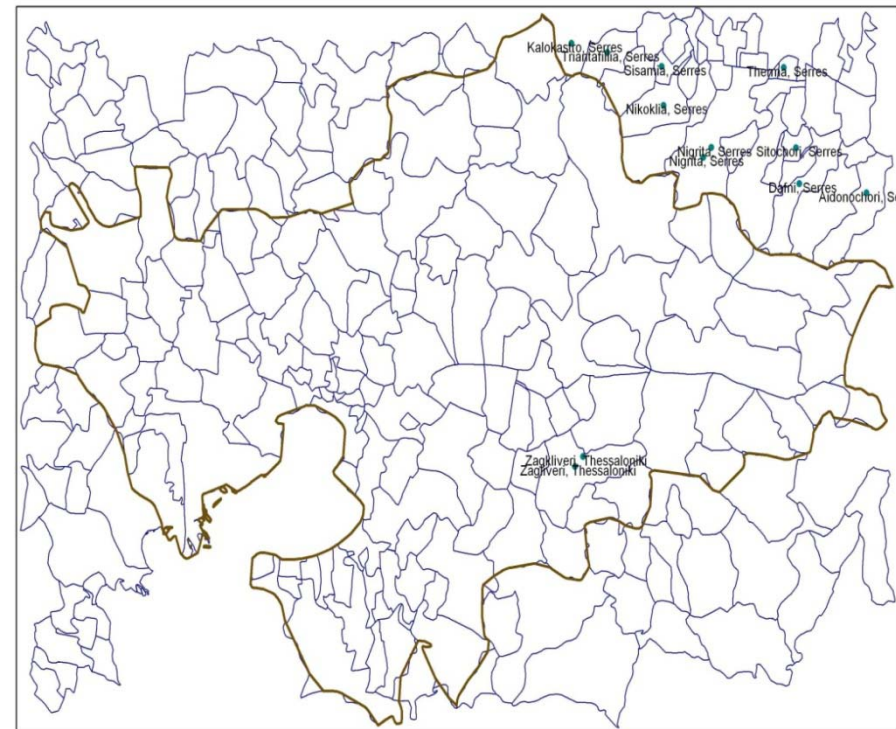
1 dot / label = 1 fox sample



Legend

- OPIO NOMOY
- OPIO OTA

Serres



Legend

- OPIO NOMOY
- OPIO OTA



Thessaloniki

Small number of monitoring samples in 2014 (*and early 2015*)

- ❑ The collection of samples could be performed by:
 - veterinary officers along with the local forestry officers and the gamekeepers AND
 - hunters (receiving a remuneration/sample –still no response)

PROBLEMS

- **lack of transport means**
- **unfavorable weather conditions during monitoring process (January–April 2015)**
- **difficulty to find foxes!**
- **Inability, due to the Greek legislation for “the use of weapons”, to use “ridged” guns for distant targeting of red foxes**
- **The hunting period was completed on 28/02/2015 – the hunters had the ability to be involved in the collection of samples only for a short period)**
- **Only up to 21/01/2015 the missions with hunting dogs were allowed**
- **Reduction in the fox population!! (assumption –not fully documented yet)**

Monitoring ORV 2014– Analysis of samples

Preliminary results

- ❑ 45 samples out of the 87 samples collected have been analyzed until now
- ❑ Samples derived mainly from two Regional Units (Serres and Trikala)
- ❑ The final results will be obtained by the NRL late in September– early in October 2015

TTC detection (+): 39 samples out of 45*

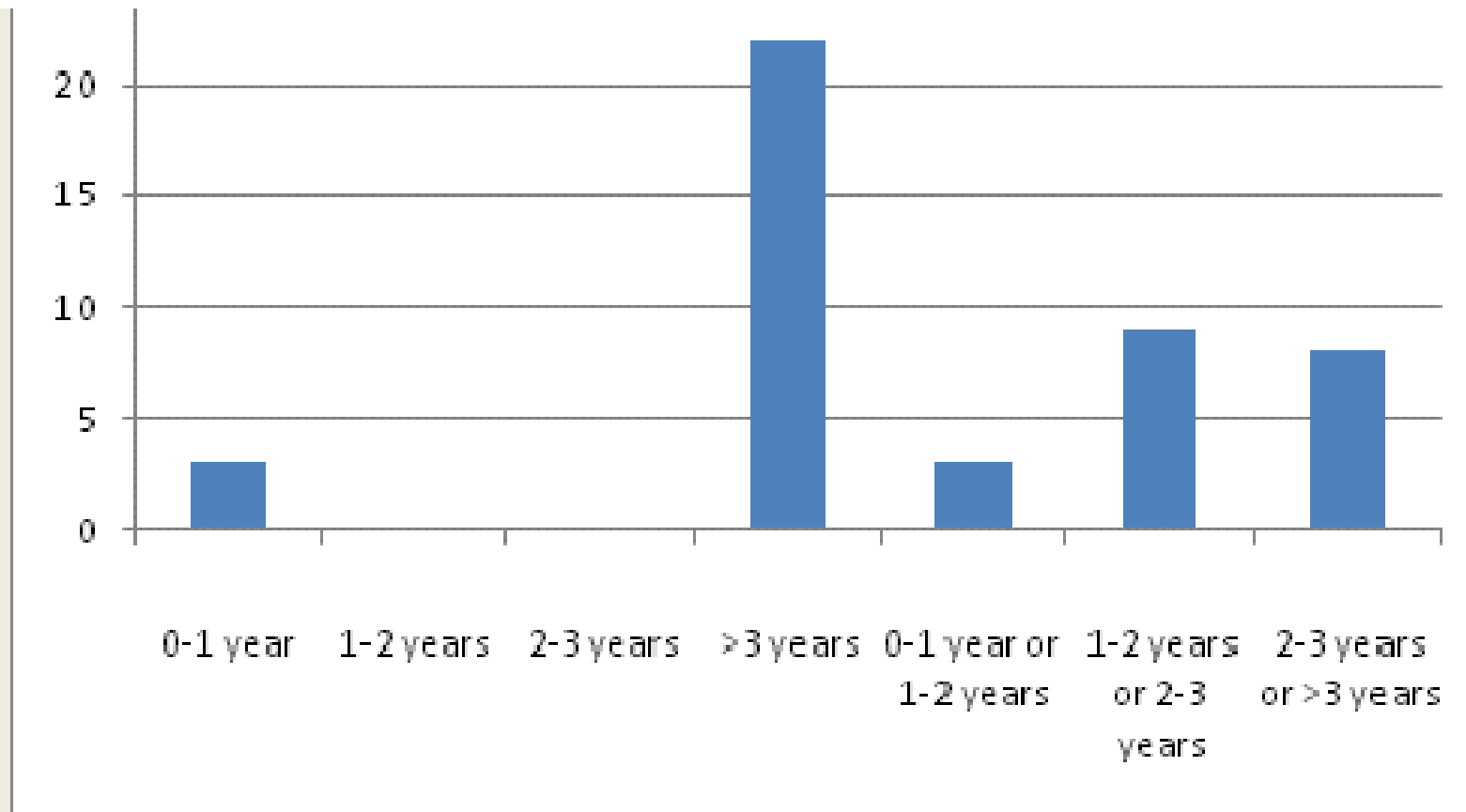
Ab detection (+): 23 samples out of 43

* The estimation of the time of bait's uptake is not available yet

Monitoring ORV 2014- Analysis of samples

Preliminary results

Age determination of red foxes sampled (45 samples)



Awareness campaign - Leaflets and posters

ΛΥΣΣΑ

Πώς θα αναγνωρίσω την ασθένεια;

- Αναστροφή του σκύλου
- Αναστροφή του γατιού
- Αναστροφή του αρουσιού
- Αναστροφή του κουνιού
- Αναστροφή του ποντικού
- Αναστροφή του αρκούδα

www.mhmg.gr

ΑΓΑΠΗ ΓΙΑ ΤΑ ΖΩΑ ΠΡΟΤΑΣΙΑ ΑΠΟ ΤΗ ΛΥΣΣΑ

1. Αποφεύγετε να αγκαλιάζετε με τους ζώα.
2. Γλιστρώστε από κοντά με τα ζώα.
3. Μην τρώτε μαζί τους.
4. Μην πίνετε από τα δοχεία τους.
5. Μην αφήνετε τα ζώα να πιουν από το νερό που έχετε.
6. Μην αφήνετε τα ζώα να πιουν από το νερό που έχετε.
7. Μην αφήνετε τα ζώα να πιουν από το νερό που έχετε.

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ΛΥΣΣΑ ΓΙΑ ΠΙΚΤΟΙΣ ΚΙΝΗΤΩΣ

ΠΡΟΣΤΑΣΙΑ ΤΩΝ ΚΙΝΗΤΩΝ ΣΤΟ ΚΑΤΑΣΤΗΜΑ ΤΗΣ ΚΑΛΟΚΑΙΡΙΑΣ

- Αποφύγετε να αγκαλιάζετε με τα ζώα.
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ΣΥΜΒΟΛΗ ΤΩΝ ΚΥΝΗΓΩΝ ΣΤΟ ΠΡΟΦΥΛΑΚΤΙΚΟ ΤΗΣ ΛΥΣΣΑΣ

ΠΡΟΤΕΡΗΧΙΑ ΤΩΝ ΕΒΟΛΩΝ

ΜΕΤΑΒΟΛΕΣ ΣΤΟ ΕΠΙΣΤΗΘΙΟ

ΕΝΗΜΕΡΩΣΗ ΤΩΝ ΑΠΟΛΩΝ ΑΡΙΘΜΩΝ

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Θα πρέπει να ρυθινούμε τους μαζεύτους πώς να προστατεύουμε από τη λύσσα

ΤΙ ΕΙΝΑΙ Η ΛΥΣΣΑ;

ΕΠΙΧΑΙΡΩ ΑΣΣΑΛ ΤΑ ΑΓΡΙΑ ΖΩΑ

ΤΡΕΦΩΝ ΜΕ ΤΑ ΖΩΑ

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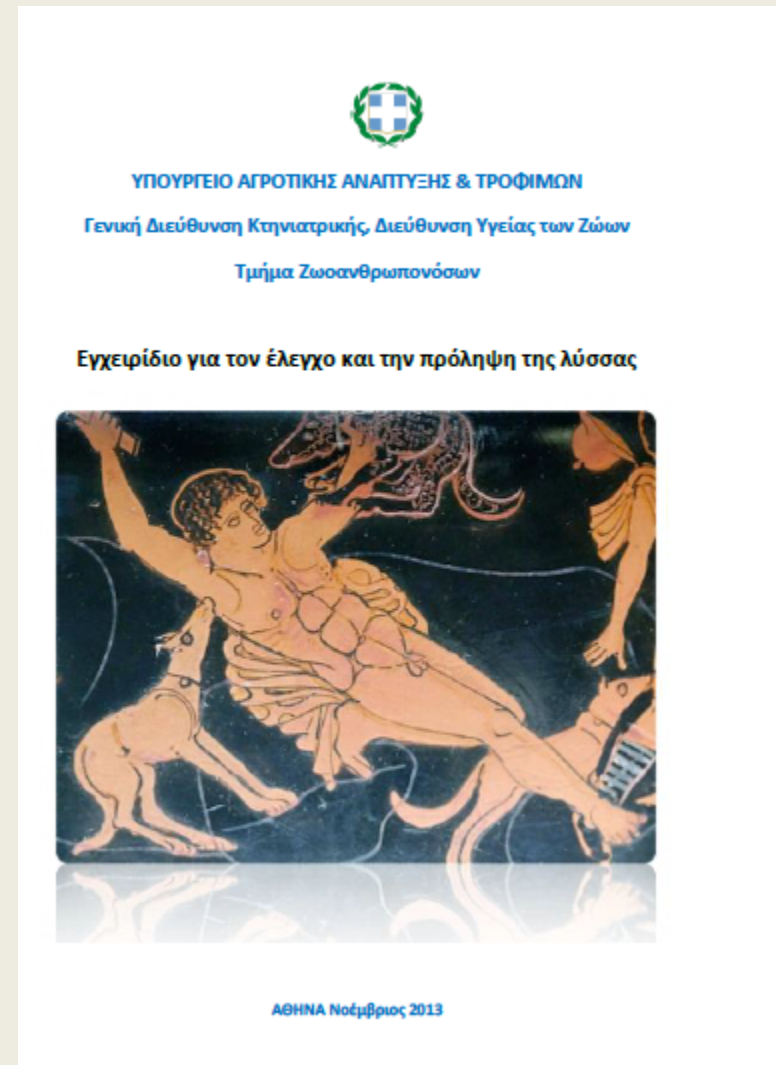
ΠΡΟΦΥΛΑΞΙΑ ΣΤΟΝ ΑΝΘΡΩΠΟ

ΕΙΣΑΓΩΓΗ ΤΗΣ ΛΥΣΣΑΣ ΣΤΟΝ ΑΝΘΡΩΠΟ

ΤΡΟΠΟΙ ΠΡΟΦΥΛΑΞΙΑΣ ΤΗΣ ΛΥΣΣΑΣ ΣΤΟΝ ΑΝΘΡΩΠΟ

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Awareness campaign TV spot – Rabies Manual



Awareness campaign

Αρχική Ειδήσεων
Ελλάδα
Κόσμος
Οικονομία
Επιστήμη-Τεχνολογία
Πολιτισμός
Περίεργα
Πρόσωπα και Ιστορίες
Αθλητισμός

Πολιμέσα
Βίντεο - Ήχος
Φωτορεπορτάζ

Απόψεις
Blogs
Οι απόψεις σας

Εργαλεία
Οι ειδήσεις μου
RSS

in.gr » Ειδήσεις » **Επιστήμη-Τεχνολογία**
Δολώματα για τις αλεπούδες
Ελικόπτερα θα ρίξουν εμβόλια κατά της λύσσας στην Κεντρική Μακεδονία
Δημοσίευση: 03 Οκτ. 2013, 17:54



Ο ιός της λύσσας προσβάλλει το νευρικό σύστημα και μπορεί να προκαλέσει επιθετική συμπεριφορά.

Google εμβολια λυσσα

embovia λυσσα

embovia λυσσα - Αναζ...

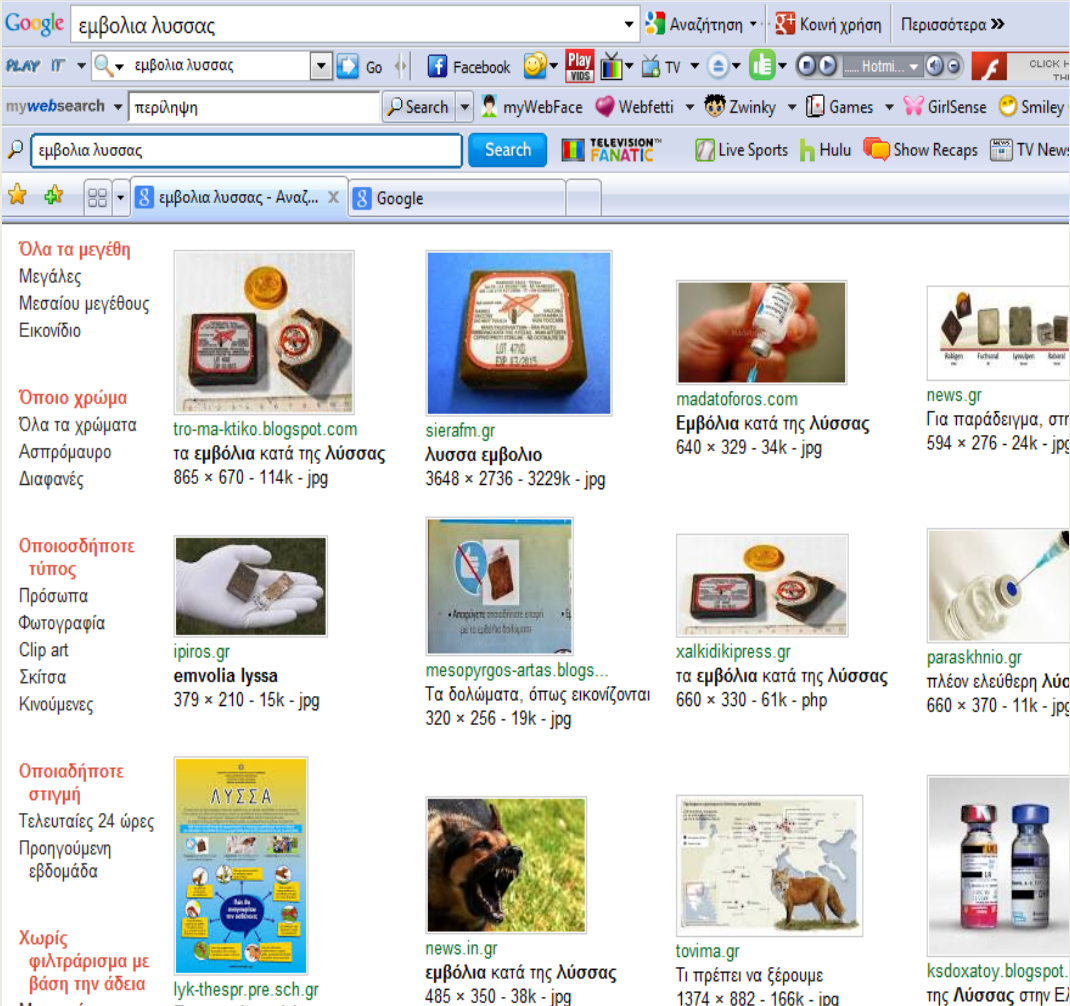
Όλα τα μεγέθη
Μεγάλες
Μεσαίου μεγέθους
Εικονίδιο

Όποιο χρώμα
Όλα τα χρώματα
Ασπρόμαυρο
Διαφανές

Όποιοσδήποτε τύπος
Πρόσωπα
Φωτογραφία
Clip art
Σκίτσα
Κινούμενες

Όποιαδήποτε στιγμή
Τελευταίες 24 ώρες
Προηγούμενη εβδομάδα

Χωρίς φιλτράρισμα με βάση την άδεια



tro-ma-ktiko.blogspot.com
τα εμβόλια κατά της λύσσας
865 × 670 - 114k - jpg

sierafm.gr
λυσσα εμβολιο
3648 × 2736 - 3229k - jpg

madataforos.com
Εμβόλια κατά της λύσσας
640 × 329 - 34k - jpg

news.gr
Για παράδειγμα, στη
594 × 276 - 24k - jpg

ipiros.gr
emvolia lyssa
379 × 210 - 15k - jpg

mesoryrgos-artas.blogspot...
Τα δολώματα, όπως εικονίζονται
320 × 256 - 19k - jpg

xalkidikiexpress.gr
τα εμβόλια κατά της λύσσας
660 × 330 - 61k - php

paraskhnio.gr
πλέον ελεύθερη λύα
660 × 370 - 11k - jpg

lyk-thespr.pre.sch.gr

news.in.gr
εμβόλια κατά της λύσσας
485 × 350 - 38k - jpg

tovima.gr
Τι πρέπει να ξέρουμε
1374 × 882 - 166k - jpg

ksdoxatoy.blogspot.
της Λύσσας στην Ε/

Awareness campaign

Training activities 2014–2015

- Lecture on Rabies, 3rd Hellenic Veterinary Congress
- Round Table on Rabies, 25th Medical Congress of the Army
- Training courses for Official Veterinarians in Greece (3 seminars, 85 participants) – Official training programs (EKDDA)
- Lecture on Rabies in the Veterinary School of Thessaloniki
- Lecture on Rabies in a MSc program in Athens Medical School
- Organization of a meeting with the participation of hunting associations and official vets in Thessaloniki (early in October 2015)

Meetings 2015

- January 2015: Meeting with the National Committee for Rabies (Veterinary, Health, Forestry authorities and hunters)
- June 2015: Meeting with Forestry authorities and hunters for the use of specific types of guns for shooting during the monitoring program
- Circulars for strengthening the collection of samples
- Meetings in local level (Veterinary officers–hunting associations etc)

Bottlenecks–Conclusions (1)

- Reduced number of samples in the Passive Surveillance and Monitoring of ORV program
- Monitoring limited in a small number of Regional Units
- Funding...
- Cancellations of tenders
- Tenders legislation – difficult to cut short some administrative procedures

Bottlenecks–Conclusions (2)

- Limited number of staff involved..
- Costs of transport for the need of sample's collection (forestry and veterinary services – hunting federations)

No rabies cases since 2014:

–effective ORV campaigns?

–low surveillance rates?

–decreased red fox population?

–disease dynamics

–Rabies status in neighboring countries

Corrective actions

- ❑ The remuneration for each sample provided by the hunters (monitoring) is increased to 20 EURO in 2015 (instead of 13 EURO in 2014)
- ❑ The tender has been announced for two consecutive campaigns (Autumn 2015 – Spring 2016)
- ❑ Immunization of hunters/gamekeepers
- ❑ Meetings with hunters

Contact

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NRL for Rabies in animals

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Rickettsial and Exotic Diseases

Athens Veterinary Center

Tel-Fax: +30 210 6011499

E-mail: viruslab.ath@gmail.com