

## THE ANNUAL SEROLOGICAL SURVEY IN WILD BOAR POPULATIONS IN FRANCE 2000-2001 REPORT

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### Abstract ( ? ?)

### Zusammenfassung( ? ?)

### Resumé ( ? ?)

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The French Ministry of Agriculture (MAP) and the National Hunting and Wildlife Agency (ONCFS) have been concerned increasingly with the risk that wildlife could constitute to the health of reared animals and man in France.

For three reasons, the wild boar has become a subject of special attention: the population figures have been highly increasing for the past 25 years, particularly for the last 10 years (x 350 %).

Wild boars are or could be a reservoir of several infectious or parasitic diseases, which are very important from an economic or public-health point of view because they are transmissible to the pig (which belongs to the same *Sus scrofa* species), to other domestic species and man.

The development of open-air pig breeding increases the chances of contact with wild boars, and consequently the risks of transmission of pathogenic agents.

A national programme for the serological surveillance of the wild boar population was launched in 1991 by the MAP. It was based on the blood sampling of hunter-killed boars, supervised in each French *département* (sub-regional division, 95 of them in France) by the official Veterinary Services in collaboration with the local hunters associations. The analyses were carried out by the respective national reference laboratories in the French Agency for Food Safety (AFSSA) and the National Veterinary School in Alfort. .

Until 1999, sera were only analysed for Classical Swine Fever and Aujeszky Disease antibody detection. An average of 1000 sera per year have been collected in 60 *départements* (i.e. 10 to 20 analysed sera per *département*). Since the 2000-2001 hunting season, the programme's protocol has been revised by the ONCFS and the MAP so that it be better adapted to the epidemiological situation, but also to increase the reliability and precision of the results. On one hand, the surveillance part was extended to include two other diseases: brucellosis and trichinellosis. On the other hand, the sampling procedure was thoroughly changed (objective: 100 sera per *département* in the 22 *départements* selected according to epidemiological criteria related to the 4 diseases, as

observed in previous surveys in wild or domestic swine populations). In 2000-2001, the objective had exceeded our expectations since 2,548 sera were collected.

## Results

For classical swine fever, no spread of the virus has been revealed among the wild boar population in France, except for the Northern Vosges former outbreak (in the Moselle and Bas-Rhin *départements*) which, in 2001, is in the process of natural extinction;

For Aujeszky's disease, the virus is carried by wild boars in several *départements*, with variable infection rates;

For brucellosis, the *Brucella suis* 2 infection appears extremely widespread, with very high prevalence rates (mean seroprevalence rate = 29 %);

for trichinellosis, several seroprevalences which may amount to 16% have been detected in certain *départements*. This, undoubtedly, reveals an underestimation of the presence of *Trichinella*, which, according to the official trichinoscopic verifications, are only exceptionally shown in wild boar

In order to follow the evolution of the incidence and the geographical distribution of the four diseases in France, it is planned to repeat the sero-surveys in the course of next hunting seasons.