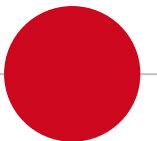


# Stato sanitario dei carnivori selvatici nella Regione Friuli Venezia Giulia (2018-2023)

**BREGOLI Marco<sup>1</sup>, DE ZAN Gabrita<sup>1</sup>, PESARO Stefano<sup>2</sup>, BERALDO Paola<sup>2</sup>,  
DORIGO Luca<sup>3</sup>, SELLO Marco<sup>1</sup>, BENEDETTI Paolo<sup>4</sup>, FATTORI Umberto<sup>4</sup>, PALEI  
Manlio<sup>4</sup>, LAPINI Luca<sup>3</sup>, DANESI Patrizia<sup>1</sup>, OBBER Federica<sup>1</sup>, CEGLIE Letizia<sup>1</sup>,  
LEOPARDI Stefania<sup>1</sup>, DE BENEDICTIS Paola<sup>1</sup>, CITTERIO Carlo<sup>1</sup>**

*<sup>1</sup>Istituto Zooprofilattico Sperimentale delle Venezie, <sup>2</sup>Università degli Studi di Udine, <sup>3</sup>Museo Friulano di Storia Naturale di Udine, <sup>4</sup>Regione Friuli Venezia Giulia*

40èmes Rencontres du GEEFSM  
Saluzzo (CN) – 22/09/2023



● 2908 esemplari analizzati (01/01/2018-30/06/2023)



*Meles meles* - 844



*Vulpes vulpes* - 1840



*Felis silvestris* - 53



*Canis lupus* - 14



*Mustela putorius* - 1



*Martes foina* - 66



*Lutra lutra* - 3



*Martes martes* - 4



*Canis aureus* - 83

# ● Malattie/patogeni sottoposti a sorveglianza



## SNC:

- RABBIA (IF)
- CIMURRO (PCR)



## MILZA:

- FIV e FeLV (PCR)



## POLMONE:

- CIMURRO (PCR)
- ADENOVIRUS (PCR)



## INTESTINO:

- PARVOVIRUS e FIP (FCoV) (PCR)



## FEGATO:

- ADENOVIRUS (PCR)



## MUSCOLO (tibiale craniale + diaframma):

- *Trichinella* (EC Regulation 1375/15)

## FECI:

- *Echinococcus multilocularis* (sedimentazione-filtrazione + PCR)



## ALTRI ORGANI/ESAMI:

- batteriologici
- istopatologici
- *Leptospira* (PCR)

## ● Dati sierologici

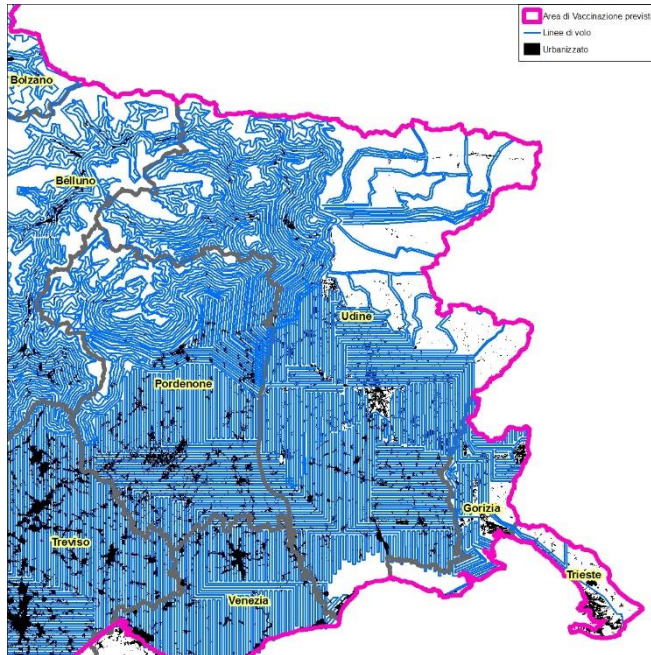


- 10 *Canis aureus*
- 3 *Canis lupus*
- 4 *Ursus arctos*
- 2 *Vulpes vulpes*
- 1 *Lynx lynx*





# Rabbia



Tutte le specie esaminate sono risultate negative

Italia indenne dal 2012



# Cimurro



19,8%



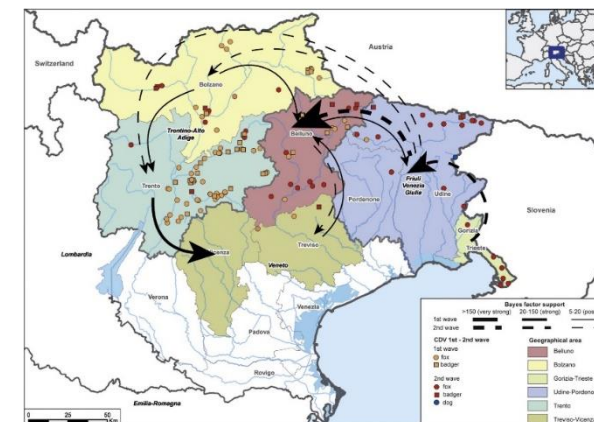
7,3%



4,9%



16,6%

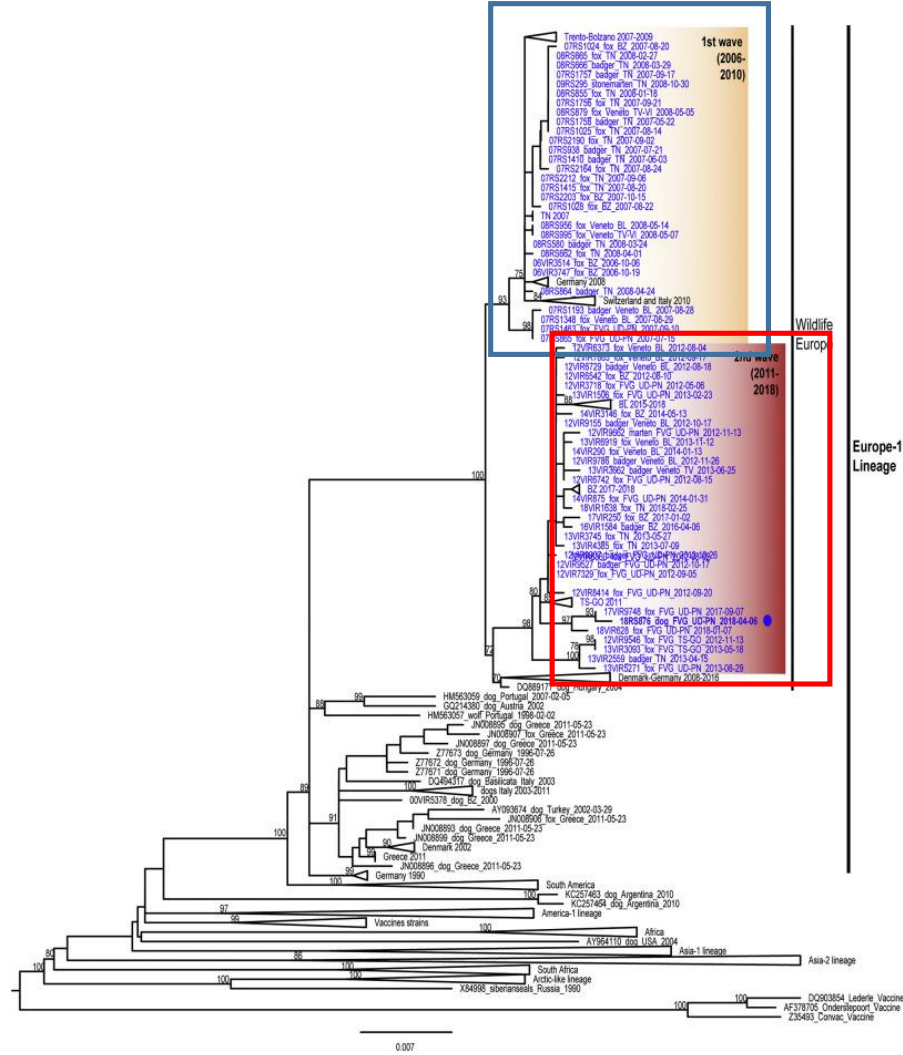


2,2%



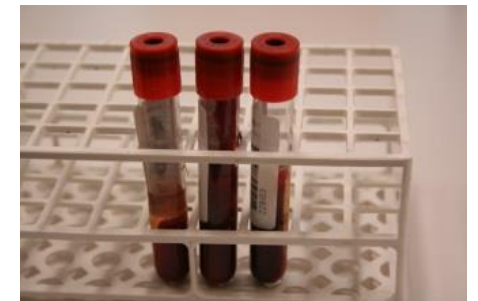
7,3%

# Cimurro



*Ursus arctos*

2/4 sieropositivi





47,2%

9,0%

2,3%

8,3%

Communication

## *Carnivore protoparvovirus 1 (CPV-2 and FPV) Circulating in Wild Carnivores and in Puppies Illegally Imported into North-Eastern Italy*


Stefania Leopardi <sup>1</sup>, Adelaide Milani <sup>1</sup>, Monia Cocchi <sup>2</sup>, Marco Bregoli <sup>2</sup>, Alessia Schivo <sup>1</sup>, Sofia Leardini <sup>1</sup>, Francesca Festa <sup>1</sup>, Ambra Pastori <sup>1</sup>, Gabrita de Zan <sup>2</sup>, Federica Gobbo <sup>1</sup>, Maria Serena Beato <sup>1,†</sup>, Manlio Palei <sup>3</sup>, Alessandro Bremi <sup>3,4</sup>, Marie-Christin Rossmann <sup>4,5</sup>, Paolo Zucca <sup>3,4</sup>, Isabella Monne <sup>1</sup> and Paola De Benedictis <sup>1,\*</sup>

Veterinary Research Communications (2022) 46:1291–1295  
<https://doi.org/10.1007/s11259-022-09965-w>

SHORT COMMUNICATION



### Investigation of *Carnivore protoparvovirus 1* and *Amdoparvovirus* infections in red fox populations of the Italian Dolomites

Laura Grassi <sup>1</sup> · Maria Luisa Menandro <sup>1</sup> · Federica Obber <sup>2</sup> · Michele Drigo <sup>1</sup> · Matteo Legnardi <sup>1</sup> · Daniela Pasotto <sup>1</sup> · Claudia Maria Tucciarone <sup>1</sup> · Giulia Faustini <sup>1</sup> · Carlo Citterio <sup>2</sup> · Mattia Cecchinato <sup>1</sup> · Giovanni Franzo <sup>1</sup> 

FPV

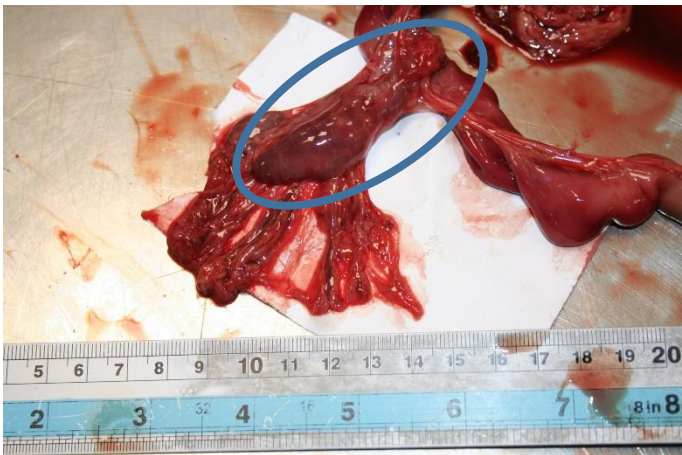
CPV2c

CPV2a-b





# Parvovirus

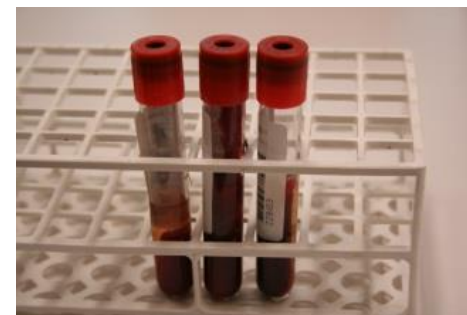


## • POSITIVITA' SIEROLOGICHE

- 5 *Canis aureus*
- 1 *Canis lupus*
- 1 *Lynx lynx*



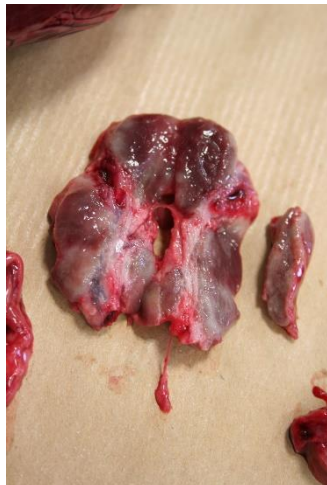
1:2560



# ● Adenovirus Canino tipo 1 e 2



1,8%  
CAV2

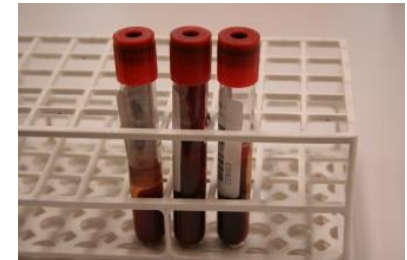


## ● POSITIVITA' SIEROLOGICHE CAV2

- 3 *Ursus arctos*
- 3 *Canis aureus*
- 1 *Canis lupus*

## CAV1

- 1 *Canis lupus*



## ● FCoV, FeLV, FIV

- FCoV 2,3%



- FeLV 6,9%



Soggetti adulti con splenomegalia, congestione del parenchima polmonare, concomitante infestazione da ascaridi e tenie

Riscontro in linea con altre indagini in Europa (tuttavia uno studio sierologico in Slovenia ha dato esito negativo – Racnik *et al.* 2008)

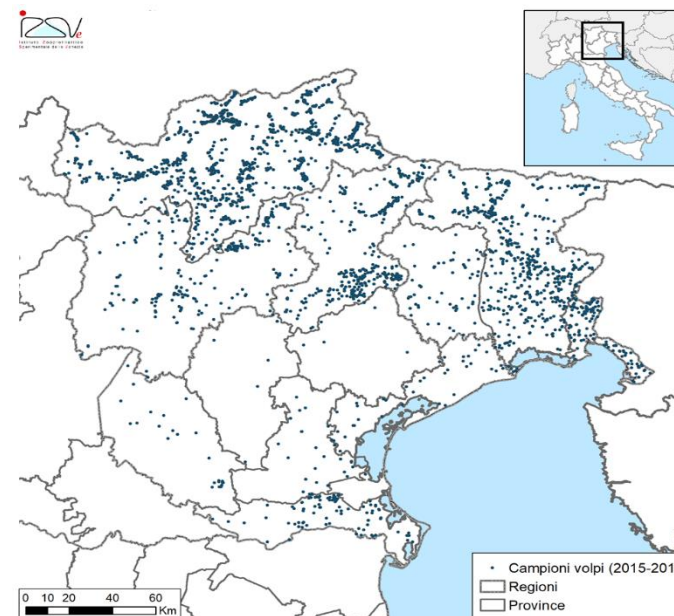
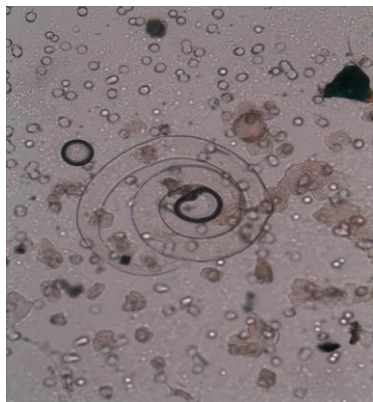
- FIV: tutti negativi

# ● *E.multilocularis* e *Trichinella*

- Negatività per *E.multilocularis*

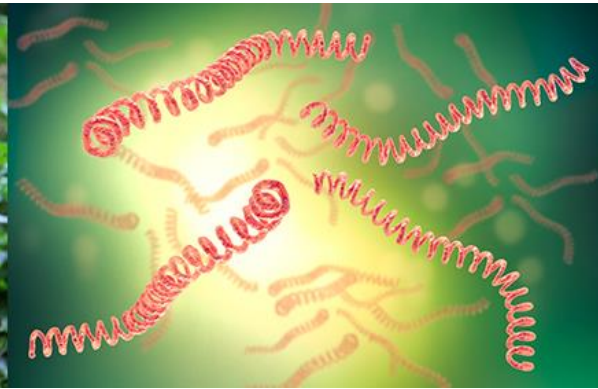
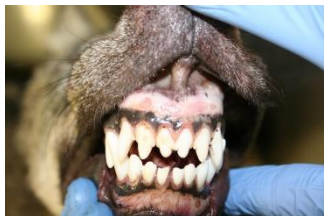
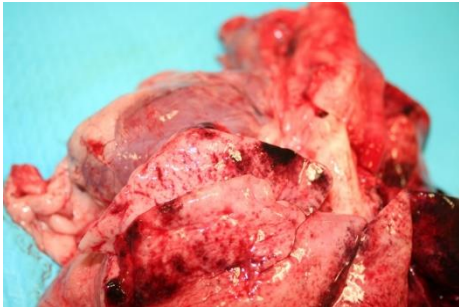


- Negatività per *Trichinella*



# Leptospirosi

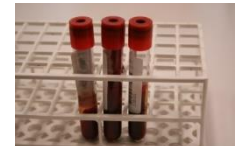
*L. kirschneri pomona*  
mozdok



*L. hycterohaemorrhagiae*



- 3 orsi (1:800 sejroe var. hardio; 1:12800 pomona var. pomona)
- 2 lupi (1:6400 e 1:200 grippothyphosa)
- 1 sciacallo (1:200 grippothyphosa)
- 2 volpi (1:1600 hycterohaemorrhagiae e 1:800 hycet.+canicola)
- 1 lince (1:800 grippothyphosa e 1:400 hycet.)



# ● Altre positività sierologiche

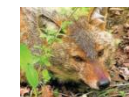
## Toxoplasma (ELISA)

- 4 *Ursus arctos*
- 2 *Canis aureus*
- 1 *Linx linx*

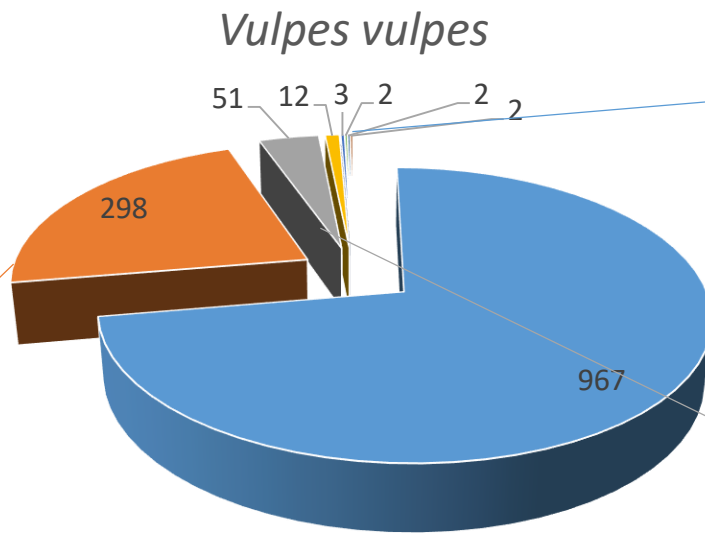


## TBEV (cELISA)

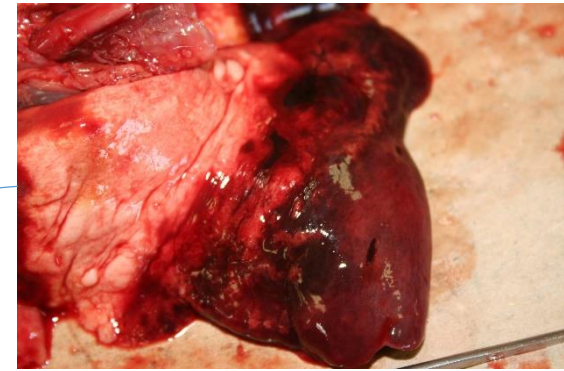
- 3 *Ursus arctos*
- 2 *Canis aureus*



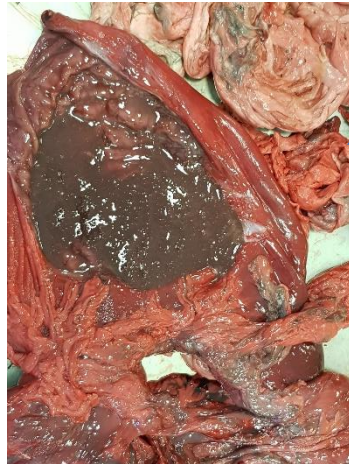
# ● Cause di mortalità – *Vulpes vulpes*



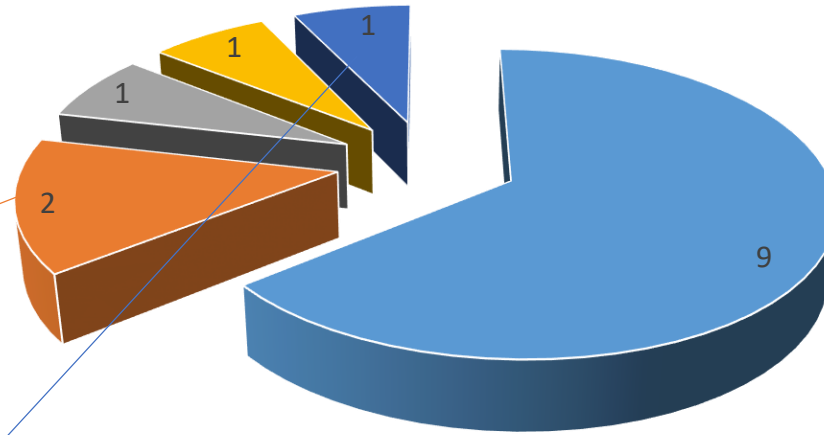
- investimenti   ■ cimurro   ■ rognia
- indeterminata   ■ arma da fuoco   ■ avvelenamenti
- polmonite   ■ leptospirosi   ■ setticemia



# ● Cause di mortalità – *Canis lupus*



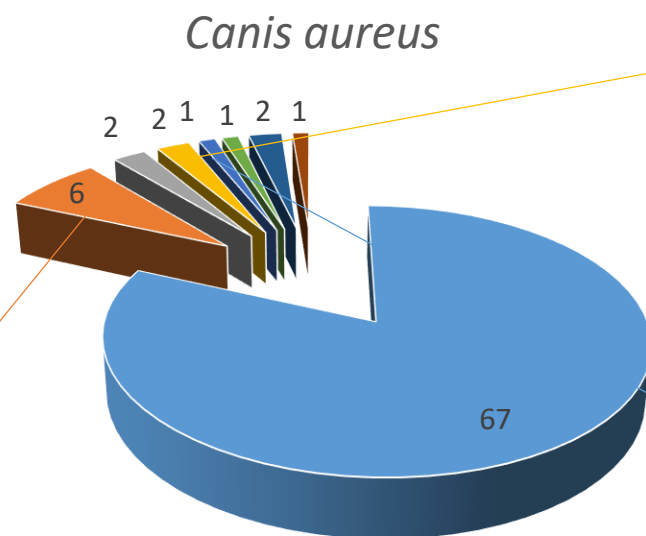
*Canis lupus*



- investimenti
- aggressione
- arma da fuoco
- avvelenamento
- emorragia



# ● Cause di mortalità – *Canis aureus*

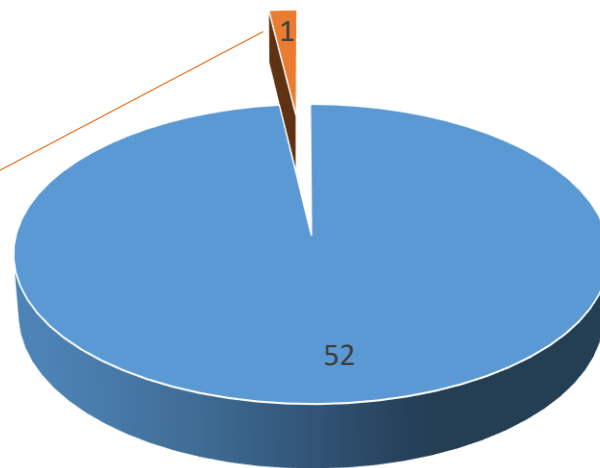


- investimenti
- avvelenamenti
- annegamento
- aggressione
- arma da fuoco
- gastrite emorragica
- indeterminata
- tumore

# ● Cause di mortalità – *Felis silvestris*



*Felis silvestris*



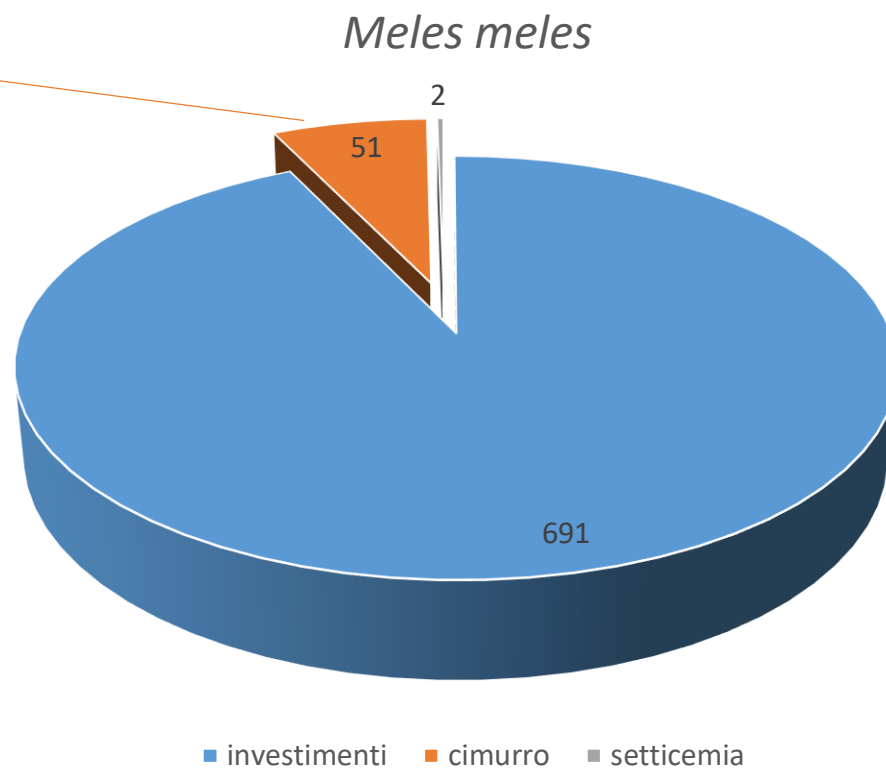
■ investimenti   ■ gastroenterite emorragica   ■

Causes of mortality	N. of events recorded	% of total events	AMR	SE of AMR	% of AMR
Roadkill	13	54.17%	0.079	0.022	56.68%
Poaching	5	20.83%	0.031	0.014	22.31%
Disease	3	12.50%	0.012	0.007	8.67%
Unknown	2	8.33%	0.011	0.008	8.08%
Mowing	1	4.17%	0.006	0.006	4.26%
Sum	24	100%	0.140	0.057	100%

Bastianelli *et al.*, 21  
Biological Conservation



# ● Cause di mortalità – *Meles meles*



# ● Cause di mortalità – altri mustelidi

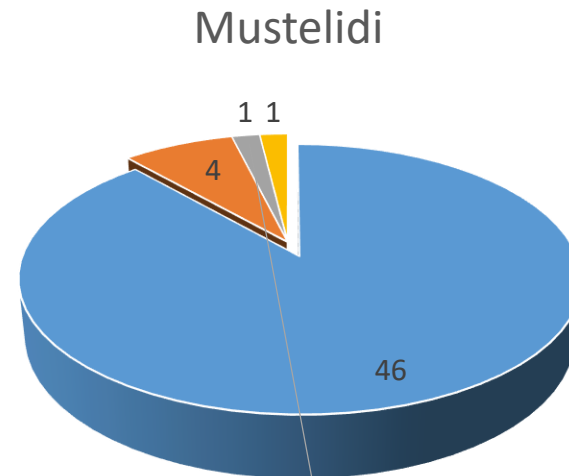


- *Martes foina*

- *Martes martes*

- *Mustela putorius*

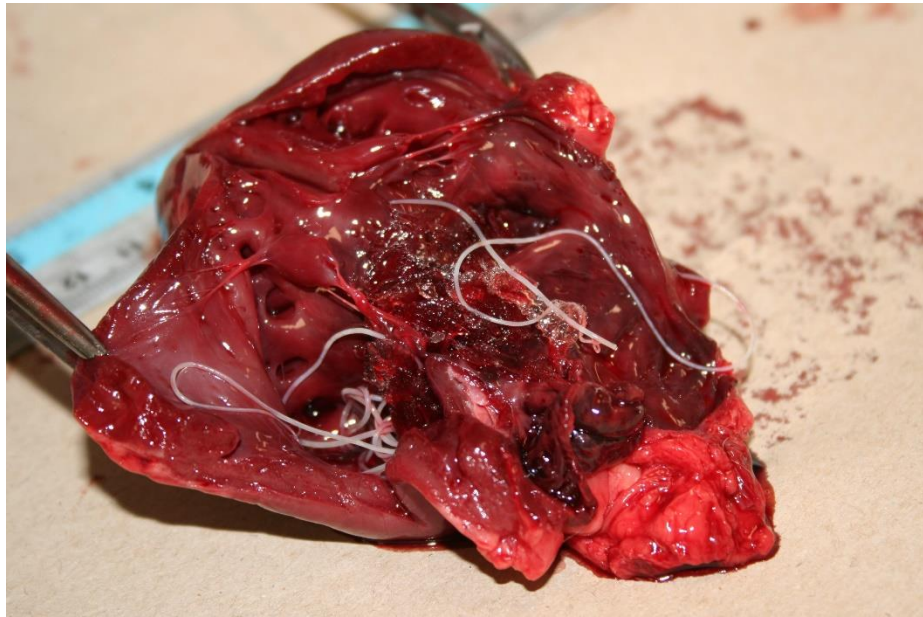
- *Lutra lutra*



■ investimenti ■ cimurro ■ rogna ■ endocardite



● **Esami anatomopatologici/altre patologie/rilievi**



- Specie in espansione, soprattutto sciacallo dorato e gatto selvatico, ritorni (lontra), presenze occasionali
- Valutazione interazioni interspecifiche e antropiche
- Cimurro: virus maggiormente diffuso e maggiore causa infettiva di mortalità
- Attenzione problematiche conflittuali (avvelenamenti, bracconaggio)
- Monitorare diffusione altri virus (parvovirus, coronavirus, adenovirus..)
- Sorvegliare eventuale emergenza di problematiche zoonotiche (*E.multilocularis*, leptospirosi)





gracias por  
su atención!

merci pour  
votre  
attention!