HUMAN INDUCED CETACEAN MORTALITY IN THE ADRIATIC SEA

Đuras Gomerčić, Martina (1), Galov, Ana (2), Gomerčić, Tomislav (3), Lucić, Hrvoje (4), Škrtić, Darinka (5), Ćurković, Snježana (6), Vuković, Snježana (7) and Gomerčić, Hrvoje (8)

(1,4,5,6,7,8) Department of Anatomy, Histology and Embryology, Faculty of Veterinary Medicine, University of Zagreb, Heinzelova 55, 10000 Zagreb, Croatia; martina.duras@vef.hr (2) Department of Animal Physiology, Faculty of Science, University of Zagreb, Rooseveltov trg 6, 10000 Zagreb, Croatia (3) Department of Biology, Faculty of Veterinary Medicine, University of Zagreb, Heinzelova 55, 10000 Zagreb, Croatia

Introduction

- human induced mortality can impact the population dynamics of small or localized cetacean populations
- bottlenose dolphin (Tursiops truncatus) only resident cetacean species in the Adriatic Sea
- estimated population size: 250 animals

Materials and methods

- from October 1990 till November 2008 - post-mortem examinations were performed on 158 cetacean carcasses found in Croatian part of the Adriatic sea



Fig. 1: Study area, Croatian part of the Adriatic Sea is marked red

Results

- cause of death was determined in 57.6% of cases
- human induced mortality:
 - higher in resident (bottlenose dolphin) species 62.3%
 - lower in nonresident species 27.3%
 - in bottlenose dolphins bycatch 59%
 - larynx strangulation with gillnet parts 28%
 - gun lesions 5%
 - physical traumatic injuries 5%
 - blast trauma? 3%

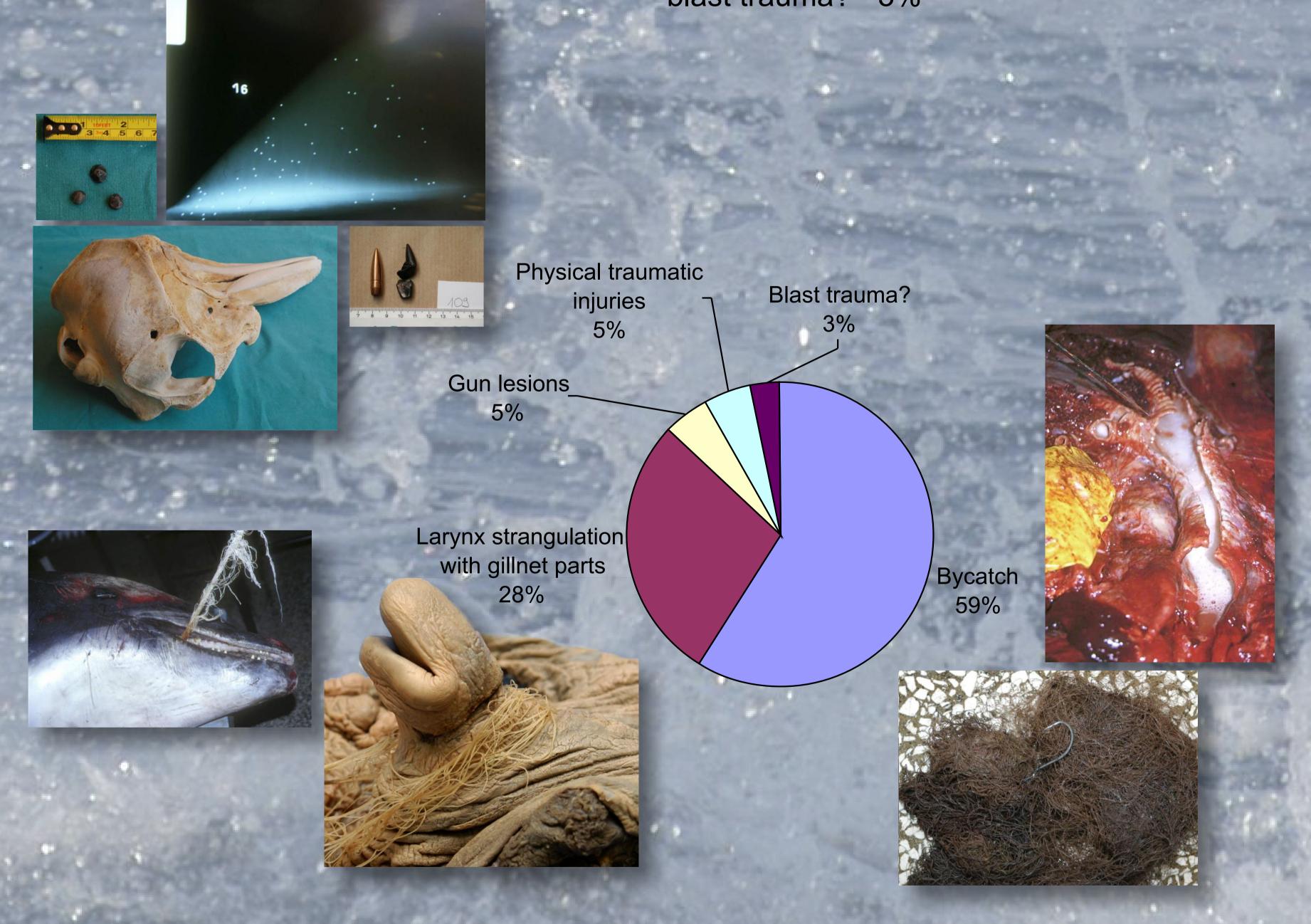


Fig. 3: Human induced mortality in the bottlenose dolphin

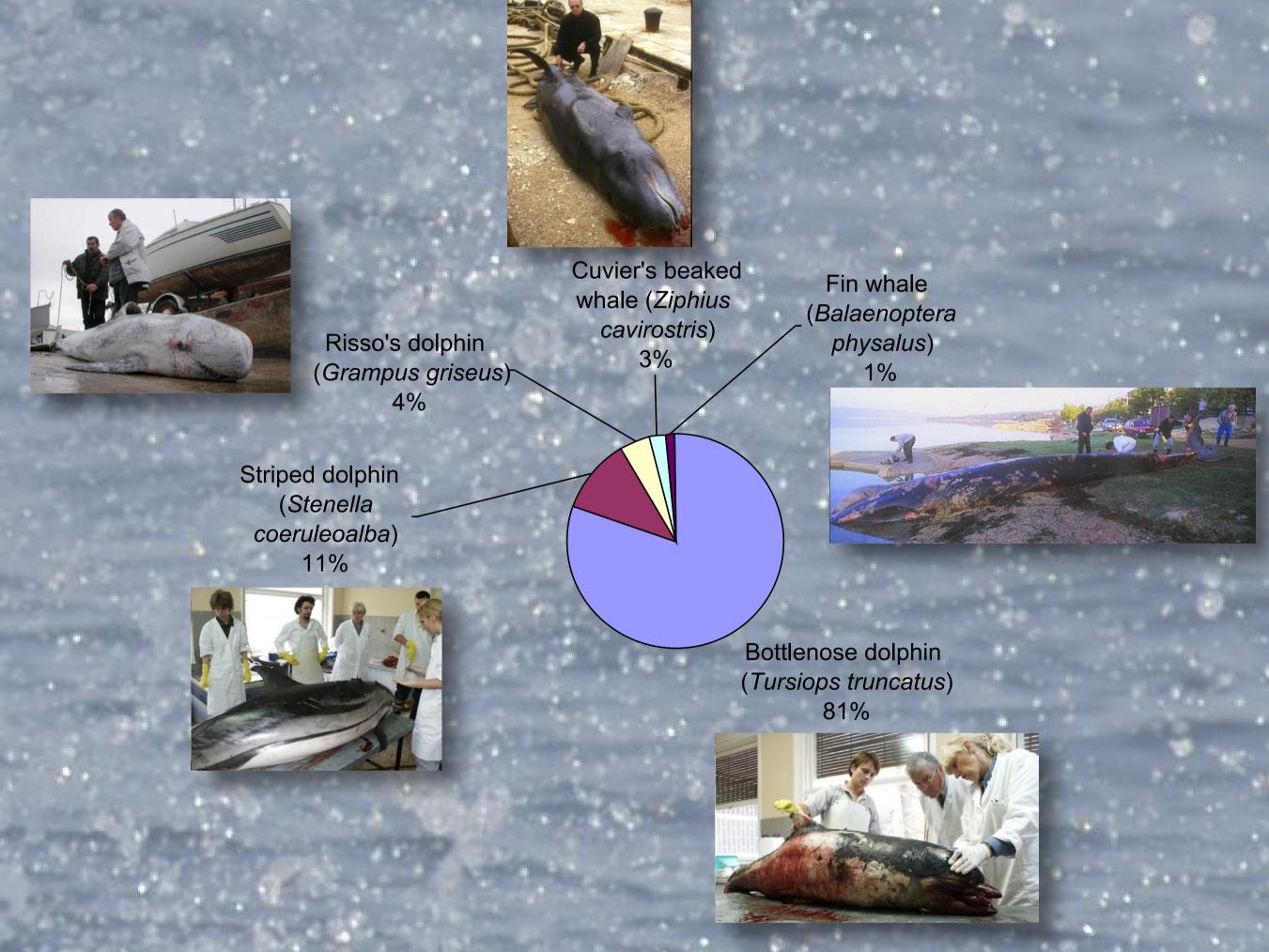


Fig 2. Ceatacean species examined

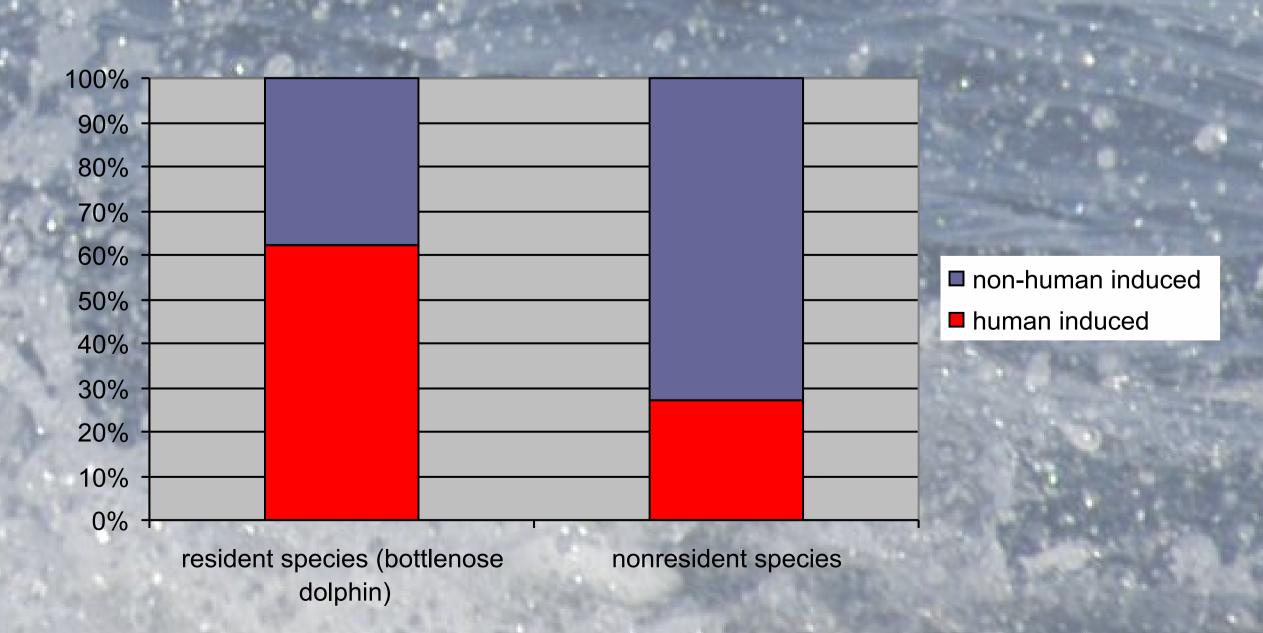


Fig. 4: Human induced mortality ratio

Acknowledgments

- This research was funded by:
- Ministry of Science, Education and Sport of Republic of Croatia (Project No. 0053317)
- Willistry of Science, Education and Sport of Republic of Ci - Gesellschaft zur Rettung der Delphine, Munich, Germany
- The State Institute for Nature Protection, Croatia
- with annual permits of Croatian authorities.