#### **RABIES BULLETIN EUROPE**

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**Quarter 3** 

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The Rabies Bulletin Europe has been compiled and edited by the

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#### **1. INTRODUCTION**

This BULLETIN describes the **reported rabies cases in Europe** for the **Third Quarter 1998**, subsequently referred to as "This Quarter".

In SECTION 2 a summary of the rabies situation in general is given.

SECTION 3 (3.1-3.38) reflects the situation for individual countries. Unfortunately, not all countries report regularly yet. However, their contribution is expected. In the **Miscellaneous** SECTION (4) under 4.1 an article describes the evidence of freedom from rabies in Albania.

4.2 points out an International Emerging Infectious Disease (EID) Laboratory Fellowship.

Information is given on a WHO Conference on Rabies Control and Oral Immunization of Red Foxes against Rabies in Central and Eastern Europe with the participation of the Office International des Epizooties - OIE under 4.3. The rabies case data are tabulated for the Third Quarter 1998 in SECTION 5. The arrangement of countries follows practical considerations, not alphabetical ones.

SECTION 6 lists the **official contributors** to the BULLETIN.

The geographical distribution of rabies cases in Europe of the Third Quarter 1998 is shown on maps of the Russian Federation, Turkey and Europe in the ANNEX.

#### **2. SUMMARY OF RABIES IN EUROPE**

During "This Quarter", 1439 rabies cases were reported in Europe. Of these 865 were in wild animals (60.1% of total), 571 in domestic animals and 3 in humans.

Of the **865 cases in wild animals**, 706 were foxes, 2 wolves, 75 raccoon dogs, 15 badgers, 3 stone martens, 19 pine martens, 7 polecats, 1 ferret, 1 mouse weasel, 3 roe deer, 1 wild boar, 22 bats, 1 squirrel, 1 hamster, 1 black rat, 6 other small rodents and 1 other wild animal. Of the **571 domestic animals**, 146 were dogs, 166 cats, 6 horses, 1 pig, 242 bovines, 10 sheep.

There were 3 human

**cases** reported from the Russian Federation.

The above data were summarized in TABLES 5.1 and 5.3 . TABLE 5.2 adds up quarters 1 to 3 of 1998.

For the **Third Quarter** a seasonal increase of rabies cases is expected in countries with **fox-mediated rabies**, due to the dispersal of the young foxes born in spring increasing the contact rate in the population, although oral vaccination of foxes, now widely practised in Europe, often interferes with the seasonal pattern. For "*This Quarter*" the total of cases (1439) amounted to 232 cases more than the previous quarter (1207).

Turkey, though added in the gross total, is the only country in Europe with **dogmediated rabies** registered 29 cases, all in domestic animals (21 dogs, 8 bovines).

There were 22 cases in insectivorous bats, and 1 sheep died infected with the bat rabies virus prevalent in Europe. The countries affected were: Denmark (9), Germany (3), the Netherlands (4) and Poland (6). Because of the distinct epidemiological features of the disease in bats, these cases are marked in a different colour in the map of the ANNEX.

**Rabies-free** countries in Europe during "This Quarter" were: Albania, Finland, Greece, Iceland, Ireland, Italy, Norway, Portugal, the mainland and islands of Spain, Sweden, Macedonia, the United Kingdom

of Britain and Northern Ireland.

There were no cases reported from Austria, Belgium, Bulgaria, France, the Grand Duchy of Luxembourg and Switzerland, but the last

indigenously acquired case (terrestrial or bat) was less than two years ago.

The status of the countries with data supplied irregularly cannot be judged.

#### **3. RABIES IN INDIVIDUAL COUNTRIES**

3.1	Albania	ALB	3.3	Belgium	BEL	no rab Bulgar	ies case was repor ia.
	by Kristaq Berxho	li		by L. Hallet			
						3.6	Belarus
	The country r	remained		No case of ra	ibies was		
rabies-free.			diagno <i>ter</i> ".	sed during "Th	nis Quar-		by S.N. Shpilevsky
Survei	illance:						During "This Qua
	13 terrestrial ar	nimals (5	Surveil	lance:		21 ani	mal rabies cases
foxes,	5 dogs, 1 mink, 1	l weasel,		The following	g animals	reporte	d from Belarus, 13
1 cat)	) and 8 bats (6	Myotis	were i	nvestigated for	or rabies	less that	an in the previous
blythi,	2 undetermined	species)	with r	negative resul	lts from	ter. Th	ne cases occurred
were	examined durin	g "This		98 to 31.08.19		foxes,	1 wolf, 1 raccoon
Quarter" but revealed negative				129 bovines, 23		and the second second second	4 cats, 1 pig and

Note:

results.

See article in Miscellaneous Section of this BULLE-TIN.

3.2	Austria	AUT
7. /.	AUSICIA	

by Helmut Schnabl

Of 4710 animal samples examined for rabies "This Quarter", no case was diagnosed positive.

3.4	<b>Bosnia</b> and	BIH
	Hercegovina	

dogs, 43 small ruminants, 5

horses, 11 stone martens, 8

badgers, 2 ferrets, 1 polecat, 2

pine martens, 8 cervines, 5

bats, 2 squirrels, 1 duck, 2 rats

No data.

and 1 wild rabbit.

3.5 Bulgaria BUL

by L. Lavchev

During "This Quarter",

orted in

#### BYE

arter". s were 3 cases is quard in 6 dog, 5 1 3 bovines.

Out of 6 administrative regions of the country the following were affected: the regions of Brest, Vitebsk, Grodno and Minsk.

3.7	Croatia	CRO

by Danijela Lamer

During "This Quarter", a total number of 56 rabies cases in 29 municipalities were diagnosed, an increase of 2 cases compared to the same period in 1997, and of 18 cases compared to the previous quarter. 50 cases

occurred in wild animals (49 foxes, 1 marten) and 6 in domestic animals (3 dogs, 1 cat, 1 bovine, 1 sheep).

#### 3.8 Czech Republic CZH

by Oldrich Matouch

During "This Quarter", 1544 samples were examined for rabies in the Czech Republic. Rabies was diagnosed in 10 cases, 19 less than in the third quarter 1997 and 6 less than in the previous quarter. 8 cases were registered in foxes, 1 in a marten and 1 in a domestic cat.

The majority of cases was located in formerly active foci, in the districts Jihlava, Pelhřimov and Ústí n.L.

#### 3.9 Denmark DEN

by Eric Stougaard and S. Ammendrup

During "*This Quarter*", 10 rabies cases were diagnosed, 9 in bats and 1 in a sheep.

Rabies has not been present in terrestrial animals in Denmark since 1982 and at present there is no such rabies either, nor is there any in the northern part of the Federal Republic of Germany.

Rabies in bats has been found in many European countries and since 1985 has also been found in bats of Denmark. During 1997 17 bats were submitted for examination and rabies has been diagnosed in 8 of them.

Contact between bats and domestic animals must be considered unusual and no spread of bat rabies to terrestrial animals has been reported in Europe. However, a characterization of the strain isolated from a sheep in Denmark dur-"This Quarter" by the ing Central Veterinary Laboratory, Weybridge, United Kingdom, revealed the bat rabies virus type EBL1a, which is identical to the bat virus that is prevalent in Denmark.

The sheep flock in which the case occurred is under restriction. No animals can leave the holding without a permit of the Danish Veterinary Service. No other animal has shown any clinical signs of rabies yet.

<u>Note of the editor</u>: The above sheep case is the first bat rabies case in a terrestrial animal in Europe.

There were two human cases caused by bats: one in Helsinki (Finland) in 1985 (strain EBL2b) and one in Belgorod of the former Soviet Union (strain EBL 1a).

#### 3.10 Germany, DEU Federal Republic

by Winfried W. Müller and Hartmut Schlüter

During "This Quarter", there were 18 rabies cases in terrestrial animals (13 foxes, 1 roe deer, 1 dog, 2 cats, 1 horse) and 3 in bats. 16 cases occurred in a still very active focus in the federal state of Nordrhein-Westfalen. There was 1 case each in the states Rheinland-Pfalz and Saarland.

The bats cases occurred in the federal states Schleswig-Holstein (1) and Berlin (2). In both states bat cases were diagnosed previously.

#### Note of correction:

In the text on the Federal Republic Germany in issue 2/98, page 5 of this BULLETIN 1 case was reported having occurred in Rheinland-Pfalz. This should read HESSEN. The mistake was not made in the table on page 20 of issue 2/98.

#### 3.11 Estonia EST

#### by Matti Nautras

In 12 infected districts of Estonia 36 cases were diagnosed rabid during "This Quarter". There were 23 cases in wild animals (16 foxes and 7 raccoon dogs) and 13 in domestic animals (3 dogs and 10 cats).

The district Tartumaa in the east of the country reported 10 cases, all other infected districts between 1 and 5 cases.

3.12 Finland FIN

#### by Riitta Heinonen

The country remained rabies-free.

#### Surveillance:

A total of 76 animals were examined by immunofluorescence test on brain tissue during "*This Quarter*", all with negative results. Of the animals 32 were raccoon dogs, 13 foxes, 1 lynx, 6 badger, 3 bears, 1 mouse weasel, 5 American minks, 1 other wild carnivore, 1 hare, 1 brown rat, 8 bats, 3 dogs and 1 cat.

		12 Sector 2017
3.13	France	FRA
5.15	France	I INA

#### by Michel F.A. Aubert

No rabies case was diagnosed in France during "This Quarter".

#### Surveillance:

During "*This Quarter*", 1570 samples were investigated for rabies with negative results.

#### 3.14 Federal Republic FRY of Yugoslavia

by Milijana Simić

12 rabies cases (in 9 foxes and 3 cats) were registered during "*This Quarter*" in the Federal Republic of Yugoslavia, one case more than in the previous quarter.

3.15 Greece GRE

The country remained rabies-free.

3.16	Hungary	HUN
0.10	A A COLLEGE OF A	

#### by Bálint Kerekes

During "This Quarter", 106 rabies cases in animals were registered, 15 more than during the previous quarter and 18 less than during the third quarter 1997.

The rabies situation remained as previously described with an improved situation in the western part of the country where oral vaccination is practiced.

3.17	Iceland	ICE
J.T.I	reciunta	

The country remained rabies-free.

#### 3.18 Ireland IRE

The country remained rabies-free.

3.19 Italy ITA

#### by Santino Prosperi

The country remained rabies-free.

#### 3.20 Lithuania LTU

by K. Lukauskas and A. Dranseika

During "This Quarter", rabies increased in Lithuania by 16 cases compared to the previous quarter. There were 57 cases of rabies in 20 districts; 27 cases in wild animals (13 foxes, 6 raccoon dogs, 2 badgers, 4 pine martens, 1 roe-deer and 1 polecat) and 30 cases in domestic animals (18 bovines, 2 horses, 3 dogs and 7 cats).

The affected districts recorded between 1 and 8 cases.

During "This Quarter" more than 23 000 dogs, 1000 cats and 1800 bovines were vaccinated against rabies.

There was no human case reported in the country.

#### 3.21 Luxembourg LUX

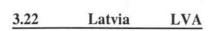
#### by Joseph Kremer

No case of rabies was diagnosed during "This Quarter". The last case of the Grand Duchy of Luxembourg occurred in December 1997.

To maintain the good condition of the rabies situation of the country, a second oral vaccination campaign during the year was carried out from 21.-25. September 1998 covering the entire country. Here 44,000 Raboral vaccine baits (approx. 17 per km<sup>2</sup>) were distributed by helicopter.

#### Surveillance:

4 foxes. 1 pine marten, 1 stone marten, 1 roe deer and 1 wild cat were investigated for rabies with negative results.



by J. Rimeicans and E. Jegers

A total of 86 rabies cases were registered during "This Quarter" in 20 infected districts. There were 33 cases more than during the previous quarter. 62 cases were diagnosed in wild animals (72.1% of total). 41 of the cases in wild animals were foxes, 10 raccoon dogs, 8 badgers, 2 pine martens and 1 rodent - a black rat. Of 24 rabies cases in domestic animals 7 were dogs, 11 cats and 6 bovines.

The most affected district was Valmiera with 17 cases.

3.23	Moldova	MLD

by Vasile Bahau, A. Ganea and V.Kilary

During "This Quarter", 25 samples (11 dogs, 6 cats and 8 wild animals) were received by the Central Veterinary Laboratory to be examined for rabies. Six of these were diagnosed rabid: 1 fox each in Strasheny, Syngereya, Glodyany and Orgeev, 1 dog in Rybnica (town), 1 cat in Kaushany.

#### 3.24 Netherlands NET

by G. Visser

During "This Quarter",

67 animals (5 foxes, 3 dogs, 1 cat, 1 bovine, 1 polecat, 1 ferret, 1 squirrel and 54 bats) were examined for rabies. Four bats were diagnosed rabies positive, distributed in 3 provinces of the Netherlands -Friesland (2), Overijssel, Zuid-Holland. Two bats from the Amsterdam Zoo (Artis) were examined for rabies with negative results.

2.05		NOD
3.25	Norway	NOR

by Gudbrand Bakken

The country remained rabies-free.

3.26 Poland POL

by Andrzej Komorowski

During "This Quarter", 357 rabies cases in animals were registered, 74 cases more than during the 3<sup>rd</sup> quarter 1997 and 105 cases more than in the previous quarter.

Six bat rabies cases were reported, all in *Eptesicus serotinus*.

Except for the relative many bat rabies cases the rabies situation remained grossly the same as described during the last quarter, with an improved situation in the western half of the country where oral vaccination of foxes is practised compared to the eastern half with the majority of cases.

#### 3.27 Portugal POR

The country remained rabies-free.

#### 3.28 Romania ROM

#### by Niculai Popârlan

During "*This Quarter*", 3 rabies cases were recorded in Romania in a dog, a cat and a bovine.

The cases occurred in the provinces of Bacau (2) and Vrancea in the eastern half of the country.

#### 3.29 Russia RUS (European part only)

by V.A.Vedernikov, V.A.Sedov, P.N.Pitalev, V.E.Semljanova, A.N.Guljukin, B.L.Cherkasskiy, V.Y. Ladnyi, V.V.Seliverstov, V.F.Pilinin, and S.A. Kolomizev

During "This Quarter", 509 rabies cases in animals were reported and 3 human cases.

Of the total number of animal cases 340 were in domestic animals - 82 dogs, 80 cats, 168 bovines, 2 horses, 8 sheep.

Of 169 wild animals rabies was diagnosed in 145 foxes, 11 raccoon dogs, 3 badgers, 2 pine martens, 3 hedgehogs, 1 wolf, 1 ferret, 1 hamster, 1 rat, 1 mouse.

Most affected were the Kursk Region with 106 cases,

the Belgorod and Tula Regions with 46 cases each, the Orenburg Region with 38 cases

cases. There were 3 human cases reported - 2 in the Tula Region and 1 in the Moscow Region.

and Bashkortostan with 37

#### 3.30 Spain SPA

by Carlos Abellán García

During "This Quarter", the mainland and islands of Spain remained rabies-free.

There were no cases in the Spanish territory of North Africa however, the last case in this area was less than two years ago to gain the status of rabies-free.

#### 3.31 Slovak Republic SVK

by Jozef Sokol and Bohuslav Lovas

A total of 110 rabies cases in animals was reported in the Slovak Republic during "This Quarter". Of these were 92 (83.6%) in wild animals (88 foxes, 2 pine martens, 1 mouse weasel and 1 roe deer) and 18 (16.4%) in domestic animals (4 dogs and 14 cats).

#### 3.32 Slovenia SVN

by Zoran Kovač

A total of 3 foxes were diagnosed rabid during "This Quarter". The cases were scattered from north to south.

3.33	Sweden	SWE
5.55	Differen	DIL

The country remained rabies-free.

#### 3.34 Switzerland SWI

#### by Urs Breitenmoser

During "This Quarter", no rabies case was diagnosed in Switzerland. A total of 157 animals (105 foxes) were examined. There was no rabies case in Switzerland in the previous quarter (2/98), nor in the third quarter of 1997.

For the first time since 1978, when the first field trials of oral immunization of the red foxes had started, no vaccination campaign was carried out in the Fall in Switzerland. The last campaign took place in spring 1998 in the north of the country (cantons of Basel-Stadt, Basel-Landschaft, Solothurn, and Aargau). This is also the area where a higher vigilance in regard to rabies still is needed, and where the sampling of red foxes for the surveillance of the epizootic and the herd immunity will continue for some time.

8 bats (4 Pipistrellus pipistrellus, 1 pipistrellus sp., 1 Myotis myotis, and 2 Eptesicus nilssoni) were examined in this quarter, all were found to be negative for rabies. 3.35 Turkey TUR

#### by Celal Özcan

During "This Quarter", 29 rabies cases in animals were reported in Turkey. All cases were in domestic animals: 21 dogs and 8 bovines.

The provinces (II) of Istanbul and Izmir reported 13 and 7 cases respectively, six other provinces between 1 and 2 cases.

#### 3.36 Macedonia TYM

The country remained rabies-free.

2 27	Illenoine	UKR
3.37	Ukraine	UKK

No data.

#### 3.38 United Kingdom UNK

by W.J. Pollitt

The country remained rabies-free.

\*\*\*\*\*

page 8

#### 4.1 Evidence of Freedom from Rabies in Albania

by Ilir Kusi, Sulejman Duka, Kristaq Berxholi

Institute of Veterinary Research "Bilal Golemi" Tirana 10 - Albania

The last rabies cases were recorded in Albania in 1976, both in humans and animals. The cases were described in detail elsewhere (Kusi et al.). In Kacinar, a community of Mirdita district, a rabid German shepherd dog or wolf (it remained unclear) bit 14 people severely. Ten out of 14 bitten people died of rabies. Since that time no more rabies in humans was observed. By virtue of severe restrictive measures taken by the former political regime in controlling the movements of humans and animals entering Albania, not only rabies but also many other infectious diseases were limited or even eradicated. Mandatory rabies vaccination in confined areas for domestic animals and culling of wild carnivores suspected of being rabid were applied for rabies control (Kusi et al.). Being successful in this way, negligence in maintaining a good surveillance and implementing contemporary diagnostic techniques was the result. Rabies diagnosis in animals was carried out exclusively through histological examination followed simultaneously by rabbit inoculation test. In 1990 the political, economic and social situation changed dramatically in Albania. The country adopted to a new life-style and made new experiences. For example, Albania faced an uncontrolled entry of pet dogs from countries such as Turkey, Bulgaria, etc., where dog rabies was present. The number of stray dogs as well as owned dogs and cats, particularly in big cities, increased considerably. In regard to wildlife, there was no knowledge on the rabies situation.

Considering that all vectors of importance to rabies in the neighbouring countries like the dog, the red fox, or bats were present in Albania, plus the above mentioned border problems, it was decided to introduce a contemporary rabies diagnostic and to establish an effective surveillance system.

In 1997 a large scale rabies survey of important vector species was started. Samples were taken from different geographical regions. The teams looked out for animals behaving suspicious of rabies or animals found dead as well as for some apparently healthy ones - the latter mainly from wild carnivores and bats. A bounty was paid to receive more wildlife samples.

As shown in TABLE 4.1.1 the surveillance focused mainly on red foxes. Other wild carnivores, dogs, cats and bats were included as well. All 140 animals were negative for rabies. The tests routinely performed were the standard FAT (fluorescent antibody test) and MIT (mouse inoculation test).

The data are provisional, however at this point they support the fact that Albania is free from rabies. A possible reason why Albania has been free from rabies may be due to its mountainous terrain in the northern and the northeastern parts of the country as well as the fact that two border countries, Macedonia and Greece, are rabies-free for a long time.

Nevertheless, efforts will be taken in the future in order to geographically extend the surveillance to a wider range of wild carnivorous species as well as to bats.

#### Table 4.1.1

#### Animals tested for rabies in 1997-1998

Animal	No. of Animals tested
Fox	66
Jackal	4
Wolf	2
Badger	3
Weasel	3
Mink	4
Fish otter	1
Dog	26
Cat	9
Bat	22
FOTAL	140

For pet dogs and cats coming from areas and countries with rabies, regulations have to be established for an effective control.

#### Acknowledgements

The authors would like to thank Drs. W.W.Müller, J.H. Cox and H.Schlüter of Bundesforschungsanstalt für Viruskrankheiten der Tiere, Tübingen and Wusterhausen, Federal Republic of Germany, for the concrete help and assistance they offered in establishing a contemporary rabies diagnosis and surveillance in Albania.

Dr. K. Stöhr of the Zoonotic Diseases, Division of Emerging and other Communicable Diseases, Surveillance and Control, WHO, Geneva, Switzerland helped to arrange postgraduate training.

#### Reference

Kusi, I., Kushe, G., Pano, K., Duka., S. (1998)

Rabies situation in Albania: Strategy and objectives for setting up an effective control programme in animals and humans. Revista Veterinary <u>1</u>, 77-87 [in Albanian].

\*\*\*\*

#### 4.2 Fellowship

by Klaus Stöhr \* and Winfried Müller\*\*

 \*Zoonotic Diseases Division of Emerging and other Communicable Diseases Surveillance and Control, World Health Organization (WHO), CH-1211 Geneva, Switzerland
 \*\*WHO Collaborating Centre for Rabies Surveillance and Research at the Federal Research Centre for Virus Diseases of Animals, Institute of Immunology, P.O. Box 1149, D-72001 Tübingen, FRG

The above two authors would like to point out an **International Emerging Infectious Disease (EID) Laboratory Fellowship.** It is a Centers for Disease Control and Prevention (CDC), CDC Foundation, and Association of Public Health Laboratories (APHL) collaboration and is funded through an **Educational Grant from Eli Lilly and Company.** 

#### **Purposes of Fellowship Program**

- To enable the Fellows to gain skills in the latest laboratory techniques and technology, and thereby build the laboratory capacity for addressing diseases endemic to their home countries;
- To train a network of laboratory leaders throughout the globe to provide rapid, multinational responses to infectious disease threats;
- To establish linkages and ongoing professional and educational relationships among leaders in infectious diseases from public health, academia, and industry around the world;
- To reinforce the public health laboratory system and strengthen its relationship to infectious disease surveillance, prevention, research, and control, including issues related to antimicrobial resistance.

Applicants must be citizens of countries other than the United States. Individuals must have received a Ph.D., M.D., D.V.M., or equivalent doctoral degree from an accredited institution before a fellowship. All applicants must be fluent in English.

There will be a stipend for 1 year, allowances for travel, health insurance, and meeting participation.

Eligible applicants will be recruited through public health organizations or those with strong public health ties such as: the Centers for Disease Control and Prevention (CDC), the Association of Public Health Laboratories (APHL) or its member laboratories, Public Health Schools Without Walls, and WHO Collaborating Centers (for infectious diseases).

More detailed information may be obtained via:

e-mail	-	fellowship@aphl.org,
phone	-	202-822-5227,
fax	-	202-887-5098.

Applications should be forwarded to:

International EID Laboratory Fellowship Association of Public Health Laboratories 1211 Connecticut Avenue, Suite 608 Washington, D.C. 20036, U.S.A.

#### DEADLINE IS THE 1<sup>ST</sup> MARCH 1999.

#### 4.3 Information on the WHO Conference on Rabies Control and Oral Immunization of Red Foxes against Rabies in Central and Eastern Europe with the Participation of the Office International des Epizooties - OIE

by Hartmut Schlüter WHO Collaborating Centre for Rabies Surveillance and Research at the Federal Research Centre for Virus Diseases of Animals, Institute of Epidemiology, Seestr. 55, D-16868 Wusterhausen

The above conference was held on 22-23 October 1998 in Zagreb, Croatia.

Organizer of the meeting were two WHO Reference Centres from Germany and France and the host country Croatia. Furthermore, 12 countries of central and eastern Europe participated: Austria, Czech Republic, Estonia, Finland, Hungary, Italy, Lithuania, Latvia, Romania, Russian Federation, Slovak Republic and Slovenia. There was a total of 55 participants and observers. Dr. Michel F.A. Aubert of the Laboratoire d'Etudes sur la Rage et la Pathologie des Animaux Sauvages (CNEVA), Malzeville, France, represented the Office International des Epizooties (OIE) of Paris, France.

At the centre of discussion was the progress of rabies made in Europe in regard to oral immunization of red foxes against rabies. Here, reference was made to similar meetings in Slovenia in 1996 and in France in early 1998. The participating countries reported individually.

The second part of the meeting elaborated on laboratory issues. First of all how to improve diagnostics in regard to standardizing reagents and technology. Furthermore, the subjects of follow-up investigations in connection to the oral immunization of foxes and service training issues were discussed.

An up-dating on how surveillance and national and international rabies data processing is practised today was presented in that part of the meeting. Here, examples were given on the use of the computer with its ever expanding possibilities for collecting, storage, transferring and presenting data. A new rabies surveillance system available in the Internet initiated by WHO, called RABNET, was demonstrated.

Recommendations were formulated in working groups on subjects like the conditions for a rabies-free country, the management of oral immunization, how to improve diagnostic measures and the data exchange.

Conference proceedings are in the process of being prepared.

The representatives of the host country Croatia provided a harmonious atmosphere to the participants thus contributing to the success of the conference.

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EUR EUROPE	3/98	3		31	RABI	ES	CASE	S					1.7.	98 - 30	. 9.98
LOCATION		ром	EST	IC A	NIM	ALS			WII	D A	NIM	ALS		HUMAN	TOTAL
CODE NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL	CASES	TUTAL
ALB ALBANIA * AUT AUSTRIA * BEL BELGIUM * BIH BOSNA I HERCEGOWIN** BUL BULGARIA * BYE BELARUS	5	4	3	-	_	1	0 0 0 0 13	6	_	_	_	2	0 0 0 0 8		0 0 0 0 21
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POL POLAND POR PORTUGAL * ROM ROMANIA	13 1	19 1	36 1	-	-	-	68 0 3	224	2	14	-	49	289 0 0		357 0 3
RUS RUSSIAN FEDERATION SPA SPAIN * SVK SLOVAK REPUBLIC SVN SLOVENIA SWE SWEDEN *	82 4	80 14	168	2	-	-	340 0 18 0	145 88 3	3	3	1	18	169 0 92 3 0	3	512 0 110 3 0
SWI SWITZERLAND + LIEC* TUR TURKEY TYM MAKEDONIJA * UKR UKRAINE ** UNK UNITED KINGDOM *	21	-	8	-	-	-	0 29 0 0						00000		0 29 0 0
TOTAL	146	166	242	6	10	1	571	706	15	31	з	110	865	з	1439
PER CENT	10.1	11.5	16.8	0.4	0.7	0.1	39.7	49.1	1.0	2.2	0.2	7.6	60.1	0.2	100.0

TABLE 5.1

\* NO CASES \*\* NO DATA 1) SHEEP INFECTED BY BAT RABIES VIRUS

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TABLE 5.2

	1-3/	50			RABI	ESI	CASE	S					1. 1.	98 - 30	. 9.98
LOCATION		DOM	EST	IC A	NIM	ALS			WII	LDA	NIM	ALS			TOTAL
CODE NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL	CASES	TUTAL
ALB ALBANIA *							0						0		0
AUT AUSTRIA							0	2	-	-	-	-	2	1	2
BEL BELGIUM							0	1	-	-	-	-	1		1
BIH BOSNA I HERCEGOWIN**							0						0		0
BUL BULGARIA							0		-	-	-	8	8		8
BYE BELARUS	22	7	5	4	-	1	39	25	-	-	-	18	43		82
CRO CROATIA	7	8	2		з	-	20	214	-	4	-	з	221		241
CZH CZECH REPUBLIC	1	з	-	-	-	-	4	49	1	-		1	51		55
DEN DENMARK 1)	-	-	-	-	1	-	1	-	-	-	-	12	12		13
DEU FED.REP.OF GERMANY	2	2	-	1	1		6	56	-	2	2	3	63	1	69
EST ESTONIA	15	22	1	-	1	-	39	69	2	2	1	29	103		142
FIN FINLAND *							0						0		0
FRA FRANCE	1		-	-	-		1	1	-	-		1	2		3
FRY FED.REP.OF YUGOSLA	4	8	-	-	- 1	-	12	43	-	-	2	1	46		58
GRE GREECE *							0						0		0
HUN HUNGARY	17	40	13	2	1	-	73	325	-	5	4	-	334		407
ICE ICELAND *							0						0		0
IRE IRELAND *							0						0		0
ITA ITALY *							0						0		0
LTU LITHUANIA	9	15	33	з	-	-	60	47	3	9	2	16	77		137
LUX LUXEMBOURG *				100			0						0		0
LVA LATVIA	17	24	6	-	-	- 1	47	77	11	2	1	29	120		167
MLD MOLDOVA	з	з	1	-	-	-	7	18	-	-	<u> </u>	-	18		25
NET NETHERLANDS							0	-	-	- 1	-	6	6		6
NOR NORWAY *							0						0		0
POL POLAND	31	46	58	-	-	-	135	723	5	32	4	90	854		989
POR PORTUGAL *							0						0		0
ROM ROMANIA	3	5	1	-	18	-	27	8	-		-	1	9		36
RUS RUSSIAN FEDERATION	337	186	313	16	61	13	926	531	6	11	1	46	595	3	1524
SPA SPAIN 2)	7	-	-	-	-	-	7						0		7
SVK SLOVAK REPUBLIC	20	22	1	-	-		43	220	-	4	1	2	227		270
SVN SLOVENIA							0	14	-	-	-	-	14		14
SWE SWEDEN *							0						0		0
SWI SWITZERLAND + LIEC*							0						0		0
TUR TURKEY	81	1	15	1	2	1	101						0		101
TYM MAKEDONIJA *							0						0		0
UKR UKRAINE **							0						0		0
UNK UNITED KINGDOM *							0						0		0
TOTAL	577	392	449	27	88	15	1548	2423	28	71	18	266	2806	з	4357
								-							
PER CENT	13.2	9.0	10.3	0.6	2.0	0.3	35.5	55.6	0.6	1.6	0.4	6.1	64.4	0.1	100.0

\* NO CASES \*\* NO DATA 1) SHEEP INFECTED BY BAT RABIES VIRUS 2) NORTH AFRICA

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TABLE 5.3

EUR EUROPE	3/98			B I E S THER ANIM	C A S E AL SPECIE					1. 7.98 -	- 30. 9.98
LOCATION	O.DOM.ANIM				OTHER	WILD ANIM	ALS				TOTAL
CODE NAME	PIG	WOLF	RACOON DOG	WILD BOAR	INSECTIV BAT	SQUIRREL	HAMSTER	BLACK RAT	OTH.SMA. RODENTS	OTHERS	TUTAL
BYE BELARUS	1	1	1	-	-	-	-	-	-	-	з
CZH CZECH REPUBLIC	-	-		-	-	-	-	-	-	1	1
DEN DENMARK	-	-	-	-	9	-	-	-	-	-	9
DEU FED.REP.OF GERMANY	-	-	-	-	Э	-	-	-			з
EST ESTONIA	-	-	7	-	-	-	-	-	-	-	7
LTU LITHUANIA	-	-	6	-	-	-	-	-	-	-	6
LVA LATVIA	-	-	10	-	-	-	-	1	-	-	11
NET NETHERLANDS		-	-	-	4	-	-	-	-	-	4
POL POLAND	-		40	1	6	1	1	-	-	-	49
RUS RUSSIAN FEDERATION	· –	1	11	-	-	-	-	-	6	-	18
TOTAL	1	2	75	1	22	1	1	1	6	1	111
PER CENT	0.9	1.8	67.6	0.9	19.8	0.9	0.9	0.9	5.4	0.9	100.0

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					ABI		1. 122 342 Kala	S							
LOCATION		<b>D O M</b>	EST	IC A	NIM	ALS			WIL	DA	NIM	ALS		HUMAN	TOTAL
CODE NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL	CASES	TUTAL
BYE BELARUS															
01 Brest Region							0	1	-	-	-	-	1		1
02 Vitebsk Region	2	з	1		-	1	7	2	-	-	-	1	3		10
04 Grodno Region	-	1		-	-	-	1	1	-	-	-	1	2		3
05 Minsk Region	з	-	2	-	-	-	5	2	-	-	-	-	2		7
TOTAL	5	4	Э	0	0	1	13	6	0	0	0	2	8	0	21
PER CENT	23.8	19.0	14.3	0.0	0.0	4.8	61.9	28.6	0.0	0.0	0.0	9.5	38.1	0.0	100.0
34 Anyksciu 39 Vilkaviskio 41 Vilniaus 49 Kaisiadoriu		1	1 2 - 1	-	-		2 2 1	2	- 1 1	1	-	1	4 0 2 1		6 2 3 2
51 Marijampoles	-	-	1	-	-	-	1	1	-	-	-	-	1		2
54 Kelmes	-	-	1	-	-	-	1						0		1
55 Klaipedos	1	-	-	1	-	-	2						0		2
62 Moletu	1	1	1	-	-	-	з	2	-	-	-	1	3		6
65 Pakruojo	1	-	-	-	-	-	1						0		1
67 Pasvalio	_	1	_	_	-	-	1	1	-	-	-	-	1 0		2
68 Plunges 72 Raseiniai	-	1	3		-	_	1						0		3
77 Taurages		1	-	_	_	_	1	-	-	1	-	-	1		2
81 Ukmerges		1		_	_	-	1	_	-	1	_	-	1		2
82 Utenos	_	-	1	1	-	-	2	з	-	-	-	3	6		6
84 Sakiu			-	-			0	-	-	-	1	-	1		1
85 Salcininku	-	-	з	-	-	-	3						ō		3
88 Silutes	-	-	3	-	-	-	з	1	-	-	-	1	2		5
89 Sirvintu	-	-	1	-	-	-	1	2	-	1	-	-	3		4
91 Siauliu							0	-	-	1	-	-	1		1
TOTAL	з	7	18	2	0	0	30	13	2	5	1	6	27	0	57
PER CENT	5.3	12.3	31.6	3.5	0.0	0.0	52.6	22.8	3.5	8.8	1.8	10.5	47.4	0.0	100.0

CRO CROATIA RABIES CASES 1. 7.98 - 30. 9.98 LOCATION DOMESTIC ANIMALS WILD ANIMALS TOTAL HUMAN CODE NAME SHEEP TOTAL OTHER TOTAL CASES DOG CAT CATTLE HORSE GOAT OTHERS FOX BADGER MUSTEL DEER OTHERS 001 BELI MANASTIR 0 з з з ----004 BJELOVAR 0 1 ----1 1 016 DONJI LAPAC 0 1 -\_ --1 1 018 DRNIS ----1 --1 0 1 -019 DUBROVNIK 0 1 --1 --1 020 DUGA RESA 0 1 ----1 1 024 DURDEVAC ----1 -1 1 ----1 2 025 GARESNICA 1 -------1 1 ----2 1 031 IMOTSKI 0 17 ----1 1 033 IVANIC GRAD 0 7 --\_ -7 036 KARLOVAC 0 1 1 -\_ \_ \_ 1 039 KNIN 0 \_ 1 1 ---1 040 KOPRIVNICA 0 1 1 -\_ \_ 1 1 221 044 KRIZEVCI \_ 1 1 ----1 \_ ---1 059 OPATIJA 0 2 -\_ \_ -2 061 OSIJEK 1 1 -----0 065 PAKRAC 0 1 \_ 1 --1 073 RIJEKA 1 0 1 ----1 077 SISAK 0 1 ---\_ 1 1 079 SLAVONSKI BROD 0 5 --5 --5 087 VARAZDIN 0 1 1 ----1 -088 VINKOVCI 0 2 2 ---2 089 VIROVITICA 0 ---1 1 -1 092 VRBOVEC 0 4 --\_ -4 4 096 VUKOVAR 0 1 -------1 1 097 ZABOK 0 1 ----1 1 098 ZADAR 1 -----1 1 ----2 1 101 ZUPANJA 0 4 ----4 4 102 GRAD ZAGREB 0 4 \_ \_ --4 4 TOTAL з 1 1 0 1 0 6 49 0 1 0 0 50 0 56 PER CENT 5.4 1.8 1.8 0.0 1.8 0.0 10.7 87.5 0.0 1.8 0.0 0.0 89.3 0.0 100.0

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				1	RABI	ES	CASE	S					1. 7.9	98 - 30	. 9.98
LOCATION		р о м	EST	IC A	ИІМ	ALS			WII	_ D _ A	NIM	ALS		HUMAN	TOTAL
CODE NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL	CASES	
CZH сzесн ве	PUBL	. I C	10 7												
00 District of Prague 02 South Bohemia 04 North Bohemia 06 South Moravia	-	1	-	-	-	-	0010	1 2 3				- 1 -	1 3 2 3		1 3 3 3
TOTAL	0	1	0	0	0	0	1	8	0	o	0	1	9	0	10
HUN HUNGARY															
01 Budapest 02 Baranya 03 Bacs-Kiskun 04 Bekes 05 Borsod-Abauj-Zemplen 06 Csongrad 07 Fejer 09 Hajdu-Bihar 10 Heves 11 Komarom 12 Nograd 13 Pest 15 Szabolcs-Szat 16 Szolnok 18 Vas	1 - - 1	4 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 1 2 1					0 0 4 0 9 4 0 4 0 0 4 0 0 0 0 0 0 0 0 0	1 3 10 10 12 11 5 11 5 11 6 3 1					1 3 10 12 13 1 5 11 5 11 6 3 1		1 3 14 15 14 15 14 1 7 9 1 5 12 6 5 1
TOTAL	2	12	1	1	0	0	16	87	0	з	0	0	90	0	106
PER CENT	1.9	11.3	0.9	0.9	0.0	0.0	15.1	82.1	0.0	2.8	0.0	0.0	84.9	0.0	100.0
SVK SLOVAK R	EPUE	BLIC													
i Bratislavsky kraj 2 Trnavsky kraj 3 Trenciansky kraj 4 Nitriansky kraj 5 Zilinsky kraj 6 Banskobystricky kraj 7 Presovsky kraj 8 Kosicky kraj		1 2 3 6 1	-		-	=	1 0 1 2 0 3 10 1	8 4 12 5 18 22 13					8 4 12 5 20 22 13		9 4 9 14 5 23 32 14
TOTAL	4	14	0	0	0	0	18	88	0	з	1	0	92	0	110
PER CENT	3.6	12.7	0.0	0.0	0.0	0.0	16.4	80.0	0.0	2.7	0.9	0.0	83.6	0.0	100.0

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					ABI	ES (	CASE	s	Numerican Constant				1. 7.	98 - 30	. 9.98
LOCATION		ром	EST	IC A	NIM	ALS		7	WIL		NIM	ALS			
CODE NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL	HUMAN	TOTAL
DEN DENMARK															
020 FREDERIKSBORG 030 HYIDEBHEK 050 SONDERJYLLAND 065 RINGKOBING 1) 070 ARHUS 080 NORDJYLLAND	-	-	-	··· = ·	1	-	0 0 1 0					1 1 1 3 3	1 1 0 3 3		1 1 1 3 3
TOTAL	0	0	0	0	1	0	1	0	0	0	0	9	9	0	10
DEU FED.REP.OF GERMA 01 Schleswig-Holstein 05 Nordrhein-Westfalen 07 Rheinland-Pfalz 10 Saarland 11 Berlin	- 1	2 -	-	1	-	-	0 3 0 1 0	- 12 1 -		-	- 1 -	1 - - 2	1 13 1 0 2		1 16 1 1 2
TOTAL	1	2	0	1	0	0	4	13	0	0	1	З	17	0	21
PER CENT	4.8	9.5	0.0	4.8	0.0	0.0	19.0	61.9	0.0	0.0	4.8	14.3	81.0	0.0	100.0
NET NETHERLA 02 FRIESLAND	NDS						0	-	_	=	Ξ	2	2		2
08 OVERIJSSEL 10 ZUID-HOLLAND							0	-	-	-	-	1 1	1 1		1 1
TOTAL	0	0	0	0	o	o	o	0	0	o	o	4	4	o	4
SVN SLOVENIA															
017 CRNOMELJ 043 KAMNIK 060 LITIJA							000	1 1 1	=	Ē			1 1 1		1 1 1
TOTAL	0	o	0	0	o	0	0	з	0	0	0	0	з	0	з

1) SHEED INFECTED BY BAT RABIES VIRUS

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LOCATION		DOM	EST	IC A	NIM	ALS			WIL		NIM	ALS			
CODE NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL	CASES	TOTAL
EST ESTONI	4														
01 Harjumaa 03 Ida-Virumaa	1	-	-	-	-	-	1	1	=	-	-	1	2		3
04 Jogevamaa							0	4	-	-	-	1	1		1
05 Jaervamaa 07 Laeaene-Virumaa	_	з	_	-	_	_	03	3				_	3		3
08 Polvamaa	1	-	-		_		1	1	<u> </u>			1	2		4
09 Paernumaa		1	-	-	-	-	1	-	-	-		1	1		2
10 Raplamaa		1001					0	-	-		-	1	1		1
11 Saaremaa							0	1	-	-	-	-	1		1
12 Tartumaa		4	-	-	-	-	4	4	-	-	-	2	6		10
14 Viljandimaa 15 Vorumaa	1 -	2	=	-	-	=	1 2						0		1 2
TOTAL	з	10	0	0	0	0	13	16	o	o	0	7	23	0	36
PER CENT	8.3	27.8	0.0	0.0	0.0	0.0	36.1	44.4	0.0	0.0	0.0	19.4	63.9	0.0	100.0
01 Aizkraukle 02 Aluksne 04 Bauska 05 Cesis 06 Daugavpils 07 Dobele 08 Gulbene 11 Kraslava 12 Kuldiga 13 Liepaja 14 Limbazi 15 Ludza 17 Ogre 18 Preili 19 Rezekne 20 Riga 21 Saldus	1	1 1 1 2 1 2 -					00011101121200143	- 1112 - 115321127	1			1 1	12113011405441220		1 2 1 2 1 2 1 2 4 1 1 2 5 2 6 6 4 1 3 6 3 6 3 1 3 6 3 1 3 6 3 1 3 6 3 1 3 6 3 1 3 6 3 1 3 6 3 1 3 6 3 1 3 6 3 1 3 6 3 1 3 6 3 1 3 6 3 1 3 6 3 1 3 1
23 Tukums							0	1	-	-	-	1	2		2
24 Valka 25 Valmiera	-	- 3	1 2		-	-	1 5	4	2	-	Ξ	- 1	6 12		7
															17
TOTAL	7	11	6	0	0	0	24	41	8	2	0	11	62	0	86
PER CENT	8.1	12.8	7.0	0.0	0.0	0.0	27.9	47.7	9.3	2.3	0.0	12.8	72.1	0.0	100.0

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8				I	RABI	ES	CASE	S					1. 7.	98 - 30	. 9.98
LOCATION		о о м	EST	IC A	NIM	ALS			WIL	D A	NIM	ALS			
CODE NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL	CASES	TOTAL
FRY FED.REP.OF YUGO	SLAVIA														
02 Pancevo 03 Novi Sad 04 Zrenjanin 05 Subotica	-	1 1	-	-	=	-	1 1 0	2			-	-	2 0 2 2		3 1 2 2
06 Sombor 07 Sabac 09 Jagodina 11 Kraljevo	-	1	-		-	-	0100	1 1 1		-			1 0 1 1		1 1 1
TOTAL	0	з	0	0	0	0	з	9	0	0	0	0	9	0	12
MLD MOLDOVA	1	I		1	1	1			1	í			1	1	
01 MOLDOVA	1	1	-	-	-	-	2	4	-	-	-	-	4		6
TOTAL	1	1	0	0	0	0	2	4	0	0	0	0	4	0	6
PER CENT	16.7	16.7	0.0	0.0	0.0	0.0	33.3	66.7	0.0	0.0	0.0	0.0	66.7	0.0	100.0
ROM ROMANIA										,					
04 BACAU 40 VRANCEA	1	- 1	1	-	-	-	2						0		2
TOTAL	1	1	1	o	0	0	з	o	0	o	0	0	0	0	з
TUR TURKEY															
10 BALIKESIR 16 BURSA 31 HATAY 34 ISTANBUL 35 IZMIR 37 KASTAMONU 46 KAHRAMANMARAS 52 ORDU	1 2 10 6 - 1		1 1 4 7 4 4 2 1				1 2 2 3 7 1 2 1						000000000000000000000000000000000000000		1 2 2 3 7 1 2 1 2 1
TOTAL	21	٥	8	o	0	0	29	o	o	0	0	0	0	0	29
PER CENT	72.4	0.0	27.6	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0

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POL POLAND RABIES CASES 1.7.98 - 30.9.98															
LOCATION		DOM	EST	IC A	NIM	ALS		WILD ANIMALS							
CODE NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL	CASES	TOTAL
01 WARSZAWA	-	2	-	-	-	-	2	7	-	2	-	2	11		13
03 BIALA PODLASKA	1	-	-	-	-	-	1	18	1	-	-		19		20
05 BIALYSTOK	-	2	3		-	-	5	10	1	1	-	1	13		18
09 BYDGOSZCZ	1						0	-		-	-	2	2	1	2
11 CHELM	1	-	-	-	-	-	1	з		-	-	-	3		4
13 CIECHANOW	-	-	2	-	-	-	2	8	-	-	-	1	9		11
17 ELBLAG		-	3		-	-	Э	1	-	-	-	1	2		5
29 KIELCE							0	6			-	-	6		6
37 KROSNO	-	1	-	-	- 1	-	1	2	-	-	-	- 1	2		3
43 LUBLIN	6	2	1	-	-	-	9	26	-	1	-	-	27		36
45 LOMZA		1	1	-	-		2	2		-	-	4	6		8
49 NOWY SACZ							0	1	-	-	-	- 1	1		1
51 OLSZTYN	-	1	3	-		- 1	4	22	-	-	-	10	32	1	36
55 OSTROLEKA		1	-	-	- 1		1	Э	-	1	-	1	5		6
57 PILA					1		0	-	-	-	-	1	1		1
59 PIOTRKOW TRYB							0	з	- 1	-	-		3	1	3
51 PLOCK							0	12	-	1	-	1	14		14
63 POZNAN	-	-	1	-	-	-	1	5	- 1	-	-	1	6		7
65 PRZEMYSL	1	-	-	-	-	-	1	6	-	1	-	-	7		8
67 RADOM							0	8	-	2	-	-	10	20. I	10
69 RZESZOW	-	1	-	-	-	-	1	10		-	-	-	10		11
71 SIEDLCE					1		0	13	-	1	-	1	15		15
73 SIERADZ					1		0	1	-	-	-	-	1	1	1
75 SKIERNIEWICE					1		0	1	-	-	-	-	1	1	1
79 SUWALKI	-	5	7		-	-	12	21	-	2	-	20	43	1	55
83 TARNOBRZEG	1	-	-	-	-	-	1	6	-	-	-	-	6		7
85 TARNOW							0	1	-	-	-	-	1		1 1
87 TORUN	-	2	12	-	- 1	-	14	12	-	1	-	2	15		29
91 WLOCLAWEK	1	-	з	-	-	-	4	6	-	-	-	-	6		10
95 ZAMOSC	2	1	-	-	-	-	З	10	-	1	-	1	12		15
TOTAL	13	19	36	0	0	0	68	224	2	14	0	49	289	0	357
PER CENT	3.6	5.3	10.1	0.0	0.0	0.0	19.0	62.7	0.6	3.9	0.0	13.7	81.0	0.0	100.0

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LOCATION	DOMESTIC ANIMALS								WILD ANIMALS						
CODE NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL	HUMAN	TOTAL
07 Novgorod Region							0	4	-	-	-	-	4		4
08 Pskov Region	2	з	-	· · · -	-		5	2	1	-	-	1	4		9
10 Vladimir Region	1	-	-	-		-	1		_			-	0		1
12 Twer Region	1	-	2	- 1	-	-	з	2	-	-	-	-	2		5
13 Kaluga Region	4	з			-		7	5		-	-	-	5		12
15 Moscow Region	з	4	1	-	-	-	8	7	-	-	-	6	13	1	22
16 Oryol Region	1	з	12	-	-	-	16	Э		1	-	1	5	-	21
17 Ruazan Region	1	-		-	-	-	1	-		-		-	0		1 1
18 Smolensk Region	1	2	1	1 1		-	5	1		-	-	-	1		6
19 Tula Region	11	8	12		5	-	36	з	1	-	-	4	8	2	46
24 Rep. of Mordoviya							0	1		-	-		1	-	1 1
25 Rep. of Chuvashiya					1		0	1	-	-	-		1		1
26 Belgorod Region	5	4	25	-	1	-	35	9	-	1	-	1	11		46
27 Voronezh Region	2	4	13	-	-	-	19	4	-		-		4		23
28 Kursk Region	8	18	31	1	-	-	58	46	-	1	-	1	48		106
29 Lipetsk Region	-	-	1		-	-	1	1	-		-		1		2
31 Astrakhan Region	2	_	1	_	-		3	-					ō		3
32 Volgograd Region	3	5	, a	-	-	-	17	2		- 1	-	3	5	-	22
33 Samara Region	-	-					0	4	-	-	-	-	4		4
34 Penza Region	1	-	-		-	-	1	7		-	-	-	7		8
35 Saratov Region	2	2	2	-	-	-	6	5	-	_	-	-	5		11
36 Ulyanovsk Region	1	1	2	-	-	-	4	2	-	_	-	_	2		6
37 Rep. of Kalmykiya	3	_	1 1	-	-	_	4	-					0		4
38 Rep. of Tatarstan	1	2	17	-	-	-	20	9	-		-	-	g		29
39 Krasnodar Territory	6	1	-	-	-	-	7	2	-	-	-	-	2		9
40 Stavropol Territory	9	7	4	-	1	-	21	1		-	-	-	1		22
41 Rostov Region	4	3	3	-	1	-	11	1	-	-	-	1	2		13
42 Orenburg Region	7	9	11	-	-	-	27	11	-	-	-	1 1	11		38
44 Rep. of Bashkortostan	Э	1	20	-	-	-	24	12	1	-	-	-	13		37
TOTAL	82	80	168	2	8	0	340	145	з	з	0	18	169	з	512
PER CENT	16.0	15.6	32.8	0.4	1.6	0.0	66.4	28.3	0.6	0.6	0.0	3.5	33.0	0.6	100.0

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