

## HUNTING AND FISHING: VALUE OF WILDLIFE AND BENEFIT FOR DISEASE SURVEILLANCE

- **Mörner T. (1), Fischer J.R. (2)**

(1) Swedish National Veterinary Institute, Department of Pathology and Wildlife Diseases, SE- 751 89 Uppsala, Sweden; Swedish Hunters Association, Öster Malma, SE- 611 91 Nyköping, Sweden

(2) Southeastern Cooperative Wildlife Disease Study, College of Veterinary Medicine, University of Georgia, Athens - GA 30602, U.S.A.

Wildlife management, conservation and sustainable use of wildlife contribute to national and local economies globally, both in the industrial world as well as in developing countries. Sustainable use of wildlife is also supported by International Conventions and Agreements such as “Convention on Biological Diversity” and the “Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity”.

Free ranging wildlife (mammals, birds and fish) is a renewable natural resource that can be utilized forever, provided the use is sustainable. The value of hunting wildlife can be direct (meat, trophies, etc) or indirect (rural development, habitat conservation, aesthetics and quality of life, tourism, disease monitoring, etc).

In the USA, data assembled by the U.S. Fish and Wildlife Service demonstrate that 87.5 million people 16 years old and older (38% of the population) spent \$122 billion on fishing, hunting, and wildlife watching in the United States in 2006. This is approximately 1% of the USA gross domestic product. In Sweden the total economic value of hunting is an estimated 350 million Euros annually and the game meat produced is equivalent to 4% of Sweden’s total meat production.

Wildlife disease monitoring programs started in Scandinavia as sporadic post mortem examinations in the early 20th-century. These programs were performed in cooperation with national hunting associations and governmental agencies. Hunters play an important role in these programs because they spend time in nature where they observe wildlife in different seasons and they are concerned with the health of the wild animals they hunt and consume. These programs are an integrated part of the environmental monitoring programs and a large number of animals are submitted every year, mainly by hunters and landowners. Similar programs currently are in place in many countries in Europe, North America, Australia, and other parts of the world. Disease surveillance programs for wild fish also are being conducted in some countries. These programs have lead to discoveries of new diseases and environmental pollutants in many mammals, birds and fish. In outbreaks of FMD, Bovine Tuberculosis (TB), Classical Swine Fever and other important diseases in domestic and/or wild animals, cooperation between hunters and animal health authorities is critical. This was clearly demonstrated in the outbreak of highly pathogenic H5N1 influenza virus in 2006 when valuable disease surveillance information was developed by testing tens of thousands of samples from hunter-killed waterfowl in Asia, Europe, and North America. In addition, in the USA, samples collected from hunter-killed wild cervids provide important data on disease distribution (including first detection), as well as the impacts of disease management efforts on TB and chronic wasting disease where they occur in wildlife.

