

# What is in a whale?

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I mean it literally. What is inside a whale that causes it to beach? As a veterinary pathologist, a good part of my work involves trying to answer three basic questions: what disease has caused a particular animal to die, why did this disease happen, and what is the potential significance of this disease for the rest of the population of the particular species involved?

Because of my fascination for wildlife, I am most interested in answering these questions when I am presented with a dead wild animal. Wildlife diseases used to be considered a part of the natural mechanisms controlling animal populations. However, because of the detrimental influence of human activity on natural habitats, many disease outbreaks are now occurring among wild animals that should otherwise not have occurred. For example, loss of habitat, which presently may represent the biggest threat to wild-

life, not only causes a decrease in populations of wild animals, but also forces the remaining animals

in those depressed populations to crowd on the limited habitat left, thus increasing the likelihood of infectious diseases to occur.

Environmental pollution is, of course, another important example of

the harmful influence of human activity on wildlife. The plight of the St. Lawrence population of belugas is a case in point. These animals have the very dubious reputation of being the most polluted animals on earth, and their population has declined steadily from about 1200 after commercial harvesting ended in the 1950's to about 450 currently. Work by Pierre Béland and Daniel Martineau in Québec has documented the presence of more than 30 chemicals in bodies of beached belugas, in conjunction with various diseases such as abscess, pneumonia, tumors, and reproductive failure.

Because the influence of environmental degradation on the occurrence of wildlife diseases can be a subtle but nonetheless very serious one, it becomes important to closely monitor the cause of mortality among wild animals. Having obtained most of my training on wildlife diseases at the University of Saskatchewan, to say that I had little exposure to marine

