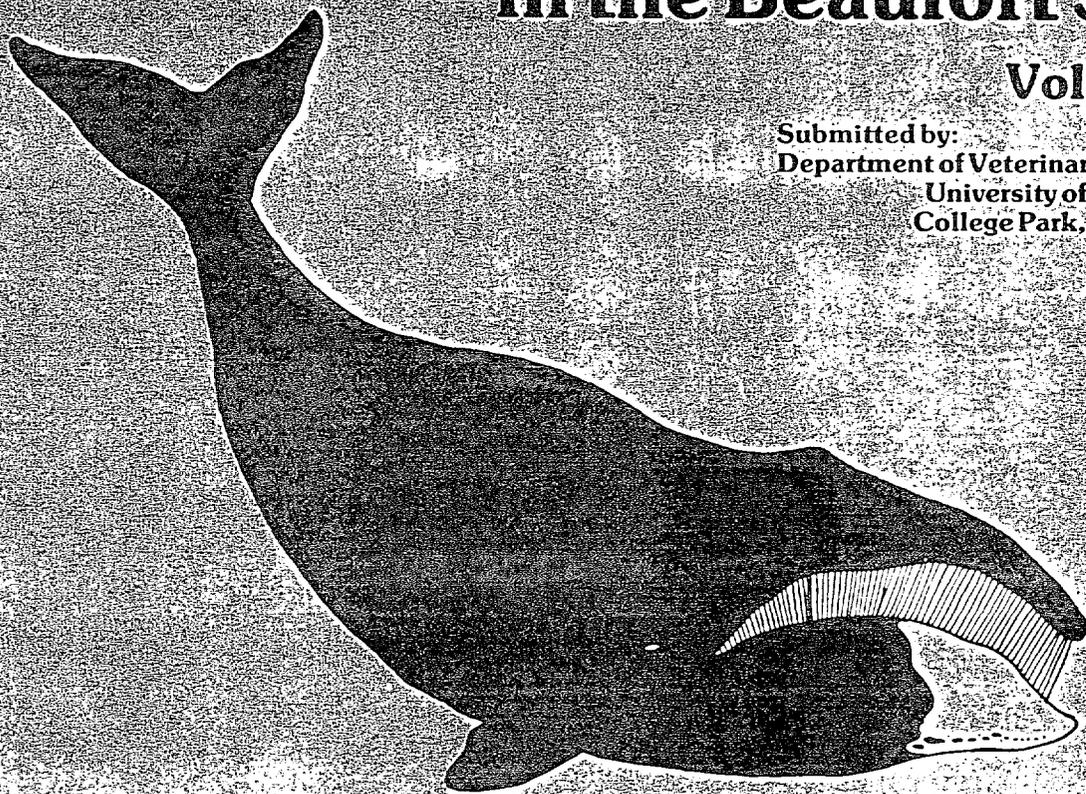


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Tissue Structural Studies and Other Investigations on the Biology of Endangered Whales in the Beaufort Sea

Volume I

Submitted by:
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Final Report for the Period April 1, 1980 through June 30, 1981.

Prepared for:
U.S. Department of the Interior Bureau of Land Management Alaska OCS Office Anchorage, Alaska

TISSUE STRUCTURAL STUDIES AND OTHER INVESTIGATIONS
ON THE BIOLOGY OF ENDANGERED WHALES IN THE
BEAUFORT SEA

Volume I

Edited By

Thomas F. Albert
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The opinions, findings, conclusions, or recommendations expressed in this report/product are those of the authors and do not necessarily reflect the views of the U.S. Department of the Interior, nor does mention of trade names or commercial products constitute endorsement or recommendation for use by the Federal Government.

It is suggested that sections of the report and the entire report be cited as follows.

Dubi el zig, R. and G. Aguirre. 1981. Morphol ogi cal studies of the visual apparatus of the bowhead whale, Bal aena mysticetus. In: Tissue Structural Studies and Other Investigations on the Biology of Endangered Whales in the Beaufort Sea, T.F. Albert (cd.), pp. 157-172. **Report to the Bureau of Land Management from the Department of Veteri nary Science, Uni versi ty of Maryl and, Col l ege Park, MD, 20742. 953 pp.**

Al bert, T. (cd). 1981. Tissue Structural Studies and Other" Investigations on the Biology of Endangered Whales in the Beaufort Sea. 953 pp. Report to the Bureau of Land Management from the Department of Veteri nary Science, Uni versi ty of Maryl and, Col l ege Park, MD, 20742.

This report contains the results of a major research effort concerning the basic tissue structure of the bowhead whale, Balaena mysticetus. Tissue samples were collected from Eskimo harvested bowhead whales during the spring of 1980. Specimens were distributed to the various investigators associated with the project. By utilizing many investigators, each expert in their own field, it was felt that the greatest amount of information could be generated in the shortest practical time. As can be seen by the great amount of information contained within this report, the project investigators took their tasks very seriously. I am indeed grateful to my fellow investigators for their cooperation.

As a project report we have attempted to document our findings for the funding agency in great detail. We realize that the detail presented here is in excess of that seen presented in anatomical journals. Findings will be presented at appropriate meetings and published in appropriate journals. It is anticipated that the large number of specimens collected will continue to provide a basis for anatomic study long after the conclusion of this project.

This study was a continuation and expansion of research begun as part of "Project Whales." "Project Whales" was a research program* conducted by the Naval Arctic Research Laboratory (NARL) for the Bureau of Land Management. During the early phase of that study critical support was provided by Dr. Arthur B. Callahan of the Office of Naval Research, to whom I am indebted.

The present study would not have been possible without the cooperation of the Alaska Eskimo Whaling Commission, the Barrow Whaling Captains Association and the many individual whalers who have directly assisted us. It is indeed a pleasure to acknowledge the help of the whalers that have assisted us, in particular; **Jacob Adams**, Eugene Brewer, Harry Brewer, Sr., Arnold Brewer, Sr and Joseph Kaleak.

During the spring 1980 whaling season, the NARL Animal Research Facility served as a logistical base for those concerned with the collection of specimens.

* Kelley, J. and G. Laursen, (eds). 1979. Investigation of the Occurrence and Behavior Patterns of Whales in the Vicinity of the Beaufort Sea Lease Area. 753pp. Final Report to the Bureau of Land Management from the Naval Arctic Research Laboratory, Barrow, Alaska.

It is a pleasure to acknowledge the assistance rendered by NARL personnel and in particular that provided by; LCDR Maria Kazanowska, Dr. John Kelley, Dr. Gary Laursen and Mr. George Selby.

A major contribution to this research effort was made by the tissue collection team which included; Dr. L. M. Philo, Dr. L. Dalton, Dr. J. Everitt and Mr. J. George. Needless to say, I am deeply indebted to these individuals for their assistance in the field.

The compilation of this report would not have been possible without the secretarial support of Barbara Rolleston and the proofreading skills of Marnie Albert.

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