

Project Update December 2025

Rufford I.D.: 37581-2

Project Title: Exploring the Use of Sonars for an Unprecedented Estimate of Amazonian Manatee Abundance

Update:

Field Report – August to September Monitoring Expedition

The main objective of this field expedition was to conduct an initial count of Amazonian manatees (*Trichechus inunguis*) and identify areas where the animals can be more easily observed during their seasonal migration period, known locally as the “arribação.” The expedition also aimed to strengthen collaboration between researchers and traditional manatee hunters from the Amanã Sustainable Development Reserve (RDSA), integrating scientific tools such as side-scan sonar and acoustic monitoring with local ecological knowledge.

During the manatee migration season, our fieldwork was conducted from August 17 to September 25. This year, water levels were very different from previous years — the floodwaters began to recede only at the end of August, which affected the timing of manatee movements in the area.

The field activities were carried out by a team of researchers together with traditional manatee hunters from RDSA. The group conducted observations in the *Paraná do Castanho*, a narrow watercourse that facilitates visual detection of animals.

The survey design included several local hunters in their canoes, along with a research canoe equipped with a side-scan sonar. Multiple transects were performed, during which the sonar scans were conducted simultaneously with visual observations from the hunters’ canoes.

Visual detections allowed for more detailed observations of the animals, including estimated body size and the identification of mother–calf pairs. Some of these visual sightings were also confirmed by the side-scan sonar.

In total, 45 sightings were recorded, involving 83 individual manatees. Most animals were observed alone or in pairs, but groups of three were occasionally seen, and one exceptional sighting included approximately nine animals together.

Based on hunters’ traditional ecological knowledge, it was also possible to map manatee routes and aggregation areas used during the migration.

In addition to the visual and sonar surveys, two underwater acoustic recorders were installed in strategic locations identified by the hunters as passageways frequently used by manatees, near *ressacas* (shallow flooded areas) where animals are believed to rest. The acoustic recordings are currently being analysed.

Although the methodology is still being tested, the number of observations obtained was highly satisfactory and demonstrates the potential for this approach to be replicated annually in order to improve our understanding of population growth estimates.