

P R E F A C E

On February 10-11, 1972 a Symposium 'Dolphins and Dolphinaria' has been held at Harderwijk, Netherlands. The initiative was accepted to found the European Association of Aquatic Mammals. Dr. W. Gewalt, director of the Duisburg Zoo, and Dr. W. H. Dudok van Heel, were accepted to take the preliminary steps to this end. A proposal for a constitution and bylaws has been sent to those concerned and the proposal for the next step will be circulated this autumn.

The following resolution was unanimously accepted:

'The participants of the Symposium 'Dolphins and Dolphinaria' held at Harderwijk on February 10-11, 1972 declare that they will approach the responsible government departments and/or their respective zoological associations in their home countries to request most urgently the protection of Cetacea, Pinnipedia and Sirenia within their territory and the establishment of rules and guidelines i.e. a minimum standard regarding the catching, transport, facilities and staff of establishments housing these animals in captivity.

List of speakers:

- Andersen, S. H., Director Marine Bio Acoustical Investigations, Odense Universitet, Hjallesvej 230, 5000 Odense, Denmark.
- Bree, Drs. P. J. H. van, Curator Mammals, Zoological Museum, Plantage Middenlaan, Amsterdam, Netherlands.
- Dudok van Heel, Dr. W. H., Curator Dolfinarium Harderwijk, Netherlands.
- Gewalt, Dr. W., Director Tierpark Duisburg, 41 Duisburg, Mulheimerstrasse 273, Germany.
- Hurk, C. F. G. W. van de, D.V.M., Veterinary Consultant to the Dolfinarium Harderwijk, Bree 37, Rotterdam, Netherlands.
- Purves, P.E., Ph. D., Head department Cetacea, Pinnipedia and Sirenia, British Museum of Natural History, Cromwell Road, S. Kensington, London SW7, England.
- Reysenbach de Haan, Dr. F. W., Otorhino-laryngologist, Chairman of the Board of the Netherlands Foundation of Cetacean Research, Parklaan 27, Eindhoven, Netherlands.
- Taylor, D. C., DVM, BVMS, FRCVS, Woodhouse Farm, Norden Rochdale, Lanc. England.
- Tiebor, J. W., Director Florida Delphin Show, 8 München 12, Gollierstrasse 32, Germany.

Programme:

- Opening and Introduction, Summary and Closing, by the Chairman Dr. F. W. Reysenbach de Haan. Aquatic Mammals Vol. 1 no. 2.
- Systematics and evolution in delphinids by P. J. H. van Bree. Beaufortia, in press. Davies, J. L. (1963): The antitropical factor in cetacean speciation. Evolution, 17(1): 107-116.
- On the anatomy of delphinids by P.E. Purves, Ph. D. Aquatic Mammals Vol. 1 no. 2.
- Dolphin capture by J. W. Tiebor. Not read.
- Dolphin transport and handling by Dr. W. H. Dudok van Heel. Aquatic Mammals Vol. 1 no. 1.
- Conservation in the light of catching and pollution by P. J. H. van Bree. Aquatic Mammals Vol. 1 no. 3.
- Pool design and waterpurification by Dr. W. H. Dudok van Heel. *
- Basic nutrition, vitamins, food preparation in delphinids by C. F. G. W. van de Hurk, DVM. Aquatic Mammals Vol. 1 no. 2.
- The diseases of dolphins by D. C. Taylor, DVM. Manuscript not submitted.
- Medication, a basic philosophy read by C. F. G. W. van de Hurk, DVM. See Dudok van Heel, Aquatic Mammals Vol. 1 no. 1.
- Veterinary techniques, hygiene by D. C. Taylor, DVM. Manuscript not submitted.
- The Killer Whale by D. C. Taylor, DVM. Manuscript not submitted.
- Forum on standards of pool design and waterpurification. *

Panel:

S. H. Andersen Mag.,
Dr. W. H. Dudok van Heel,
Dr. W. Gewalt.

* Paper and Forum discussion will be incorporated in a Proposal for Legislation and Minimum Standards on Marine (Aquatic) Mammals with respect to the Conservation and Survival of Endangered Species to be published in Aquatic Mammals Vol. 1 no. 3.

Finally I want to thank all participants of the Symposium for their attendance and cooperation, thus making the meeting a succes and establishing a valuable personal contact. Let us work on further cooperation for the benefit of our charges and their survival in nature. Gratitude goes to Mr. G. Schomberg (England) and Mr. V. Manton (England) for their corrections of the english manuscripts.

Dr. W. H. Dudok van Heel,
Executive Editor Aquatic Mammals.

OPENING AND INTRODUCTION

of the Symposium 'Dolphins and Dolphinaría', Harderwijk, February 1972 by the Chairman Dr. F. W. Reysenbach de Haan.

Ladies and gentlemen,

I wish to welcome you here to this symposium and to this place in the very heart of Holland, situated near the border of our one time largest inland sea, now partially transformed into land.

Transforming Nature to our will and to adapt it to our purposes, whatever they may be, is a typical trait of the human character. Nowadays this trait may, in some ways, even be called an inborn disease of mankind. Did not E. B. White say, quoted by Rachel Carson in 'Silent Spring': 'Our approach to Nature is to beat it into submission.' She herself stated that: 'The control of Nature is a phrase conceived in arrogance, born of the Neanderthalic age of biology and physiology, when it was supposed that Nature exists for the convenience of man. The concepts and practices of this Stone Age of science are for the most part still valid in our time.'

We are called together on the initiative of the curator of the Dolfinarium Harderwijk organizing this symposium.

In his invitation to participate in this meeting the curator Dr. W. H. Dudok van Heel wrote that emphasis will be laid on the conservation and medical problems of the animals we think we are allowed to borrow from Nature. It is especially at this point: his outspoken doubt in taking it for granted that we may borrow those wonderful creatures, called Dolphins, from Nature, that I — being Chairman of the Board of the Netherlands Foundation of the Cetacean Research — am thankful to accept the invitation to be in the Chair of this first European Symposium on these matters. In other words, because it is one of the main objectives of our Foundation to stimulate scientific research in Cetaceans and to support basic knowledge of dolphins and their kin in order to ensure their well being in nature as well as in captivity.

Already in the 16th century in England on the other side of the North Sea the Virgin Queen, Queen Elisabeth I, declared:

'The use of the sea and the air is free to everybody; neither any nation nor any person has the right to rule the ocean, because neither nature nor common law can justify it.'

This declaration was based upon the thoughts of that great Dutch philosopher and lawyer Hugo de Groot in his treatise 'de Mare Liberum' (on the Free Sea). It has been and still is of enormous importance to all of us. But the way mankind as a whole is using this freedom of the sea, not to mention the air, can not be justified and tolerated by nature anymore.

In ever increasing numbers laws and regulations are now being issued in this field. To mention some I quote Regulations from New Zealand in 1904: 'It shall not be lawful for any person to take fish or mammal of the Species commonly known as Risso's dolphin (Grampus Griseus) in the waters of Cook Street, or the bays, sounds and estuaries adjacent there to.' And in 1956: 'It shall not be lawful for any person to take or molest any dolphin in the Hokianga Harbour.'

In 1970 the State of Florida issued laws and regulations concerning the conservation of marine mammals in natural conditions as well in captivity. Other States of the U.S.A. and seaboard nations will follow suit I am sure.

Essentially better than curing a disease is its prevention. This is in a way what the world known cetologist, the late Prof. Slijper, first Chairman of our Foundation, meant when he stated in 1952 in his inaugural address on 'The destiny of the human race': 'Even worse than disease is the doctor himself.'

Although to try and cure the ill effects of disease on animals is right in itself, in fact one is in a certain way too late. Our main goal should be to forestall the disastrous ways people attack dolphins and their kind. If we don't succeed in preventing this we on this globe won't even have the chance to cure the effect of our illness: the mental disorder of mankind to exterminate all the cetaceans still alive.

I open this meeting hoping that we can proceed with the above mentioned spirit, that we will succeed in surpassing our short sighted form of satisfaction within our lifetime and open the eyes and ears of all concerned.

SUMMARY AND CLOSING

I would like to start this summary with the words the old fisherman spoke to what could have been a dolphin he was playing with and trying to catch, in Hemmingway's charming tale 'The Old man and the Sea': 'Fish,' he said, 'I love you and respect you very much; but I will kill you dead before this day ends.'

We were here together understanding this very human feeling and approach to

nature and, exactly because of that to try to forestall the ultimate consequence of it. Getting mutual information, learning medical and ecological backgrounds, discussing guidelines and feeling our way to future cooperation. All this and among other things methods to reach this goal. We were able to pass unanimously a resolution on the protection of marine mammals and to take the first step to the formation of the European Association of Aquatic Mammals. Thanking the speakers for their contributions, and everybody who took part in the discussions and last but not least the Dolfinarium Harderwijk for its organisation, I will close this symposium hoping and expecting that there will be many meetings of this kind in the years to come in order that mankind will say: 'Fish I love you and respect you very much. I will protect you and save you until the end of our days.'

THE ANATOMY OF DELPHINIDS

Summary of an introductory lecture given during the symposium at Harderwijk by P.E. Purves, Ph. D., Head Department Cetacea, Pinnipedia, Sirenia, of the British Museum of Natural History, Cromwell Road, S. Kensington, London SW7, England.

Perhaps because of the beauty of external form, the great swimming performance, acute sense of hearing, superior intelligence and playfulness of the dolphins, it has often been imagined that the anatomy of cetaceans is some how quite novel and different from that of other mammals, including Man.

In fact, nothing that has hitherto been discovered in the anatomy of the cetacea is without its counterpart in terrestrial mammals and it more often happens that structures have been lost rather than gained.

The most obvious features are the total absence of hind limbs, external ears and genitalia.

The body is perfectly smooth and devoid of hair and the skin at the end of the tail is expanded into a pair of horizontal flukes which constitute the chief locomotor organs. The front limbs are greatly shortened and there are no separate digits in the hands which have been modified to form the flippers.

The nostrils are placed on the top of the head so that the melon can be regarded as an extreme modification of the upper lip whilst the blubber is simply a thickening of the panniculus adiposus which is found under the skin of Man and some other terrestrial mammals.

The brain is exceptionally large and convoluted and more similar to that of Man than those of most other mammals.