

Venezuela. All individuals from the Amazon River Estuary were identified as Amazonian manatees. The Northeast Coast of Brazil is separated into two subpopulations ($F_{ST}=0.10$ and $R_{ST}=0.30$) with low genetic diversity ($H_o=0.34$ and 0.33) but comparable to manatee population diversity in other countries. Manatees in Brazil do not appear to have seasonal migrations, which reinforces the separation of the subpopulations. The connectivity of the populations and genetic exchange appear to be lost due to historical hunting resulting in a depleted population and excessive anthropogenic habitat use and destruction. Manatees in the southeast are geographically isolated. To mitigate the gap in the distribution, and prevent genetic isolation in the area, some captive manatees have been released into this area.

For effective management and conservation the three management units and the Estuary of the Amazon River should be treated separately as each one has different threats and habitat uses. Actions that could be prioritized include: protection and restoration of habitat with the creation and implementation of specific protected areas and travel corridors that provide gene flow, and reduction or elimination of anthropogenic pressures on manatees. **-Fabia Luna¹, Coralie Nourisson^{2,3}, Margaret Hunter⁴, Fernanda Attademo¹, Robert Bonde⁴, and José Zanon De Oliveira Passavante⁵** (fabia.luna@icmbio.gov.br, ¹CMA/ICMBio, ²GEOMARE, ³CIBIO-InBIO Research Center in Biodiversity and Genetic Resources, ⁴U.S. Geological Survey, ⁵Universidade Federal de Pernambuco)

Soft release of Amazonian manatees. For the third time, the Mamirauá Institute for Sustainable Development, in Western Brazilian Amazon, performed a release of Amazonian manatees back to the wild.

The first-ever release occurred in 2000, when a subadult male was returned to the waters of the Mamirauá Sustainable Development Reserve, near Tefé town, 700 km west of Manaus, the capital of the state of Amazonas (see Sirenews 33). Seven years later the Mamirauá Institute established a community-based manatee rehabilitation center in the Amanã reserve, under permit by the Brazilian environmental agency. In 2012 MISD conducted the 2nd release, of five rehabilitated calves, into the Amanã Lake (Sirenews 58).

The third successful release took place on 11 January 2015, when six Amazonian manatees were soft-released into a lake in the Amanã Reserve at the time isolated from the rest of the water system due to the dry period. Males Piti and Japurá, and females Castanha, Jurema, Jerusa and Luna, aged 2 to 7 years, arrived at the Center at a few months of age, between 86 and 114 cm and 11.5 and 45 kg. Most of them benefited from advancements from previous releases introduced at the Center, such as the setting of the center itself as a floating structure in a natural lake, the use of an underwater bottle to reduce human contact during feeding, the design of customized milk formula according to individual nutritional needs, the daily offering of native plant material and the soft release phase, in addition to rehabilitation in proximity to and with engagement from local communities.

Piti was the first inhabitant of the Center, and inaugurated it in 2007; he was released in 2012 but had to be brought back into captivity after losing weight his first time out. This time he was first again: he left the lake in early March and seems to be faring well, investigating water bodies nearby and taking advantage of the abundant aquatic vegetation in the area.

Prior to release animals underwent medical exams to ensure they did not carry diseases that could cause risks to the wild population, and were adapted with belt-mounted VHF transmitters built in cooperation with USGS-Sirenia Project in Gainesville, Florida, USA. All animals have been monitored since the moment of release. Two female manatees remain at the Center under rehabilitation. **-Miriam Marmontel** (marmontel@mamiraua.org.br, Instituto de Desenvolvimento Sustentável Mamirauá)