

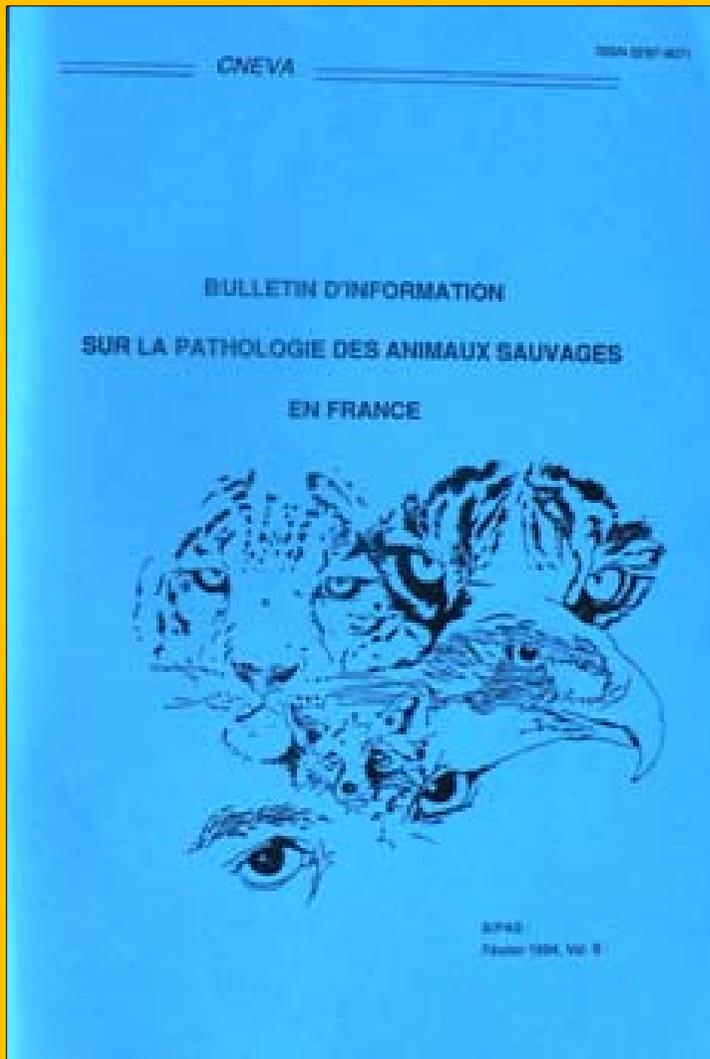
Echinococcosi/idatidosi e ritorno del lupo sulle Alpi Occidentali

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° Regione Piemonte, Progetto Lupo



NO
CERVIDI
INFESTATI

(N=111)

1985 - 1992

1 camoscio – Alpi Cozie (1 idatide fertile) – 0.3%
1 muflone – Alpi Marittime (2 idatidi fertili) – 1.5%
1 cinghiale – Alpi Liguri (5 idatidi sterili) – 0.6%

BIPAS Vol. 9 - G.E.F.S.M., 1993 : 143

**INDAGINE SULLE CESTODOSI LARVALI
NEGLI UNGULATI DI MONTAGNA
(RECHERCHE SUR LES CESTODOSES LARVAIRES
DANS LES ONGULES DE MONTAGNE)**

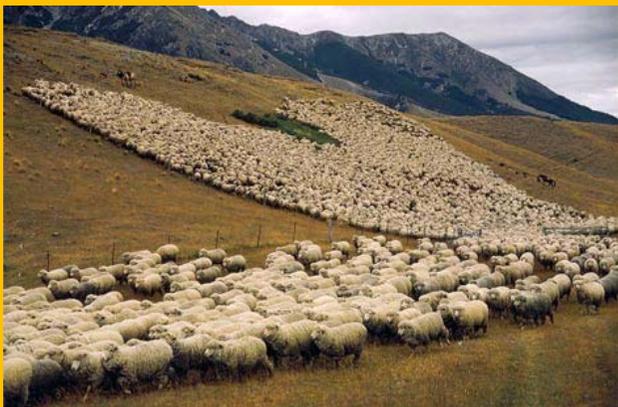
W. Mignone¹, P.G. Meneguz², M. Poggi¹, L. Rossi²

RESUME

On a recherché la présence des larves de Cestodes dans 704 ongulés de montagne. Ont été observés: en trois occasions des kystes de *Echinococcus granulosus*, en un cas un kyste de *Coenurus cerebralis* et maintes fois des kystes de *Cysticercus tenuicollis*. Les auteurs discutent brièvement l'origine de cette parasitose.

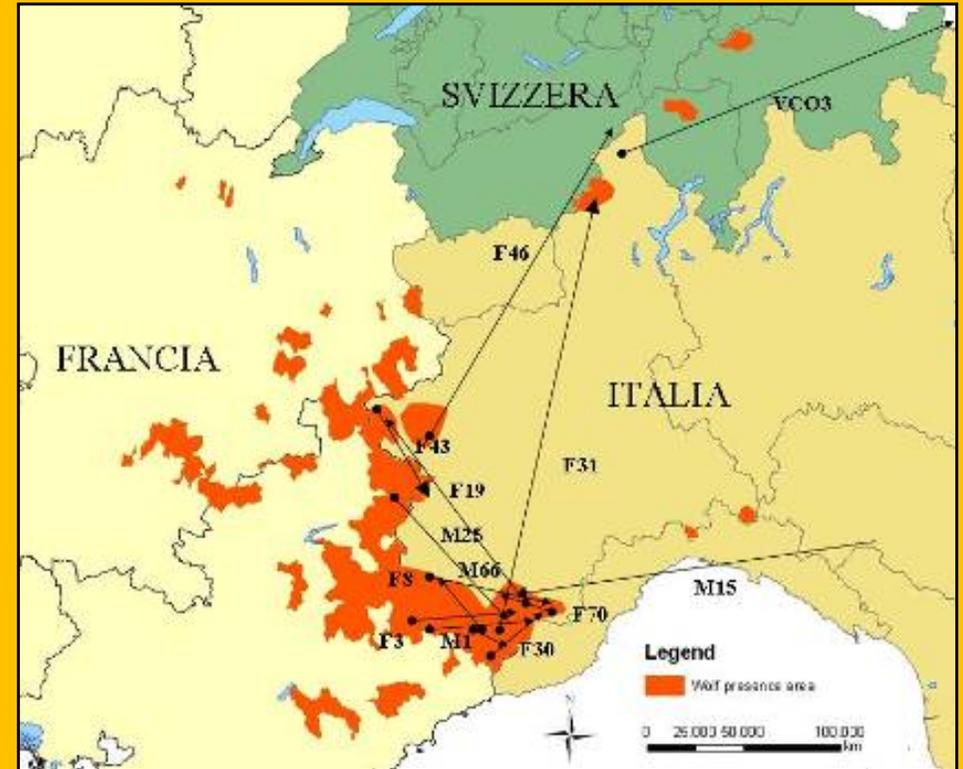
ABSTRACT

Larval cestodoses were searched for in 704 mountain ungulates. Three individuals were infected with *Echinococcus granulosus*, one with *Coenurus cerebralis* and many others with *Cysticercus tenuicollis*. A short comment about the origin of these infections is provided.

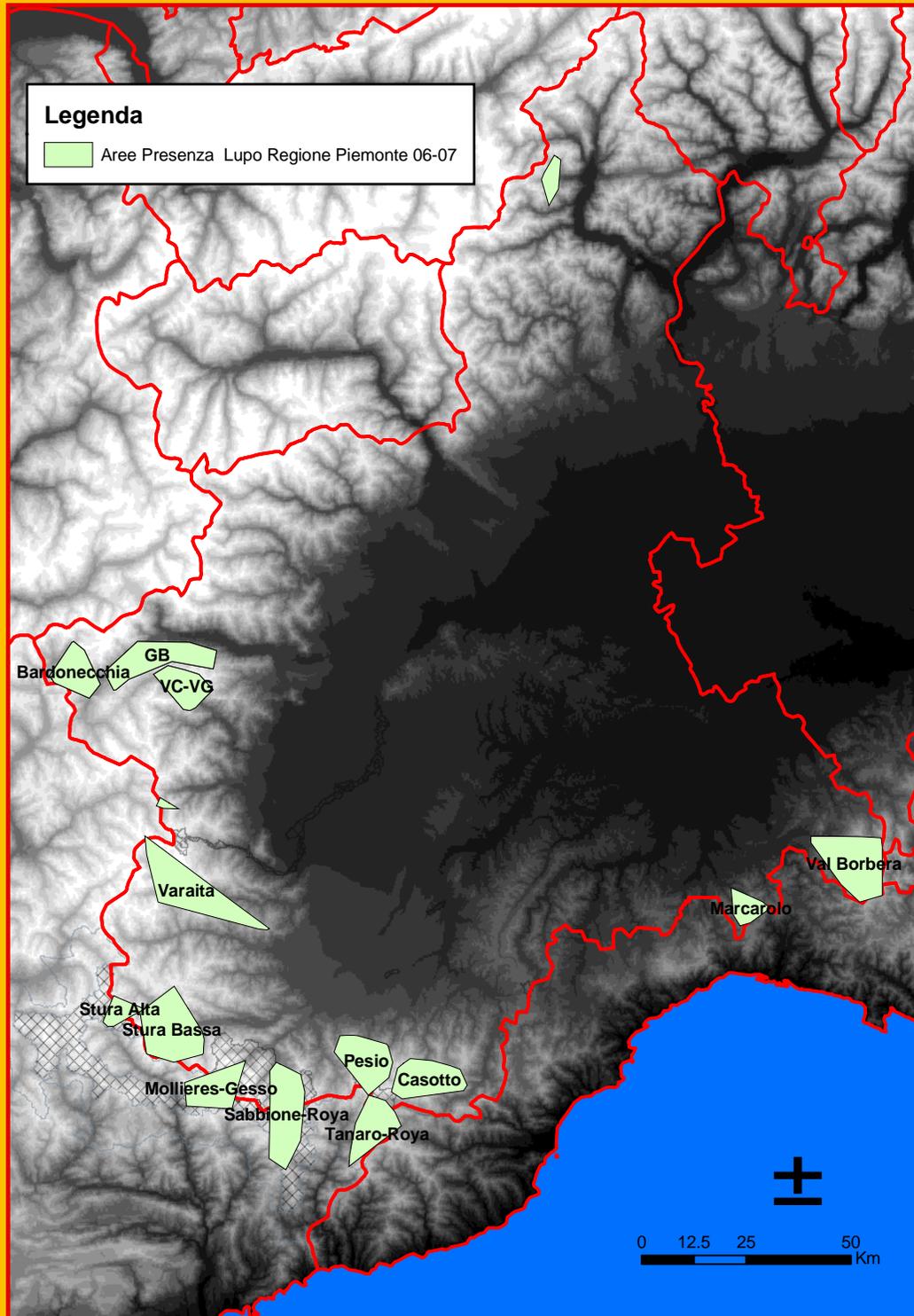


Cul-de-sacs epidemiologiques

2007: min. 50-60 loups

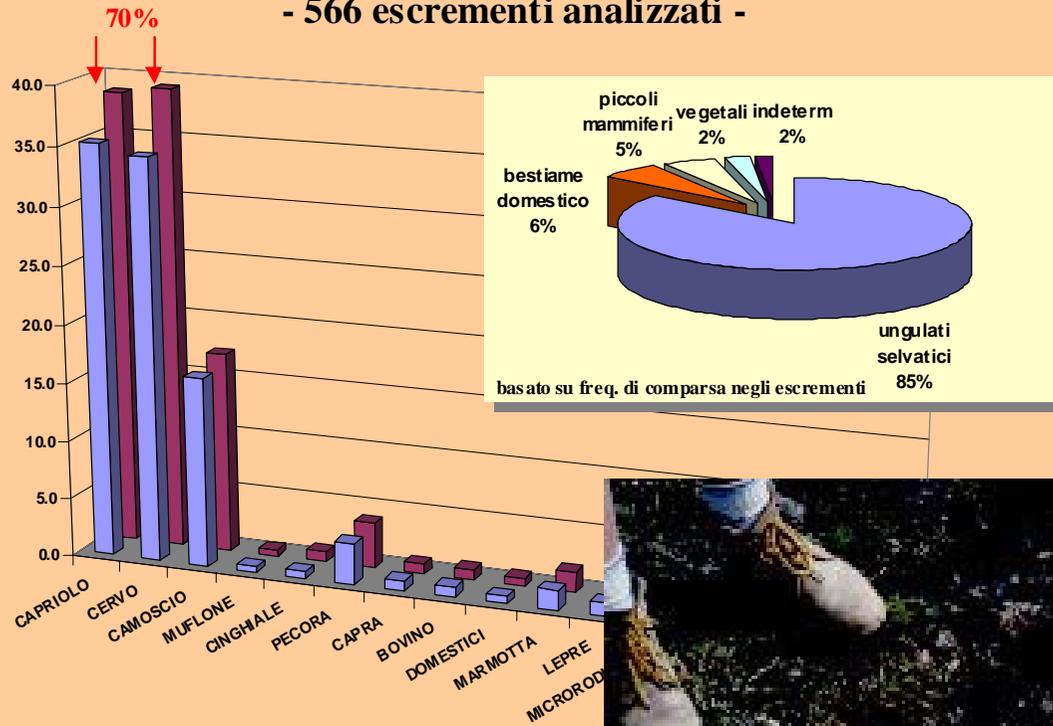


Migrations transfrontalières



Composizione della dieta

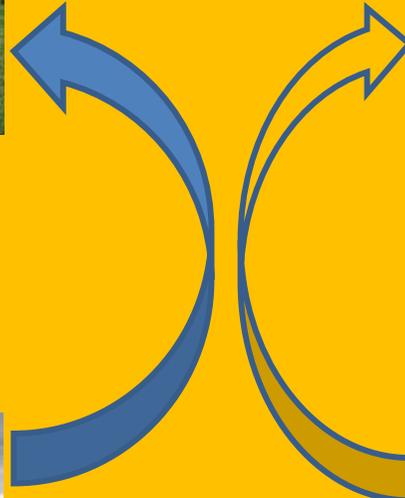
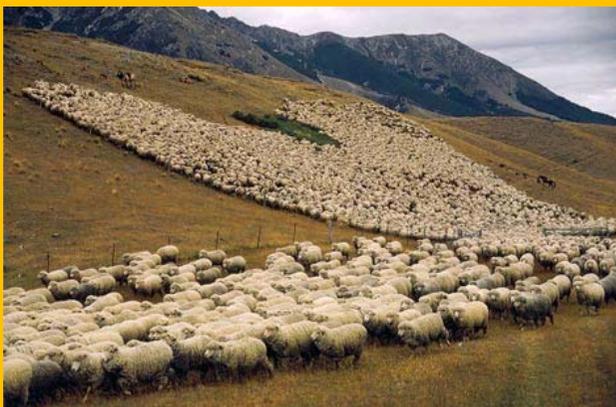
- 566 escrementi analizzati -



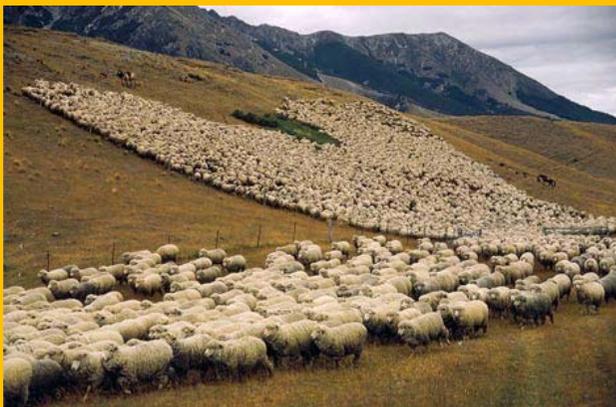
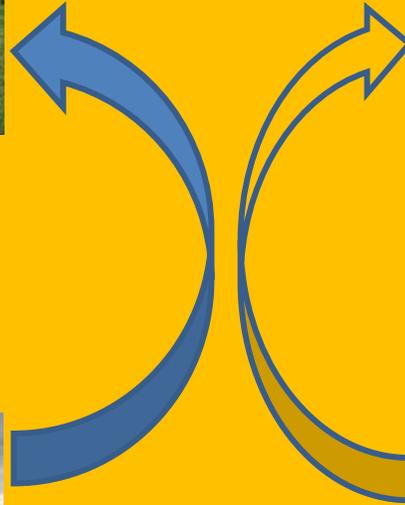
Question?



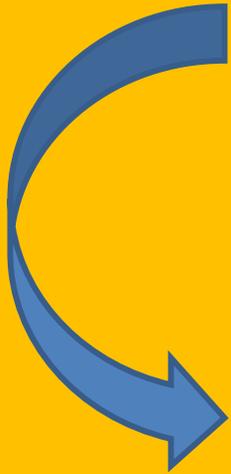
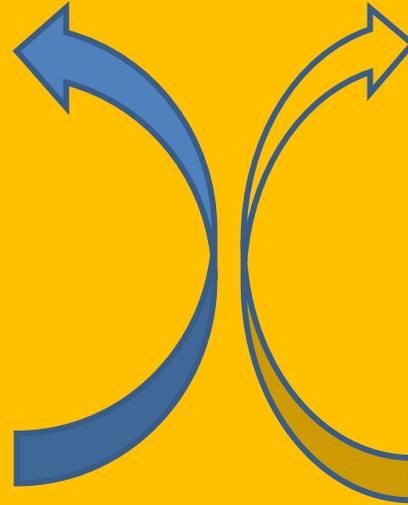
GUBERTI: 10-25%



G1 - Australia



G8-10 – Emisfero Nord



MATERIALI E METODI

Area di studio: TO – CN - IM

Arco temporale: 1999-2009



Necroscopie su ovi-caprini predati da lupo: N=146

ELISA copro-antigene su cani “zootecnici”: N=66 (da 19 greggi)

ELISA copro-antigene di lupi: N=210

Necroscopie su lupi e volpi (e cani): N=19 + 115 (+ 2)

Necroscopie su ungulati selvatici: N=1877



23/146

15.8%
(CI: 9 – 23%)



Ufficialmente in Piemonte

- 25 casi umani in 4 anni (1998-2001)
- ASL di residenza: Torino (6), Collegno (4), Chivasso (2), Chieri (1), Ivrea (1), Pinerolo (4), Biella (2), Novara (1), Asti (1), Casale M.to (1), Novi Ligure (1)
- Ovini macellazione: < 0.5%
- Bovini macellazione: < 0.1%



CHEKIT ECHINOTEST ® Bommeli

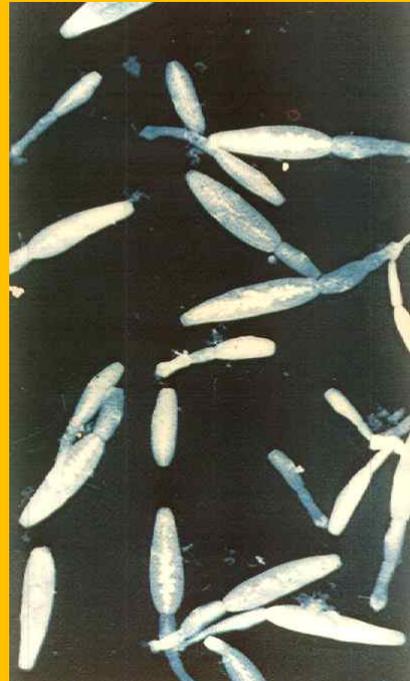
18/66 cani

9/19 greggi

27.3% (!!!)

47.4% (!)

2/2





CHEKIT ECHINOTEST ® Bommeli

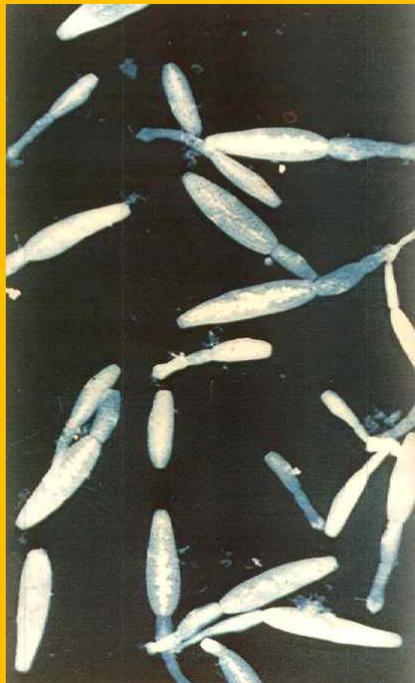
55/210 lupi

5/5 branchi

26.1% (!!!)

100% (!)

(= cani)



0/19

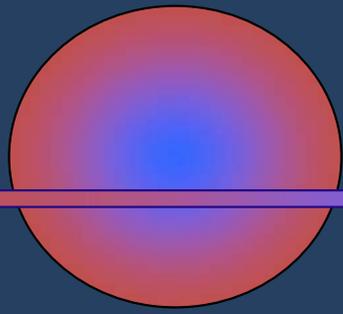
PCR (uova)
ISS Roma

0/19

~~CprAg~~

9/19

VOLPI = 0



Materiale

Amministrazione Provinciale di Torino,
Cuneo, Biella, Vercelli

ASL
(AL-AT-CN-VC)

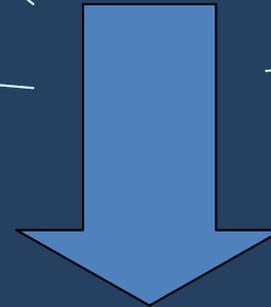
Centro di Recupero della Fauna
di Campiglia Cervo

Parco Naturale Gran Paradiso

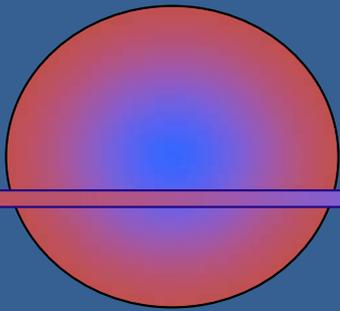
Parchi e riserve naturali cuneesi

Corpo forestale dello
Stato

C.R.A.S. di Bernezzo



Facoltà di Medicina
Veterinaria
di Torino



N=1877



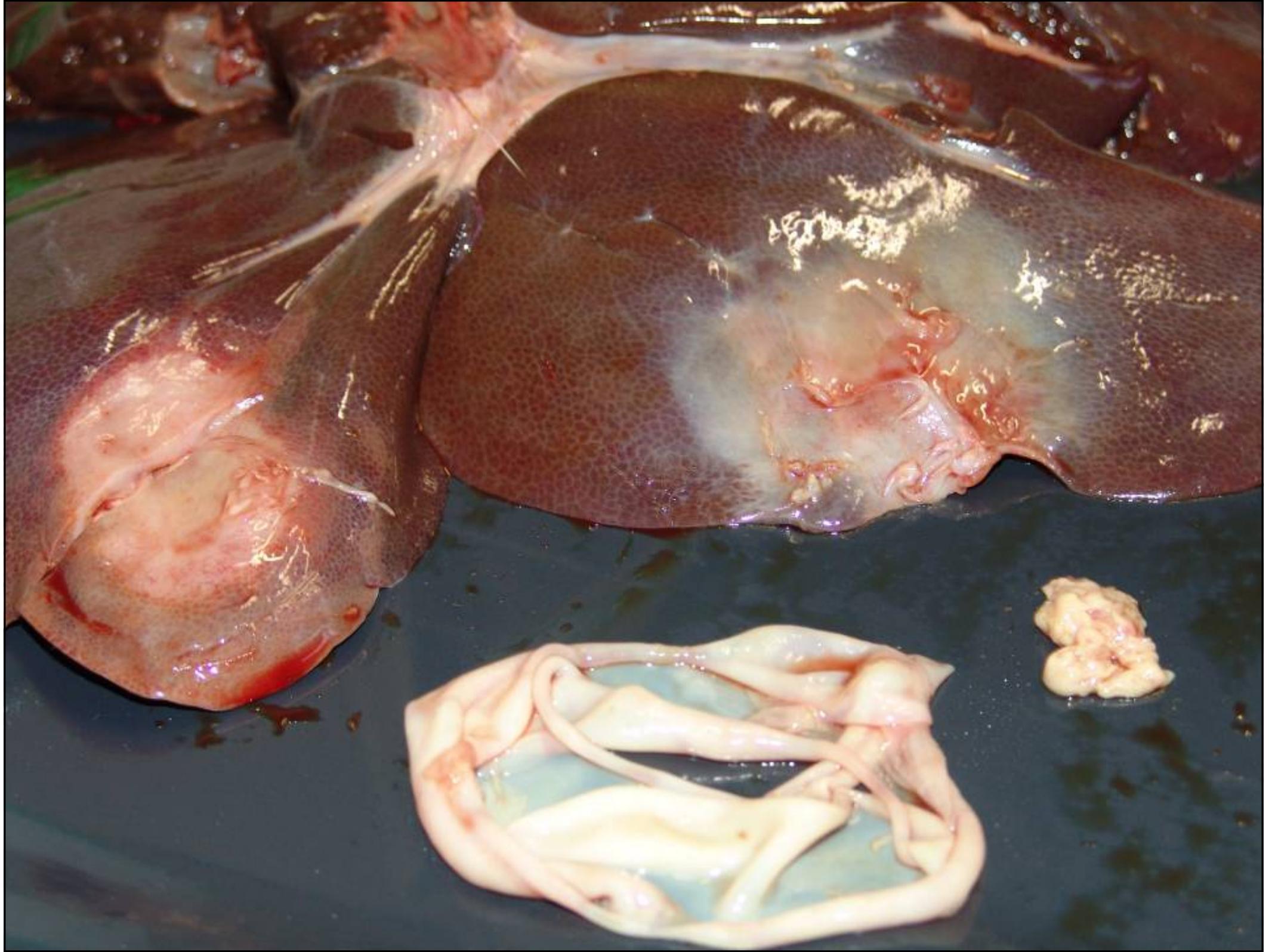
Cisti echinococco in selvatici della provincia di Imperia

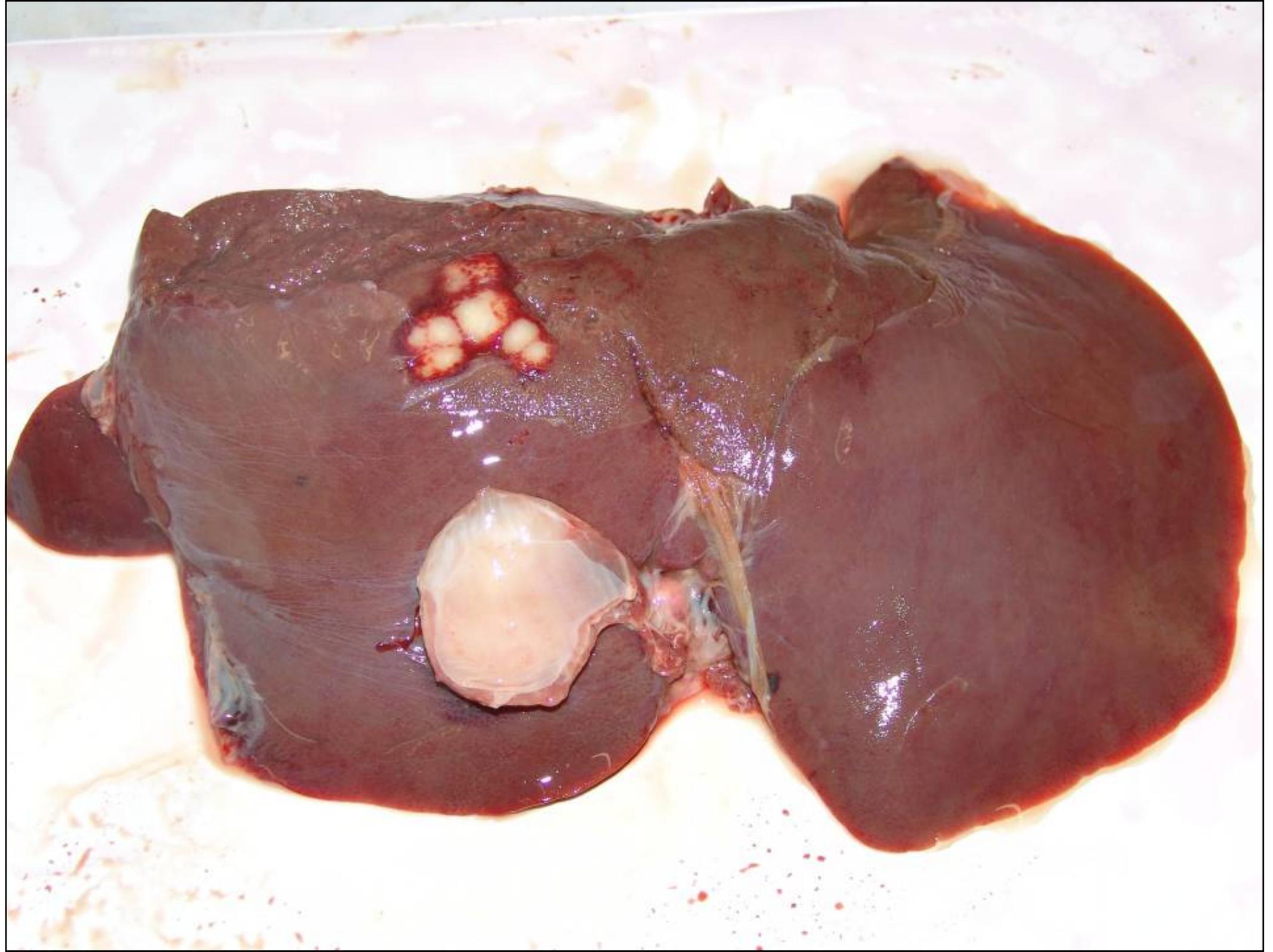
Novembre 2004: fegato camoscio Y con cisti fertili

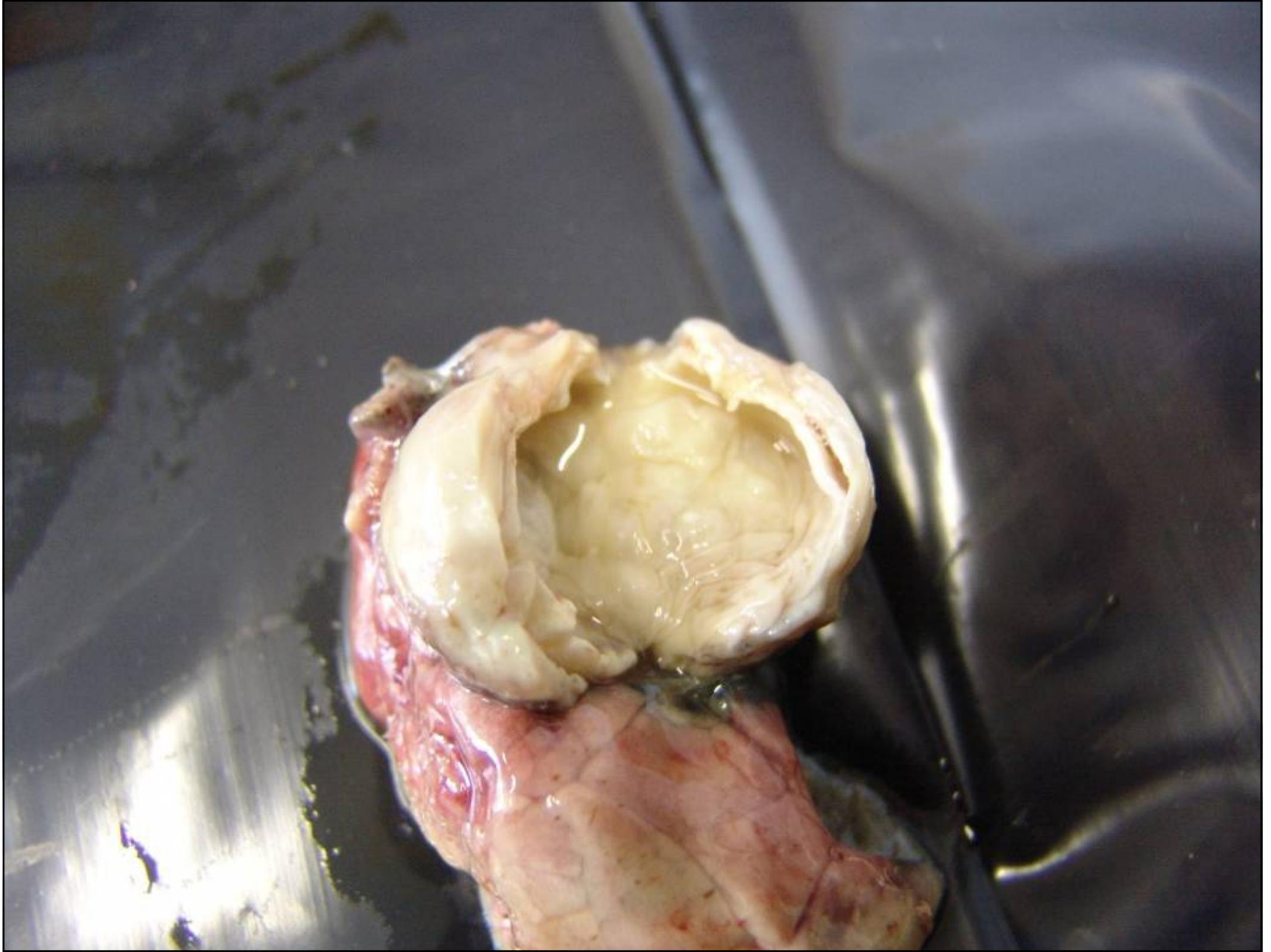
Novembre 2004: polmone camoscio Y con cisti fertili

Novembre 2004: fegato cinghiale F Ad con cisti fertili

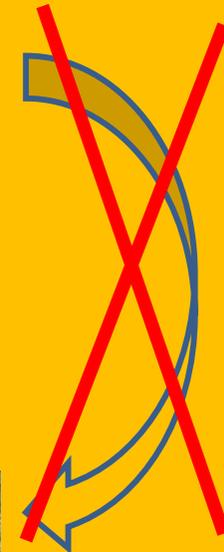
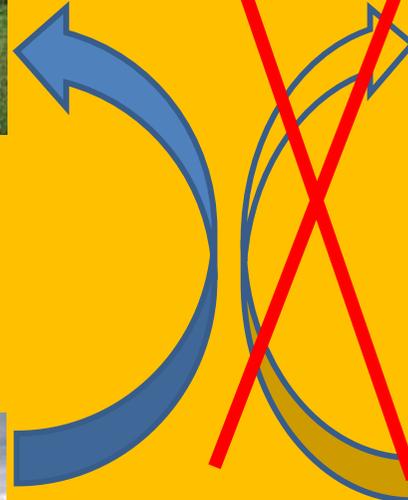
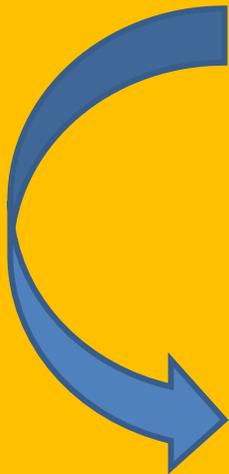
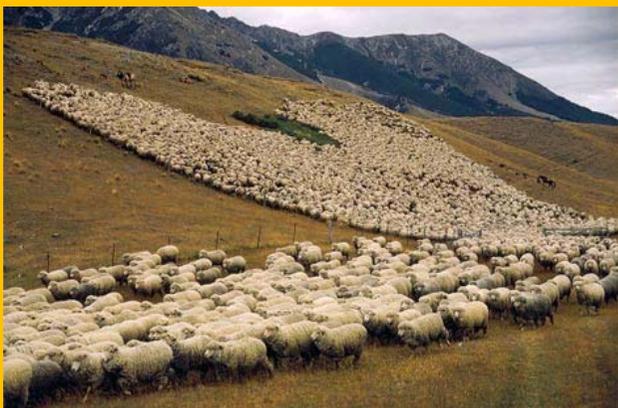
0.5% camosci/0.1% cinghiali/0% altre specie





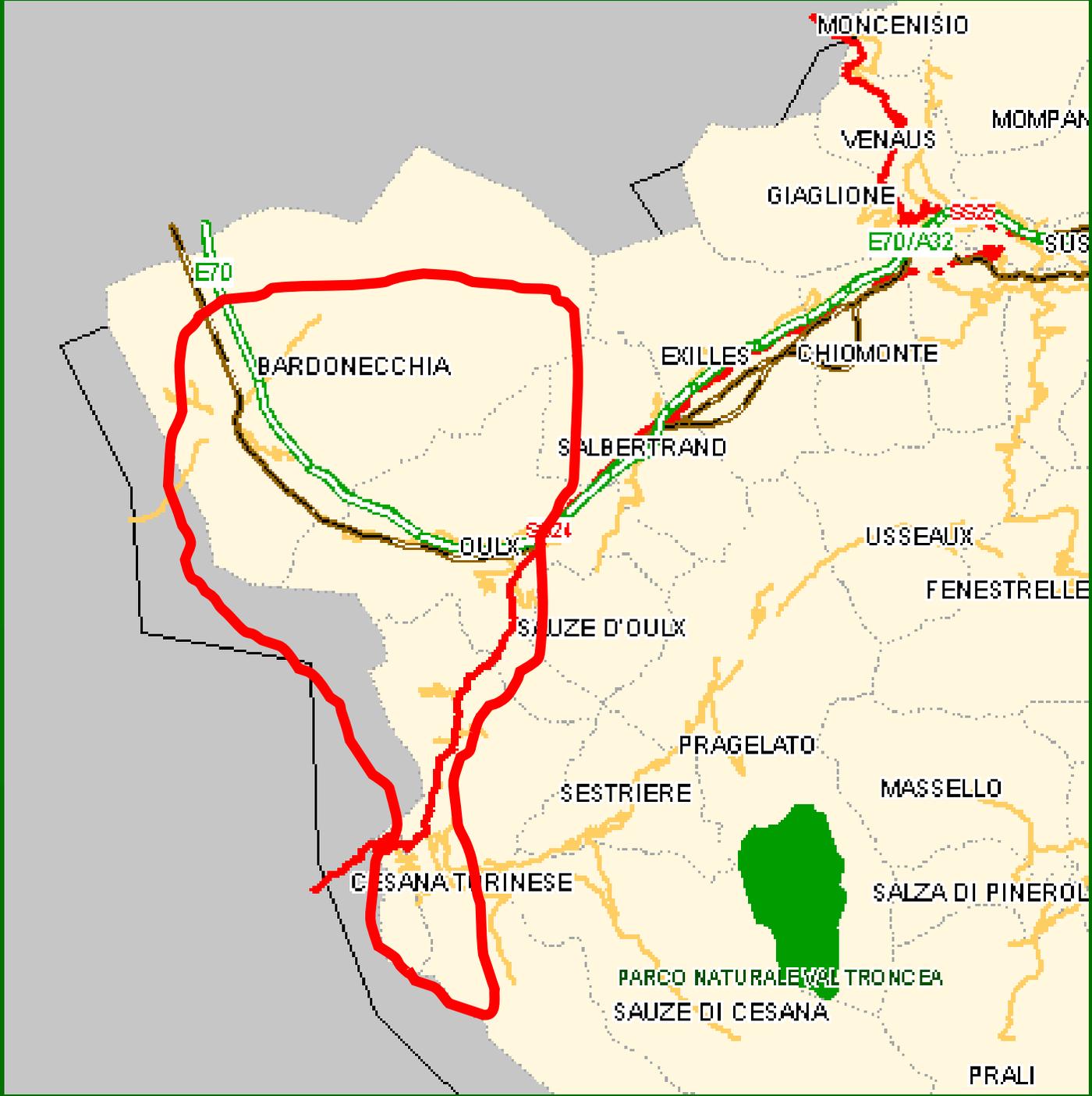


G1 - Europa





Areale di presenza



Territorio: 25.000 ha

12-15 (150-2000 ovi-caprini/gregge)

TOTALE=5-6.000 ovi-caprini

15% di ovini infestati

Attacchi lupo = 22/anno (57 vittime/anno)

Consumo di 3-4 ovini infestati/anno

(fegato e polmoni verosimilmente

consumati da lupi adulti/estate + dominanza)

Bias in campionamento lupi
(16/19 giovani) ma IC=0-21



Ipotizziamo infestazione lupi come in
Italia peninsulare o Spagna NW = 10-20%

Quale fecalizzazione da cane e da lupo?

7 cani/alpeggio x 13 alpeggi x 2 feci/die/cane x 135 gg

6 lupi x 3 feci/die/lupo x 365 gg



24570 feci cane/6570 feci lupo

Lupo = 21.1 % fecalizzazione

E' sufficiente per un ciclo silvestre di E/I?

G8-10 – Emisfero Nord



120.000 ha

8 lupi/branco

5840 feci/anno



Ma

0.1-0.2 alci/100 ha.



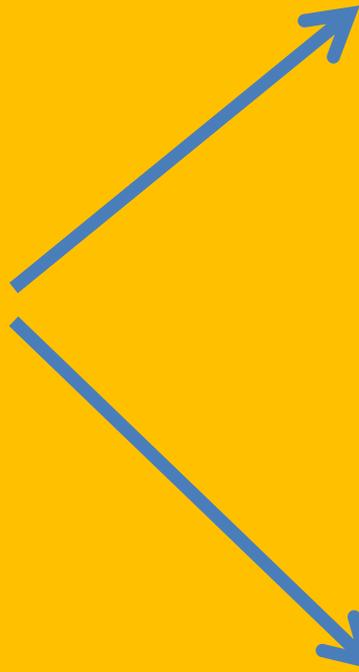
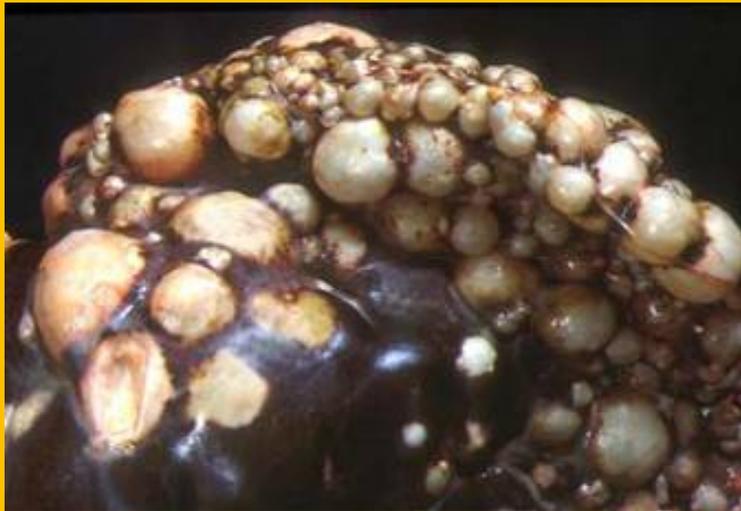
La stessa quantità di feci si interfaccia con
120-250 alci (Denali NP, Alaska)

o

1200 camosci + 2000 caprioli + 500 cervi + 80 cinghiali
(Bardonecchia)

Non è un problema di “encounter”

Competenza d'ospite?



Joly DO & Messier F (2004). The distribution of *Echinococcus granulosus* in moose: evidence for parasite-induced vulnerability to predation by wolves? *Oecologia* 140: 586-590



Cinghiale?

Grazie per l'attenzione

