

**PROTOCOL
FOR
THE COLLECTION OF TTD DATA IN WHALE HUNTS WITH DECK
MOUNTED HARPOON GUN**

Dr. Egil Ole Øen
Wildlife Management Service-Sweden
egiloen@online.no

Collecting TTD data in whaling

Background

Time to death (TTD) or Survival time (ST) and the Instantaneous death rate (IDR) are terms that are used to measure and to quantify the killing efficiency and the state of art of current killing methods and practices used in whaling operations. Collection and analysis of TTD/ST and IDR data in a standardised manner with covariates that may influence TTD/ST and IDR make it possible to compare how rigid whales are killed using different techniques and gears. Standardised collection methods and analyses of TTD makes it possible to calculate impacts on TTD and IDR of new developments, modifications or changes in hunting practices and the impact also on efficiency of systematic training of hunters.

In Norway (1981–2012) TTD of more than 5000 minke whales killed using different types of hunting gears were collected and analysed with the covariates animal size, shooting distance and angle of harpoon gun shot, hit region and detonation area. The results were used to document the need for innovations like development of new and improved weapons, consecutive modifications and testing of gears and hunting techniques and practices, training of hunters etc. During these 21 years IDR increased by 65% from 17% to 82% and the average TTD was reduced from 11.5 min to 1 min.

The NAMMCO Expert Group Meeting on Assessment of Large Whale Killing Data in 2010 underscored the importance of recording TTD/ST/IDR and recommended the use of the Norwegian way of collecting and analysing for all hunts to identify needs for improvements.

Why record TTD

To document killing efficiency

To discover potential ways to improve the killing

To follow improvements or other issues relevant for killing over time

How to sample TTD data – “the Norwegian Way”

It is very important that the personnel collecting data are independent and are able to concentrate on data collection and not have other tasks to attend to in the killing and flensing (butchering) phase.

Who should sample/collect – required qualifications prioritised

1. Veterinarians
2. Large mammal biologist and large whale physiologist
3. Hunt- and fisheries inspectors