## CURRENT STATUS AND THREAT FACTORS TO SOUTH AMERICAN MANATEES.

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In South America, Sirenia are represented by two species, *Trichechus manatus manatus*, the Antillean manatee (subspecies of *T. manatus*, the West Indian manatee), and *Trichechus inunguis*, the Amazonian manatee. According to criteria adopted by the International Union on Conservation of Nature (IUCN), the first species is considered endangered, while the latter is considered vulnerable of extinction. This classification may vary according to each range country that harbors populations of these species, as may vary the degree of protection offered by the set of national laws. Factors threatening the conservation and survivorship of populations are oftentimes shared between the species, however there are unique factors for each one. Among the main factors affecting the Antillean manatee are the alteration of coastal habitats and the stranding of dependent calves in the easternmost limit of the distribution. In the case of the Amazonian manatee, the main factors related to its conservation are those related to subsistence hunting, which includes both culling of adults and capture of calves. The latter adds to accidental entanglements throughout the region and increases the problem of captive rehabilitation and difficulties in future return of the animals to the natural environment. Recently, the confirmation of hybridization between the two species around the region of the mouth of the Amazon has raised concern among conservationists in relation to those individuals and the strategies for releasing rehabilitated Antillean manatees along the northern coast of South America.

STRANDINGS OF WEST INDIAN MANATEE CALVES IN THE SEMI-ARID COAST OF NORTHEAST BRAZIL: WHICH FACTORS MAY BE INVOLVED? Meirelles, Ana Carolina<sup>1\*</sup>; Carvalho, Vitor Luz<sup>1</sup>; Silva & Cristine Pereira negrão<sup>1</sup>. Associação de Pesquisa e Preservação de Ecossistemas Aquáticos – AQUASIS. cameirelles@yahoo.com.br\*

The stranding West Indian manatee (Trichechus manatus manatus) calves is one of the main threats this Critically Endangered (CR) species faces in northeastern Brazil. The east coast of Ceará and west of Rio Grande do Norte (semi-arid coast) is the region with the highest incidence of strandings of this nature. The aim of this study was to identify and discuss the various factors that may be contributing to the high number of records over almost two decades. Typically, the pattern of mortality observed for mammals has a high rate at the initial stage of life, followed by a period of relatively low mortality and finally a period of increased mortality in senescent animals. In the study area, approximately 80% of registered strandings were neonates, an extremely high percentage for the species. The causes most often cited to explain this phenomenon are the degradation and loss of estuaries, which are the most appropriate areas to the birth of offspring and parental care in this region. This degradation has a greater effect on the semi-arid coast when compared to other regions of the species occurrence, due to the characteristics of the rivers, which are quickly silted due to the small size. The lack of these important areas increases the vulnerability of females and their offspring to adverse geo-environmental factors and/or disturbances caused by fishing boat activities and oil and gas exploration and production. This vulnerability associated with the recruitment of young and inexperienced females may negatively influence the maintenance of mother-calf units causing permanent separation of the couple. It is still unclear what factors (environmental, behavioral and/or anthropogenic) could influence the success or failure of a female rediscovering her calf after a separation. In addition to these factors, it is known that intensive hunting and observation of low genetic variability of manatees in the country are signs that the population went through a population bottleneck and may undergo various genetic problems, including those caused by the crossing of related individuals and a consequent inbreeding depression. Certain levels of inbreeding may affect the reproductive success of animals, including decreasing the survival of juveniles, the birth of weak animals or loss of maternal ability. Pedigree and inbreeding studies, in addition to determining age of the population are a priority to test the hypotheses discussed here, and to aid the management and release of rehabilitated calves.

ENVIRONMENTAL EDUCATION: A TOOL FOR THE CONSERVATION OF THE MANATEE *Trichechus manatus* IN SINÚ BASIN, CORDOBA, COLOMBIA. Mona Sanabria, Yenyfer<sup>1\*</sup>; Espinosa Forero, Rafael<sup>2</sup> & Caicedo Herrera, Dalila<sup>3</sup>. <sup>1</sup>Fundación Omacha, <sup>2</sup>Corporación Autónoma Regional de los Valles del Sinu y del san Jorge –CVS. yenyfermona@gmail.com\*

The manatee is considered a flagship species in the basin of the Sinu River. Since 2003, the Corporación Autónoma Regional de los Valles del Sinú y San Jorge CVS and the Omacha Foundation have been working on the formulation and implementation of the Manatee Management and Conservation Plan in the lower basin of the Sinu River, where one of the programs is environmental education. The topic "Environmental Education and Community Participation" was identified as a key tool in the process of sensitization and awareness to the community of fishermen, coastal and local inhabitants as well as the education sector. The methodology used is participatory, allowing the integration of scientific knowledge with traditional