

mammals prior to coming to Prince Edward Island would be an understatement. However, I quickly realized that marine mammals and marine birds are a very important group of animals to watch as a means of monitoring the quality of the environment, more specifically the oceans. I have done my share of autopsies on large animals, such as moose and bison, and I have no difficulty in handling dolphins or belugas, as has happened this past year. But doing the necropsy of a large whale is a very different matter. I had my first attempt at it last December, when a thirteen-meter-long sperm whale beached on the west coast of the Island. I certainly cannot claim to have done a complete autopsy of this animal, the main reason being that its blubber, 15 centimeters thick, was frozen solid. Even a chain saw was of limited use, since the chain would become quickly clogged with fibrous tissue from the blubber.

With the help of some very dedicated colleagues at the Atlantic Veterinary College, I managed to make an opening, about one square meter, in the abdominal cavity of this animal. Because some degree of postmortem decomposition had set in, the build-up of gases within the abdomen was considerable. Therefore, as soon as the muscle wall of the abdomen was perforated, some of the viscera, including the stomach, several loops of intestine, and the spleen, were forced out of the opening and prevented further examination of the abdominal cavity. After three hours of work and two clogged-up chain saws, the only observations that I could make were that the blubber was of normal thickness, the stomach was empty, and the intestinal tract contained a moderate amount of ingesta. This may not seem like much, but it is nonetheless useful information. For example, the normal thickness of the blubber suggested that this animal was in good body condition and therefore, if sick, had not been affected by a chronic disease. Further-

more, that appeared to be a full intestinal tract suggested that the appetite of this animal had been good, at least until not too long before death. Moreover, the empty stomach told me that this animal had not died from having ingested fish that may have accumulated biotoxins from plankton. This kind of intoxication was reported by researchers at the Ontario Veterinary College in a group of humpback whales that beached last year on the east coast of the United States. The only remaining test that, I believe, would be worthwhile doing is analysis of samples of blubber from this whale for the possible presence of environmental pollutants, particularly organochlorine compounds. This is something that I have yet to get done, although the good body condition of this whale would not suggest that a chronic toxicity problem was present.

This sperm whale was not the first large cetacean to beach on the Island, it is unlikely to be the last, and I firmly intend to get at the next one that comes along. Again, I strongly believe that study of wildlife diseases is an important means of monitoring the quality of the environment, or lack thereof. Considering the present state of the environment, it is unlikely that people in my position will go out of business. Honestly, I would love to be proven wrong on this point.

(Pierre-Yves Daoust, DVM, Ph.D, is associate professor of pathology at the Atlantic Veterinary College, University of Prince Edward Island. Illustrations were done by Susan Stephenson.)