

NEWS FROM EUROPE

Wildlife Diseases in Europe in 2001

Torsten Mörner
Department of Wildlife
SVA
751 89 UPPSALA
SWEDEN
Phone: 018 67 42 14
Mobile: 070 567 93 52
Fax: 018 30 91 62
E-mail: Torsten.Morner@sva.se

Marc Artois
Ecole nationale vétérinaire de Lyon
Unité Pathologie infectieuse
BP 83
F- 69280 LYON
FRANCE
Fax: +33 478 8727 74
E-mail: m.artois@vet-lyon.fr

J P Duff
Veterinary Laboratories Agency,
Penrith, Cumbria, UK
Fax: +44-1768-885314
E-mail: pduff@vla.defra.gsi.gov.uk

The World Organisation for Animal Health (OIE) with headquarters in Paris and an international reporting system, regularly monitors wildlife diseases world-wide. A working group with representatives from Europe, America, Africa and Australasia is responsible for this work.

The report below is a summary of some of this data from different countries in Europe collected in 2001. We would like to thank all those who were involved and who collected this data.

Foot and Mouth Disease (FMD)

Apparently, there was no involvement of wildlife in the recent outbreak of FMD in the Netherlands, the UK or France, in 2001. No cases of FMD were observed in wildlife in any of the areas in these countries where the disease affected domesticated animals. Serological investigations were performed on a number of deer in the Netherlands and in the UK, and on boar in the Netherlands, but no positive reactions were demonstrated.

Classical Swine Fever (CSF)

CSF continues to be present in wild boar (*Sus scrofa*) populations in some parts of Europe and in 2001 was reported from Austria, Germany, Luxembourg, Slovak Republic and the Ukraine. These outbreaks were generally restricted to wild boar populations and, except in Germany and Sardinia, disease was not observed in domestic pigs from the same locality. Vaccination of wild boars through a baiting system is currently in progress in Germany.

Mycobacterial infections - Bovine and avian tuberculosis, paratuberculosis

Bovine tuberculosis (TB) was reported not only in traditional foci in badger (*Meles meles*) in the UK and Ireland but also in other wild animals in Andorra, France, Hungary, Italy, UK and Spain. Wild boar appear to be the species most commonly infected in continental Europe, but the disease was also reported in red deer (*Cervus elaphus*), roe deer (*Capreolus capreolus*), fallow deer (*Dama dama*), muntjac deer (*Muntiacus reevesi*) and red fox (*Vulpes vulpes*) from Spain, France, UK (muntjac) and Austria. Avian tuberculosis was reported from different mammalian and avian species in many parts of Europe. Red, roe and fallow deer are the species most frequently infected. Paratuberculosis caused by infection with *Mycobacterium avium* subsp. *paratuberculosis* was reported from roe deer and ibex (*Capra ibex*) in France, and from a red fox in Italy.

Rabies

Rabies in Europe has in 2001 been observed and reported from Bulgaria, Croatia, Czech Republic, Estonia, Germany, Federal Republic of Yugoslavia, Hungary, Latvia, Lithuania, Poland, Romania, Russian Federation, Slovak Republic, Slovenia and Turkey. Rabies was most frequently observed in red foxes (*Vulpes vulpes*), racoon dogs (*Nyctyreutes procyonoides*), mustelids and deer. European Bat Lyssavirus was reported from Serotine bats (*Eptesicus serotinus*) from Denmark, France, Germany, the Netherlands and Poland. We are grateful to the WHO (World Health Organisation) for these data, which they collected and posted on their Tubingen web site : <http://www.who-rabies-bulletin.org/>.

Brucellosis

Brucella suis type 2 is frequently found in wild boar in continental Europe and particularly causes problems for domestic pigs on those pastures where regular crossbreeding may occur. A case of Brucella melitensis infection was reported in a Chamois (*Rupicapra rupicapra*) in the French Alps.

Sarcoptic mange

Sarcoptic mange is still reported to be common in Northern Europe in red fox and racoon dog. The disease is occasionally observed in lynx (*Lynx lynx*), pine marten (*Martes martes*) and wolf (*Canis lupus*). In central and southern Europe, sarcoptic mange was reported in red deer, roe deer, chamois, and in a hedgehog (*Erinaceus europaeus*) in Switzerland.

Echinococcosis

Echinococcus multilocularis was reported from several European countries including Austria, Denmark, France and Switzerland. The adult form of the parasite was most commonly found in the red fox, but larvae (cysts) were reported from France in a single marmot (*Marmotta marmotta*), and a European beaver (*Castor fiber*).

Echinococcus granulosus was reported from a Moose (*Alces alces*) in Finland.

Caliciviruses of Lagomorphs

European Brown Hare Syndrome (EBHS) and Rabbit Haemorrhagic Disease (RHD) are frequently reported from most countries in Europe and are believed to have a significant impact on lagomorph populations in several areas.

Mass mortality of Frogs

Mass mortality among Common frogs (*Rana temporaria*) was reported to occur in the UK in 2001. The mortality is considered to be primarily caused by a Ranavirus (Family Iridoviridae). How this virus was introduced into the frog population in UK is uncertain, but it might have been through importation of infected amphibians or fish.

Tularaemia

Tularaemia was reported to be common in European brown hares (*Lepus lepus*) in France and Austria, but there were few reports of this disease in other countries in 2001. A follow-up of the epizootic outbreak of tularaemia in Scandinavia in 2000 revealed very few cases in 2001.

Pasteurellosis

Infections with *Pasteurella multocida* and *P. hemolytica* (*Mannheimia hemolytica*) are widespread in Europe and were reported from several countries causing mortality in European brown hares, mountain hares (*Lepus timidus*), wild rabbits (*Oryctolagus cuniculi*), squirrels (*Sqiurus vulgaris*), red fox, wild boar, chamois, roe deer, and white tailed deer (*Odocoileus virginianus*) [– the latter species were introduced to Scandinavia several years ago]. No major outbreak of Fowl cholera was observed or reported in Europe during 2001.

Pseudotuberculosis

Infections with *Yersinia pseudotuberculosis* (pseudotuberculosis) is one of the most common causes of death in European brown hares in many European countries. This disease was also recorded in mountain hare, roe deer, red deer and chamois.

Salmonellosis

Infections with *Salmonella typhimurium* in small passerine birds, gulls and pigeons are widespread in Europe and mortality from the resulting disease in 2001 was reported from Finland, Sweden, Norway, France, UK, Italy and Hungary. Salmonellosis in mammals was reported in hedgehog, red fox, raccoon dog, roe deer, ibex and wild boar from different countries.

Botulism

Botulism outbreaks were observed among waterfowl in UK, and sporadically from other countries.

Avian pox

Avian pox was reported frequently among small passerine birds in Sweden, UK and Finland.

Chlamydiosis

Infection with *Chlamydophila psittaci* have been observed in partridge (*Perdix perdix*), mallards (*Anas platyrhynchos*) and rooks (*Corvus frugilegus*). The infection seems to be subclinical in many instances but mortality increases when secondary factors like poor environment or high populations are present. Future reports from Europe indicate that this infection may be prevalent in several species of wild birds.

Circovirus infection in gulls

Mass mortality among gulls, especially herring gulls (*Larus argentatus*), black-backed gulls (*Larus marinus*) and black-headed gulls (*Larus ridibundus*), and some other waterfowl have been observed in Sweden and the Netherlands. Virological investigations have indicated that a Circovirus is a probable cause of this disease and mortality. Virology and electronmicroscopy studies are currently in progress to attempt to further determine the cause of the disease.

New Conditions? If you are investigating a disease that may be previously unreported, why not provide a short preliminary description and leave your contact details. The disease outlined this month is not particularly new but it is the subject of on-going research in the UK.

Red squirrel parapoxvirus

Red squirrel parapoxvirus (RSPPV) causes an apparently fatal disease in red squirrels (*Sciurus vulgaris*) in the UK. Signs in affected squirrels include an exudative erythematous dermatitis particularly in the facial area, toes, vulva, prepuce and medial skin surfaces of the body. A serological survey has shown that very few red squirrels have antibodies to the virus but that over 60% of the introduced North American grey squirrels (*Sciurus carolinensis*) are seropositive, suggesting that the grey squirrel is a reservoir host. Cases of the disease in grey squirrels appear to be rare. The interesting epizootiology of this virus infection is encouraging further investigation of the seroprevalence, pathology and mode of transmission. I would be interested to hear from colleagues in North America who have sera from grey squirrels which they would be willing to donate for serological screening.

- Tony Sainsbury, Zoological Society of London. *E-mail*
tony.sainsbury@ioz.ac.uk

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Rushton, S.P., Lurz, P.W.W. and Gurnell, J. (2000) Modelling the spatial dynamics of parapox disease in red and grey squirrels: a possible cause of the decline in the red squirrel in the United Kingdom? *Journal of Applied Ecology* 37:1-18.

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European Section. Material suitable for publication includes news of recent wildlife disease outbreaks and new diseases in Europe, short case reports, announcements and reports of relevant meetings in Europe, and job and scholarship announcements. Submissions should be in English, but members for whom English is a second language, will be accommodated as far as possible. The deadline for the next issue is May 2002.

Please mail, fax or e-mail submissions to, Paul Duff, VLA Penrith, Merrythought, Calthwaite, PENRITH, Cumbria, CA11 9RR, United Kingdom, *e-mail* p.duff@vla.maff.gsi.gov.uk *Fax* ++44(0)-1768-885314.